UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K/A

Amendment No. 1

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended **December 31, 2022**

OR

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number **0-16211**

DENTSPLY SIRONA Inc.

(Exact name of registrant as specified in its charter)

Delaware	**39-1434669**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
13320 Ballantyne Corporate Place, Charlotte, North Carolina	**28277-3607**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(844) 848-0137**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value $.01 per share	**XRAY**	**The Nasdaq Stock Market LLC**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes o No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.
Yes o No x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes x No o

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).
Yes x No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer x	Accelerated Filer o	Non-Accelerated Filer o	Smaller Reporting Company ☐
Emerging Growth Company ☐	If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o		

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C.7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. o

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act) Yes ☐ No x

The aggregate market value of the voting common stock held by non-affiliates of the registrant computed by reference to the closing price as of the last business day of the registrant's most recently completed second quarter ended June 30, 2022, was $7,664,602,549. Based on the closing price on June 30, 2022. For purpose of this calculation only, without determining whether the following are affiliates of the registrant, the registrant has assumed that (i) its directors and executive officers are affiliates, and (ii) no party who has filed a Schedule 13D or 13G is an affiliate.

The number of shares of the registrant's common stock outstanding as of the close of business on February 16, 2023 was 215,361,909.

DOCUMENTS INCORPORATED BY REFERENCE

Certain portions of the definitive Proxy Statement of DENTSPLY SIRONA Inc. (the "Proxy Statement") to be used in connection with the 2023 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K to the extent provided herein.

EXPLANATORY NOTE

Dentsply Sirona Inc. ("Dentsply Sirona" or the "Company") is filing this Amendment No. 1 to the Annual Report on Form 10-K (this "Form 10-K/A") for the fiscal year ended December 31, 2022, originally filed with the Securities and Exchange Commission (the "SEC") on March 1, 2023 (the "2022 Form 10-K" or "Original Filing"), to make certain changes described below.

As previously disclosed in the Company's Current Report on Form 8-K filed on August 2, 2023, subsequent to the issuance of the Company's consolidated financial statements for the year ended December 31, 2022 which were included in the 2022 Form 10-K, the Company's independent registered public accounting firm, PricewaterhouseCoopers LLP ("PwC"), conducted a routine internal quality review of its audit of the Company's consolidated financial statements and internal control over financial reporting as of and for the year ended December 31, 2022. As a result of this review, PwC requested that the Company re-evaluate the conclusion on the assessment of a previously identified control deficiency related to segregation of duties specific to the creation of manual journal entries and compensating controls intended to mitigate a potential material impact to the consolidated financial statements as a result of such control deficiency. After extensive review, the Company and PwC have now determined that the control deficiency related to segregation of duties specific to the creation of manual journal entries rose to the level of a material weakness that existed as of December 31, 2022. The Company previously identified and reported in its 2022 Form 10-K other material weaknesses as part of Management's Report on Internal Control Over Financial Reporting for the year ended December 31, 2022.

To the knowledge of the Company's principal executive officer and principal financial officer, the additional material weakness did not result in a material misstatement of the Company's consolidated financial statements included in the 2022 Form 10-K. Notwithstanding the newly identified material weakness referred to above, management, including our principal executive officer and principal financial officer, believes that the financial statements contained in the 2022 Form 10-K continue to fairly present, in all material respects, the financial condition, results of operations and cash flows of the Company for all periods presented in accordance with generally accepted accounting principles in the United States.

Amendment to Form 10-K

In accordance with Rule 12b-15 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), this Form 10-K/A is being filed to (i) amend Management's Report on Internal Control Over Financial Reporting included in Part II, Item 8 to reflect the newly identified material weakness (ii) amend its disclosure on controls and procedures included in Part II, Item 9A, (iii) revise PwC's integrated audit report thereon to disclose this additional material weakness as of December 31, 2022, and (iv) amend Part IV – Item 15 Exhibits and Financial Statement Schedules to include currently dated certifications from the Company's Chief Executive Officer and Chief Financial Officer as required by Section 302 and 906 of the Sarbanes-Oxley Act of 2002. In amending Part II, Item 8, the Company also made one immaterial adjustment to disclosures contained within Note 2 - Revenue as described therein which does not otherwise impact or change the consolidated financial statements.

Please note that the only changes to the Original Filing are those related to the matters described herein and only in the Items listed above. Except as described above, no changes have been made to the Original Filing, and this Form 10-K/A does not modify, amend or update any of the other financial information or other information contained in the Original Filing. In addition, in accordance with SEC rules, this Form 10-K/A includes an updated auditor consent as Exhibit 23.1 and updated certifications from our Chief Executive Officer and Chief Financial Officer as Exhibits 31.1, 31.2 and 32. Otherwise, the information contained in this Form 10-K/A is as of the date of the Original Filing and does not reflect any information or events occurring after the date of the Original Filing.

DENTSPLY SIRONA Inc.
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PART II

Item 8. Financial Statements and Supplementary Data

1. Financial Statements

The following consolidated financial statements of the Company are filed as part of this Form 10-K:

2. Financial Statement Schedule for the Years Ended December 31, 2022, 2021, and 2020.

The following financial statement schedule is filed as part of this Form 10-K and is covered by the Report of Independent Registered Public Accounting Firm

Management’s Report on Internal Control Over Financial Reporting (As Restated)

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Internal control over financial reporting includes those policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management of the Company assessed the effectiveness of the Company’s internal control over financial reporting as of December 31, 2022. In making its assessment, management used the criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”).

Material Weaknesses

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis.

Management identified the following material weaknesses in the Company's internal control over financial reporting:

a. The Company did not design and maintain an effective internal control environment as former management failed to set an appropriate tone at the top. Specifically, certain members of senior management, including the Company’s former Chief Executive Officer and former Chief Financial Officer, engaged in conduct that was inconsistent with the Company’s culture of compliance and Code of Ethics and Business Conduct.

b. The Company did not maintain a sufficient complement of personnel with an appropriate level of knowledge about accounting for variable consideration related to customer incentive arrangements in a manner commensurate with our financial reporting requirements.

These material weaknesses contributed to the following additional material weakness:

c. The Company did not design and maintain effective controls associated with approving, communicating, and accounting for incentive arrangements with customers, impacting the completeness and accuracy of revenues, including variable consideration.

These material weaknesses previously resulted in the restatement of our consolidated financial statements for the year ended December 31, 2021, and the unaudited interim financial information for the three and nine months ended September 30, 2021. These material weaknesses also resulted in adjustments to substantially all of our accounts and disclosures for the interim and annual periods related to 2019, 2020, and 2021.

Subsequent to the filing of the 2022 Annual Report on Form 10-K, the Company’s independent registered public accounting firm, PricewaterhouseCoopers LLP (“PwC”) requested that management re-evaluate the conclusion regarding the assessment of a previously identified control deficiency related to the segregation of duties specific to the creation of manual journal entries and the compensating controls intended to mitigate a potential material impact to the consolidated financial statements as a result of such control deficiency. After extensive review, management determined that the control deficiency related to segregation of duties specific to the creation of manual journal entries rose to the level of a material weakness that existed as of December 31, 2022. Accordingly, as of December 31, 2022, the following additional material weakness existed:

d. The Company did not design and maintain effective controls relating to the segregation of duties specific to the creation of manual journal entries.

Each of the above material weaknesses could result in a misstatement of substantially all of our account balances or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected.

In Management's Report on Internal Control Over Financial Reporting included in the Original Filing, management previously concluded that the Company did not maintain effective internal control over financial reporting as of December 31, 2022 because of the material weaknesses described in a., b. and c. above. However, management has subsequently determined that the material weakness described in d. above related to the segregation of duties specific to the creation of manual journal entries also existed as of December 31, 2022. As a result, management has amended and restated its report on the Company's internal control over financial reporting and concluded that the Company's internal control over financial reporting was not effective as of December 31, 2022 based on the criteria established in *Internal Control - Integrated Framework (2013)* issued by the COSO.

PwC has audited the effectiveness of the Company's internal control over financial reporting as of December 31, 2022, as stated in their report, which appears herein.

/s/	*Simon D. Campion*	*/s/*	*Glenn G. Coleman*
	Simon D. Campion		Glenn G. Coleman
	President and Chief Executive Officer		Executive Vice President and Chief Financial Officer
	August 7, 2023		August 7, 2023

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders
of DENTSPLY SIRONA Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of DENTSPLY SIRONA Inc. and its subsidiaries (the "Company") as of December 31, 2022 and 2021, and the related consolidated statements of operations, of comprehensive income, of changes in equity and of cash flows for each of the three years in the period ended December 31, 2022, including the related notes and financial statement schedule listed in the accompanying index (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company did not maintain, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO because material weaknesses in internal control over financial reporting existed as of that date related to lack of an effective internal control environment as former management failed to set an appropriate tone at the top, lack of a sufficient complement of personnel with an appropriate level of knowledge about accounting for variable consideration related to customer incentive arrangements in a manner commensurate with the Company's financial reporting requirements, lack of effective controls over approving, communicating, and accounting for incentive arrangements with customers, impacting the completeness and accuracy of revenues, including variable consideration, and lack of effective controls relating to segregation of duties specific to the creation of manual journal entries.

Restatement of Management's Conclusion Regarding Internal Control over Financial Reporting

Management and we previously concluded that the Company did not maintain effective internal control over financial reporting as of December 31, 2022 because of the material weaknesses related to lack of an effective internal control environment as former management failed to set an appropriate tone at the top, lack of a sufficient complement of personnel with an appropriate level of knowledge about accounting for variable consideration related to customer incentive arrangements in a manner commensurate with the Company's financial reporting requirements, and lack of effective controls over approving, communicating, and accounting for incentive arrangements with customers, impacting the completeness and accuracy of revenues, including variable consideration. However, management has subsequently determined that a material weakness in internal control over financial reporting related to lack of effective controls relating to segregation of duties specific to the creation of manual journal entries existed as of December 31, 2022. Accordingly, management's report and our opinion on the effectiveness of internal control over financial reporting have been restated to include this additional material weakness.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses referred to above are described in the accompanying Management's Report on Internal Control Over Financial Reporting. We considered these material weaknesses in determining the nature, timing, and extent of audit tests applied in our audit of the 2022 consolidated financial statements, and our opinion regarding the effectiveness of the Company's internal control over financial reporting does not affect our opinion on those consolidated financial statements.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in management's report referred to above. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Annual and Interim Goodwill Impairment Assessments – Certain Reporting Units

As described in Notes 1 and 12 to the consolidated financial statements, the Company’s consolidated net goodwill balance was $2,688 million as of December 31, 2022, of which a significant portion relates to certain reporting units. Goodwill is tested for impairment at the reporting unit level annually as of April 1 of each year, or more frequently if events or circumstances indicate that the carrying value of goodwill may be impaired. Management performs impairment tests by comparing the fair value of each reporting unit to its carrying amount to determine if there is a potential impairment. In the third quarter of 2022, management identified indicators of a "more likely than not" impairment related to its Digital Dental Group and Equipment & Instruments reporting units within the Technologies & Equipment segment. The Company has experienced adverse macroeconomic factors as a result of weakened global demand, higher cost of capital, unfavorable foreign currency impacts, and increased raw material, supply chain and service costs, which are contributing to reduced forecasted revenues, lower operating margins, and reduced expectations for future cash flows. As a result of the interim test, management recorded a pre-tax goodwill impairment charge related to the Digital Dental Group and Equipment & Instruments reporting units within the Technologies & Equipment segment of $1,100 million and $87 million, respectively. As disclosed by management, the Company uses a discounted cash flow model as its valuation technique to measure the fair value for its reporting units. The discounted cash flow model uses five- to ten- year forecasted cash flows plus a terminal value based on capitalizing the last period’s cash flows using a perpetual growth rate. As disclosed by management, the significant assumptions in the application of the discounted cash flow model include, but are not limited to, the discount rates, revenue growth rates, perpetual revenue growth rates, operating margin percentages, and net working capital changes of the reporting unit’s business.

The principal considerations for our determination that performing procedures relating to the annual and interim goodwill impairment assessments of certain reporting units is a critical audit matter are (i) the significant judgment by management when developing the fair value estimates of the reporting units, (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to the discount rates, revenue growth rates, perpetual revenue growth rates, and operating margin percentages for the annual assessment and discount rates, revenue growth rates, perpetual revenue growth rates, operating margin percentages, and net working capital changes for the interim assessment, and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill impairment assessments, including controls over the valuation of the Company's reporting units. These procedures also included, among others, testing management's process for developing the fair value estimates of certain of the Company's reporting units; evaluating the appropriateness of the discounted cash flow models; testing the completeness and accuracy of underlying data used in the discounted cash flow models; and evaluating the reasonableness of significant assumptions used by management related to the discount rates, revenue growth rates, perpetual revenue growth rates, operating margin percentages, and net working capital changes. Evaluating management's assumptions related to revenue growth rates, perpetual revenue growth rates, operating margin percentages, and net working capital changes involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the reporting units; (ii) the consistency with external market and industry data; and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in evaluating (i) the appropriateness of the Company's discounted cash flow models and (ii) the reasonableness of the assumptions related to the discount rates, perpetual revenue growth rates, and net working capital changes.

Uncertain Tax Position Related to a Worthless Stock Deduction

As described in Notes 1 and 22 to the consolidated financial statements, management applies a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Management recognizes in the consolidated financial statements the impact of a tax position if that position is more likely than not of being sustained upon examination by the taxing authorities based on the technical merits of the position. Management has recorded the full benefit of the tax deduction taken associated with a worthless stock deduction. As a result of an audit by the Internal Revenue Service (IRS) for 2013, the Company's worthless stock deduction of $546 million has been disallowed. In March 2019, the Company submitted a formal protest disputing on multiple grounds the proposed taxes and have not accrued a liability relating to the proposed tax adjustments. If the worthless stock deduction was ultimately disallowed, the Company would be subject to additional income tax expense.

The principal considerations for our determination that performing procedures relating to the uncertain tax position related to a worthless stock deduction is a critical audit matter are (i) the significant judgment by management when determining the uncertain tax position, (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating audit evidence related to management's accurate measurement of the uncertain tax position, and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the recognition and measurement of the uncertain tax position related to the worthless stock deduction. These procedures also included, among others, evaluating the appropriateness of management's assessment by reviewing the technical merits of the tax position taken; evaluating the tax documentation provided by management; and evaluating the status and results of the income tax audit, and correspondence with the IRS. Professionals with specialized skill and knowledge were used to assist in the evaluation of management's interpretation and application of relevant tax laws in the United States and in evaluating the reasonableness of management's assessment of whether the tax position will be sustained.

/s/ *PricewaterhouseCoopers LLP*

PricewaterhouseCoopers LLP

Charlotte, North Carolina

March 1, 2023, except with respect to our opinion on internal control over financial reporting insofar as it relates to the effects of the matter discussed in the penultimate paragraph of Management's Report on Internal Control Over Financial Reporting, as to which the date is August 7, 2023

We have served as the Company’s auditor since 2000.

DENTSPLY SIRONA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(in millions, except per share amounts)

	Year Ended December 31,		
	2022	2021	2020
Net sales	$ 3,922	$ 4,231	$ 3,339
Cost of products sold	1,795	1,884	1,683
Gross profit	2,127	2,347	1,656
Selling, general, and administrative expenses	1,589	1,551	1,302
Research and development expenses	174	171	123
Goodwill impairment	1,187	—	157
Intangible asset impairment and other costs	114	17	77
Operating (loss) income	(937)	608	(3)
Other income and expenses:			
Interest expense, net	60	55	46
Other expense (income), net	58	8	1
(Loss) income before income taxes	(1,055)	545	(50)
(Benefit) provision for income taxes	(105)	134	23
Net (loss) income	(950)	411	(73)
Less: Net income (loss) attributable to noncontrolling interests	—	—	—
Net (loss) income attributable to Dentsply Sirona	$ (950)	$ 411	$ (73)
Net (loss) income per common share attributable to Dentsply Sirona:			
Basic	$ (4.41)	$ 1.88	$ (0.33)
Diluted	$ (4.41)	$ 1.87	$ (0.33)
Weighted average common shares outstanding:			
Basic	215.5	218.4	219.2
Diluted	215.5	220.2	219.2

The accompanying notes are an integral part of these consolidated financial statements.

DENTSPLY SIRONA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in millions)

	Year Ended December 31,		
	2022	2021	2020
Net (loss) income	$ (950)	$ 411	$ (73)
Other comprehensive (loss) income, net of tax:			
Foreign currency translation adjustments	(156)	(181)	184
Net gain (loss) on derivative financial instruments	29	25	(32)
Pension liability adjustments	91	26	(13)
Total other comprehensive (loss) income	(36)	(130)	139
Total comprehensive (loss) income	(986)	281	66
Less: Comprehensive (loss) income attributable to noncontrolling interests	—	(2)	1
Comprehensive (loss) income attributable to Dentsply Sirona	$ (986)	$ 283	$ 65

The accompanying notes are an integral part of these consolidated financial statements.

DENTSPLY SIRONA INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in millions, except per share amounts)

	December 31, 2022	December 31, 2021
Assets		
Current Assets:		
Cash and cash equivalents	$ 365	$ 339
Accounts and notes receivable-trade, net	632	750
Inventories, net	627	515
Prepaid expenses and other current assets	269	248
Total Current Assets	1,893	1,852
Property, plant and equipment, net	761	773
Operating lease right-of-use assets, net	200	198
Identifiable intangible assets, net	1,903	2,319
Goodwill, net	2,688	3,976
Other noncurrent assets	198	121
Total Assets	$ 7,643	$ 9,239
Liabilities and Equity		
Current Liabilities:		
Accounts payable	$ 279	$ 262
Accrued liabilities	727	760
Income taxes payable	46	57
Notes payable and current portion of long-term debt	118	182
Total Current Liabilities	1,170	1,261
Long-term debt	1,826	1,913
Operating lease liabilities	149	149
Deferred income taxes	287	391
Other noncurrent liabilities	399	528
Total Liabilities	3,831	4,242
Commitments and contingencies (Note 22)		
Equity:		
Preferred stock, $1.00 par value; 0.25 million shares authorized; no shares issued	—	—
Common stock, $0.01 par value;	3	3
400.0 million shares authorized at December 31, 2022 and 2021		
264.5 million shares issued at December 31, 2022 and 2021		
215.3 million and 217.4 million shares outstanding at December 31, 2022 and 2021, respectively		
Capital in excess of par value	6,629	6,606
Retained earnings	456	1,514
Accumulated other comprehensive loss	(628)	(592)
Treasury stock, at cost, 49.3 million and 47.1 million shares at December 31, 2022 and 2021, respectively	(2,649)	(2,535)
Total Dentsply Sirona Equity	3,811	4,996
Noncontrolling interests	1	1
Total Equity	3,812	4,997
Total Liabilities and Equity	$ 7,643	$ 9,239

The accompanying notes are an integral part of these consolidated financial statements.

DENTSPLY SIRONA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(in millions, except per share amounts)

	Common Stock	Capital in Excess of Par Value	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Total Dentsply Sirona Equity	Noncontrolling Interests	Total Equity
Balance at December 31, 2019	$ 3	$ 6,587	$ 1,359	$ (602)	$ (2,301)	$ 5,046	$ 2	$ 5,048
Net loss	—	—	(73)	—	—	(73)	—	(73)
Other comprehensive income	—	—	—	138	—	138	1	139
Exercise of stock options	—	1	—	—	10	11	—	11
Stock based compensation expense	—	47	—	—	—	47	—	47
Funding of employee stock purchase plan	—	2	—	—	3	5	—	5
Treasury shares purchased	—	—	—	—	(140)	(140)	—	(140)
Restricted stock unit distributions	—	(34)	—	—	19	(15)	—	(15)
Restricted stock unit dividends	—	1	(1)	—	—	—	—	—
Cash dividends declared ($0.40 per share)	—	—	(87)	—	—	(87)	—	(87)
Balance at December 31, 2020	$ 3	$ 6,604	$ 1,198	$ (464)	$ (2,409)	$ 4,932	$ 3	$ 4,935
Net income	—	—	411	—	—	411	—	411
Other comprehensive loss	—	—	—	(128)	—	(128)	(2)	(130)
Exercise of stock options	—	15	—	—	37	52	—	52
Stock based compensation expense	—	49	—	—	—	49	—	49
Funding of employee stock purchase plan	—	2	—	—	3	5	—	5
Treasury shares purchased	—	—	—	—	(200)	(200)	—	(200)
Restricted stock unit distributions	—	(65)	—	—	34	(31)	—	(31)
Restricted stock unit dividends	—	1	(1)	—	—	—	—	—
Cash dividends declared ($0.43 per share)	—	—	(94)	—	—	(94)	—	(94)
Balance at December 31, 2021	$ 3	$ 6,606	$ 1,514	$ (592)	$ (2,535)	$ 4,996	$ 1	$ 4,997
Net loss	—	—	(950)	—	—	(950)	—	(950)
Other comprehensive loss	—	—	—	(36)	—	(36)	—	(36)
Exercise of stock options	—	1	—	—	6	7	—	7
Stock based compensation expense	—	59	—	—	—	59	—	59
Funding of employee stock purchase plan	—	1	—	—	5	6	—	6
Treasury shares purchased	—	—	—	—	(150)	(150)	—	(150)
Restricted stock unit distributions	—	(38)	—	—	25	(13)	—	(13)
Cash dividends declared ($0.50 per share)	—	—	(108)	—	—	(108)	—	(108)
Balance at December 31, 2022	$ 3	$ 6,629	$ 456	$ (628)	$ (2,649)	$ 3,811	$ 1	$ 3,812

The accompanying notes are an integral part of these consolidated financial statements.

DENTSPLY SIRONA INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)

	Year Ended December 31,		
	2022	2021	2020
Cash flows from operating activities:			
Net (loss) income	$ (950)	$ 411	$ (73)
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation	119	124	142
Amortization of intangible assets	209	222	192
Fixed asset impairment	—	—	3
Goodwill impairment	1,187	—	157
Indefinite-lived intangible asset impairment	100	—	39
Deferred income taxes	(228)	(25)	(62)
Stock based compensation expense	59	48	47
Equity in earnings from unconsolidated affiliates	36	10	—
Other non-cash (income) expense	60	24	3
Loss (gain) on sale or disposal of non-strategic businesses and product lines	3	(14)	1
Changes in operating assets and liabilities, net of acquisitions:			
Accounts and notes receivable-trade, net	85	(117)	131
Inventories, net	(141)	(64)	123
Prepaid expenses and other current assets, net	(33)	(32)	39
Other noncurrent assets	1	(10)	1
Accounts payable	30	(49)	(28)
Accrued liabilities	(6)	100	(10)
Income taxes	(15)	17	(41)
Other noncurrent liabilities	1	12	(15)
Net cash provided by operating activities	517	657	649
Cash flows from investing activities:			
Cash paid for acquisitions of businesses and equity investments, net of cash acquired	—	(248)	(1,078)
Cash received on sale of non-strategic businesses or product lines	—	28	1
Capital expenditures	(149)	(142)	(87)
Cash received on derivative contracts	13	2	58
Other investing activities, net	(2)	2	—
Net cash used in investing activities	(138)	(358)	(1,106)
Cash flows from financing activities:			
Proceeds from long-term borrowings, net of deferred financing costs	6	16	1,448
Repayments on long-term borrowings	(2)	(297)	(701)
Net borrowings (repayments) on short-term borrowings	(64)	179	2
Payments on terminated derivative instruments	—	—	(30)
Proceeds from exercised stock options	6	51	11
Cash paid for treasury stock	(150)	(200)	(140)
Cash dividends paid	(104)	(92)	(88)
Other financing activities, net	(21)	(36)	(26)
Net cash (used in) provided by financing activities	(329)	(379)	476
Effect of exchange rate changes on cash and cash equivalents	(24)	(19)	14
Net increase (decrease) in cash and cash equivalents	26	(99)	33
Cash and cash equivalents at beginning of period	339	438	405
Cash and cash equivalents at end of period	$ 365	$ 339	$ 438

Supplemental disclosures of cash flow information:						
Interest paid, net of amounts capitalized	$	70	$	64	$	45
Income taxes paid, net of refunds		122		148		82
Non-cash investing activities:						
Change in accounts payable related to capital expenditures	$	(6)	$	19	$	—

The accompanying notes are an integral part of these consolidated financial statements.

DENTSPLY SIRONA INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 - SIGNIFICANT ACCOUNTING POLICIES

Description of Business

DENTSPLY SIRONA Inc. (“Dentsply Sirona” or the “Company”), is the world’s largest manufacturer of dental products and technologies, with a 136-year history of innovation and service to the dental industry and patients worldwide. The Company’s principal product categories include dental consumable products, dental equipment, dental technologies and certain healthcare consumable products. The Company sells its products in over 150 countries under some of the most well-established brand names in the industry.

Basis of Presentation

The consolidated financial statements include the results of the Company and its wholly-owned subsidiaries. All significant intercompany accounts and transactions are eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (“US GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenue and expense during the reporting period. Actual results could differ materially from those estimates.

Cash and Cash Equivalents

Cash and cash equivalents include deposits with banks as well as highly liquid time deposits with original maturities of ninety days or less. The balance as of December 31, 2022 includes $71 million of cash and cash equivalents located in Russia which is available for use in local operations but limited in its ability to be transferred out of the country due to control measures currently in place by the Russian government.

Short-term Investments

Short-term investments are highly liquid time deposits with original maturities greater than ninety days and with remaining maturities of one year or less.

Accounts Receivable

The Company recognizes a receivable when it has an unconditional right to payment, which represents the amount the Company expects to collect in a transaction. Payment terms are typically 30 days in the U.S. but may be longer in international markets. In general, contracts containing significant financing components are not material to the Company’s financial statements.

The Company establishes an allowance for doubtful accounts based on an estimate of current expected credit losses resulting from the inability of its customers to make required payments. The allowance is determined based on a combination of factors, including the length of time that the receivable is past due, history of write-offs, and the Company's knowledge of circumstances relating to specific customers' ability to meet their financial obligations. Provision for doubtful accounts are included in Selling, general and administrative expenses in the Consolidated Statements of Operations. For customers on credit terms, the Company performs ongoing credit evaluation of those customers’ financial condition and generally does not require collateral from them. See Note 2, Revenue for additional information on Accounts Receivable.

Inventories

Inventories are stated at the lower of cost and net realizable value. The cost of inventories is based upon the first-in, first out method (“FIFO”) or average cost methods, except for $3 million of inventories that was determined by the last-in, first out method (“LIFO”) method as of December 31, 2020.

The Company establishes reserves for inventory estimated to be excess, obsolete or unmarketable based upon assumptions about future demand, market conditions, and expiration of products.

Valuation of Goodwill and Indefinite-Lived and Definite-Lived Intangible Assets

Goodwill

Goodwill is the excess of the purchase price over the fair value of identifiable net assets acquired and liabilities assumed in a business combination. Goodwill is not subject to amortization but is tested for impairment at the reporting unit level annually in accordance with ASC 350 as of April 1 of each year, or more frequently if events or circumstances indicate that the carrying value of goodwill may be impaired. The Company performs impairment tests by comparing the fair value of each reporting unit to its carrying amount to determine if there is a potential impairment. If the carrying value of a reporting unit with goodwill exceeds its respective fair value, an impairment charge is recognized for the excess amount. Additional information related to the testing for goodwill impairment, including results of the annual test performed as of April 1, 2022 and the interim impairment assessment performed in the third quarter of 2022, is provided in Note 12, Goodwill and Intangible Assets.

Indefinite-Lived Intangible Assets

Indefinite-lived intangible assets consist primarily of tradenames and trademarks and in-process research and development ("R&D") acquired in business combinations, and these are not subject to amortization. Valuations of indefinite-lived intangibles assets acquired in business combinations are based on information and assumptions available at the time of their acquisition, using income and market approaches to determine fair value. The Company conducts an impairment test in accordance with ASC 350 as of April 1 of each year, or more frequently if events or circumstances indicate that the carrying value of indefinite-lived intangible assets may be impaired. Potential impairment is identified by comparing the fair value of an intangible asset to its carrying value. Additional information related to the testing for indefinite-lived intangible asset impairment, including results of the annual test performed as of April 1, 2022 and the interim assessments performed in the third and fourth quarter of 2022, is provided in Note 12, Goodwill and Intangible Assets.

Definite-Lived Intangible Assets

Definite-lived intangible assets primarily consist of patents, tradenames, trademarks, licensing agreements, developed technology, and customer relationships. Valuation of definite-lived intangibles assets acquired in business combinations are based on information and assumptions available at the time of acquisition, using income and market model approaches to determine fair value.

Identifiable definite-lived intangible assets are amortized on a basis that best reflects how their economic benefits are utilized over the life of the asset or on a straight-line basis if not materially different from actual utilization. The useful life is the period over which the asset is expected to contribute to the future cash flows of the Company. The Company uses the following useful lives for its definite-lived intangible assets:

Definite-lived Intangible Asset Type	Useful Life
Patents	Up to date patent expires
Tradenames and trademarks	Up to 20 years
Licensing agreements	Up to 20 years
Customer relationships	Up to 15 years
Developed technology	Up to 15 years

When the expected useful life of an intangible is not known, the Company will estimate its useful life based on similar asset or asset groups, any legal, regulatory, or contractual provision that limits the useful life, the effect of economic factors, including obsolescence, demand, competition, and the level of maintenance expenditures required to obtain the expected future economic benefit from the asset.

These assets are reviewed for impairment whenever events or circumstances suggest that the carrying amount of the asset may not be recoverable. The Company closely monitors all intangible assets, including those related to new and existing technologies, for indicators of impairment as these assets have more risk of becoming impaired. Impairment is based upon an initial evaluation of the identifiable undiscounted cash flows. If the initial evaluation identifies a potential impairment, a fair value of the asset is determined by using a discounted cash flows valuation. If impaired, the resulting charge reflects the excess of the asset’s carrying cost over its fair value.

Property, Plant and Equipment

Property, plant and equipment are stated at cost, net of accumulated depreciation. Assets acquired through acquisitions are recorded at fair value. The Company capitalizes costs incurred in the development or acquisition of software, whether for internal or external use. The Company expenses costs incurred in the preliminary project planning stage. Except for leasehold improvements, depreciation and amortization is computed by the straight-line method over the assets' estimated useful lives:

Property, Plant, and Equipment Assets Type	Useful Life
Buildings	40 years
Machinery and Equipment	4 to 15 years
Capitalized Software	2 to 10 years
Leasehold Improvements	Shorter of the estimated useful life or the term of the lease

Maintenance and repairs are expensed as incurred; replacements and major improvements are capitalized. If events or circumstances exist which suggest that the carrying amount of the asset group may not be recoverable, the identifiable undiscounted cash flows of the asset group are compared to the carrying value of the asset. If the carrying value is in excess of the identifiable undiscounted cash flows, the excess of the asset group's carrying cost over its fair value is recorded as an impairment charge.

Leases

The Company leases real estate, automobiles and equipment under various operating and finance leases. The Company determines if an arrangement is a lease or contains a lease at inception. Operating lease right-of-use assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As the implicit rate is not readily determinable in most of the Company’s lease agreements, the Company uses its estimated secured incremental borrowing rate, based on the information available, at commencement of the lease to determine the present value of lease payments. Lease expense is recognized on a straight-line basis over the lease term. Leases with an initial term of 12 months or less are not recorded on the balance sheet. Any new real estate and equipment operating lease agreements with lease and non-lease components, are accounted for as a single lease component; auto leases are accounted for as separate lease components.

The Company’s leases have remaining lease terms of approximately 1 year to 10 years. Many of the Company's real estate and equipment leases have one or more options to renew, with terms that can extend primarily from 1 year to 3 years, which are not included in the initial lease term until considered reasonably certain of renewal. The Company does not have lease agreements with residual value guarantees, sale-and-leaseback terms, or material restrictive covenants. The Company does not have any material sublease arrangements. See Note 11, Leases for additional information.

Derivative Financial Instruments

The Company employs derivative financial instruments to hedge certain anticipated transactions, firm commitments, and assets and liabilities denominated in foreign currencies. Additionally, the Company manages exposures to changes in interest rates by utilizing interest rate swaps that have the effect of converting floating rate debt to fixed rate, or vice versa.

The Company records all derivative instruments at fair value and changes in fair value are recorded each period in the consolidated statements of operations or accumulated other comprehensive income (“AOCI”). The Company classifies derivative assets and liabilities as current when the remaining term of the derivative contract is one year or less. The Company has elected to classify the cash flow from derivative instruments in the same category as the cash flows from the items being hedged. Should the Company enter into a derivative instrument that included an other-than-insignificant financing element then all cash flows will be classified as financing activities in the Consolidated Statements of Cash Flows as required by US GAAP. See Note 20, Financial Instruments for additional information on derivative instruments.

Pension and Other Postemployment Benefits

Some of the employees of the Company and its subsidiaries are covered by government or Company-sponsored defined benefit plans and defined contribution plans. Additionally, certain union and salaried employee groups in the U.S. are covered by postemployment healthcare plans. Projected benefit obligations and net periodic costs for Company-sponsored defined benefit and postemployment benefit plans are based on an annual actuarial valuation that includes assessment of key assumptions relating to expected return on plan assets, discount rates, employee compensation increase rates and health care cost trends. Expected return on plan assets, discount rates and health care cost trend assumptions are particularly important when determining the Company's benefit obligations and net periodic benefit costs associated with postemployment benefits. Changes in these assumptions can impact the Company's earnings. In determining the cost of postemployment benefits, certain assumptions are established annually to reflect market conditions and plan experience to appropriately reflect the expected costs as determined by actuaries. These assumptions include medical inflation trend rates, discount rates, employee turnover and mortality rates. The Company predominantly uses liability durations in establishing its discount rates, which are observed from indices of high-grade corporate bond yields in the respective economic regions of the plans. The expected return on plan assets is the weighted average long-term expected return based upon asset allocations and historic average returns for the markets where the assets are invested, principally in foreign locations. The Company reports the funded status of its defined benefit pension and other postemployment benefit plans on its consolidated balance sheets as a net liability or asset. Additional information related to the impact of changes in these assumptions is provided in Note 18, Benefit Plans.

Accruals for Self-Insured Losses

The Company maintains insurance for certain risks, including workers' compensation, and is self-insured for employee related healthcare benefits. The Company accrues for the expected costs associated with these risks by considering historical claims experience, demographic factors, severity factors and other relevant information. Costs are recognized in the period the claim is incurred, and the financial statement accruals include an estimate of claims incurred but not yet reported. The Company has stop-loss coverage to limit its exposure to any significant exposure on a per claim basis.

Litigation

The Company and its subsidiaries, from time to time, are parties to lawsuits arising from operations. The Company records liabilities when a loss is probable and can be reasonably estimated. If these estimates are in the form of ranges, the Company records the liabilities at the most likely outcome within the range. If no point within the range represents a better estimate of the probable loss, then the low point in the range is accrued. The ranges established by management are based on analysis made by internal and external legal counsel who considers the best information known at the time. If the Company determines that a contingency is reasonably possible, it considers the same information to estimate the possible exposure and discloses any material potential liability. These loss contingencies are monitored regularly for a change in fact or circumstance that would require an accrual adjustment. Legal costs related to these lawsuits are expensed as incurred.

Foreign Currency Translation

The local currency of foreign operations, except for those in highly inflationary economies, generally are considered to be their functional currency.

Assets and liabilities of foreign subsidiaries are translated at foreign exchange rates on the balance sheet date; revenue and expenses are translated at the monthly average foreign exchange rates. The effects of these translation adjustments are reported within AOCI in the Consolidated Balance Sheets. During the year ended December 31, 2022, the Company had translation loss of $188 million and a gain of $32 million on its loans designated as hedges of net investments. During the year ended December 31, 2021, the Company had translation loss of $225 million and gains of $46 million on its loans designated as hedges of net investments. During the year ended December 31, 2020, the Company had translation gains of $235 million and losses of $54 million on its loans designated as hedges of net investments.

Foreign currency gains and losses arising from transactions denominated in a currency other than the functional currency of the entity involved are included within Other expense (income), net in the Consolidated Statements of Operations. During the years ended December 31, 2022, 2021, and 2020, net foreign currency loss of $11 million, gain of $6 million and gain of $13 million, respectively.

Revenue Recognition

Revenues are derived primarily from the sale of dental equipment and dental and healthcare consumable products. Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring goods or providing services in accordance with ASC 606-10, *Revenues from Contracts with Customers*. Revenue is recognized when performance obligations under the terms of a contract with a customer are satisfied; this occurs with the transfer of control of products and services to its customers, which for products generally occurs when title and risk of loss transfers to the customer, and for services generally occurs as the customer receives and consumes the benefit. Sales, value-added, and other taxes collected concurrent with revenue-producing activities are excluded from revenue.

Certain contracts with our customers include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately may require significant judgment. The Company generally uses an observable price, typically average selling price, to determine the stand-alone selling price for separate performance obligations. The Company determines the stand-alone selling price, based on Company geographic sales locations' database of pricing and discounting practices for the specific product or service when sold separately, and utilizes this data to arrive at average selling prices by product. In cases where an average selling price is not observable, the Company determines the stand-alone selling price using relevant information and applies suitable estimation methods including, but not limited to, the cost plus a margin approach. Revenue is then allocated proportionately, based on the determined stand-alone selling price, to each distinct performance obligation.

The Company exercises judgment in estimating variable consideration, which primarily includes volume discounts, sales rebates, and product returns. The Company adjusts the estimate of revenue at the earlier of when the most likely amount of consideration can be estimated, the amount expected to be received changes, or when the consideration becomes fixed. The Company estimates volume discounts by evaluating specific inputs and assumptions, including the individual customer's historical and estimated future product purchases. Discounts are deducted from revenue at the time of sale or when the discount is offered, whichever is later. In estimating sales rebates, the Company evaluates inputs such as customer-specific trends, terms of the customers' contracted rebate program, historical experience, and the forecasted performance of a customer and their expected level of achievement within the rebate programs. The accruals for these rebate programs are updated as actual results and updated forecasts impact the estimated achievement for customers within the rebate programs. When the Company gives customers the right to return eligible products and receive credit, returns are estimated based on an analysis of historical experience. However, returns of products, excluding warranty-related returns, are not material.

To the extent the transaction price includes variable consideration, the Company applies judgment in constraining the estimated variable consideration due to factors that may cause reversal of cumulative revenue recognized. The Company evaluates constraints based on its historical and projected experience with similar customer contracts.

For most of its products, the Company transfers control and recognizes revenue when products are shipped from the Company's manufacturing facility or warehouse to the customer. For contracts with customers that contain destination shipping terms, revenue is not recognized until the goods are delivered to the agreed upon destination. As such, the Company's performance obligations related to product sales are satisfied at a point in time as this is when the customer obtains the use of and substantially all of the benefit of the product.

The Company recognizes revenue from support and maintenance contracts, extended warranties, and other certain contract performance obligations over time based on the period of the contracts or as the services are performed, as the customer simultaneously receives and consumes the benefits provided by the Company's performance of the services. In general, the total amount of revenue recognized over time is not material to the Company's financial statements.

Depending on the terms of its contracts, the Company may defer the recognition of a portion of revenue on a relative stand-alone selling price basis when certain performance obligations are not yet satisfied. Consideration received from customers in advance of revenue recognition is classified as deferred revenue.

The Company has elected to account for shipping and handling activities as a fulfillment cost within the cost of products sold, and records shipping and handling costs collected from customers in net sales. The Company has adopted one practical expedient: relief from considering the existence of a significant financing component when the payment for the good or service is expected to be one year or less.

Additional information and disclosure regarding revenue recognition is provided in Note 2, Revenue.

Cost of Products Sold

Cost of products sold represents costs directly related to the manufacture and distribution of the Company’s products, and include costs of raw materials, packaging, direct labor, overhead, shipping and handling, warehousing and the depreciation of manufacturing, warehousing and distribution facilities and amortization of intangible assets. Overhead and related expenses include salaries, wages, employee benefits, utilities, lease costs, maintenance and property taxes.

Warranties

The Company provides manufacturer's warranties on certain equipment products. Estimated warranty costs are accrued when sales are made to customers. Estimates for warranty costs are based primarily on historical warranty claim experience. Warranty costs are included in Cost of products sold in the Consolidated Statements of Operations. The Company’s warranty expense and warranty accrual were as follows:

	December 31,		
(in millions)	2022	2021	2020
Warranty Expense	$ 27	$ 44	$ 27
Warranty Accrual	22	28	18

Selling, General and Administrative Expenses

Selling, general and administrative expenses (“SG&A”) represent indirect costs associated with generating revenues and in managing the business of the Company. Such costs include advertising and marketing expenses, salaries, employee benefits, incentive compensation, travel, office expenses, lease costs, amortization of capitalized software developed for internal use, and depreciation of administrative facilities. Advertising cost are expensed as incurred.

Research and Development Costs

R&D costs, including internal labor costs, material costs, consulting expenses, and certain overheads, such as facilities and information technology costs directly attributable to R&D activities, are expensed in the period in which they are incurred. Software development costs related to software to be sold, leased, or otherwise marketed incurred prior to the attainment of technological feasibility are considered R&D and are expensed as incurred. Once technological feasibility is established, the cost of software developed for external use is capitalized until the product is available for general release to customers. Amortization of these costs are included in Cost of products sold over the estimated life of the products.

Stock Compensation

Stock-based compensation is measured at the grant date at fair value, and is recognized as an expense over the employee’s requisite service period (generally the vesting period of the equity awards). The compensation cost is only recognized for the portion of the awards that are expected to vest.

Stock options granted become exercisable as determined by the grant agreement and expire ten years after the date of grant under these plans. Restricted Stock Units (“RSU”) vest as determined by the grant agreement and are subject to a service condition, which requires grantees to remain employed by the Company during the period following the date of grant. Under the terms of the RSUs, the vesting period is referred to as the restricted period. In addition to the service condition, certain granted RSUs are subject to performance requirements that can vary between the first year and up to the final year of the RSU award. If targeted performance is not met the RSU granted is adjusted to reflect the achievement level. Upon the expiration of the applicable restricted period and the satisfaction of all conditions imposed, the restrictions on RSUs will lapse, and shares of common stock will be issued as payment for each vested RSU. Upon death, disability or qualified retirement all awards become immediately exercisable for up to one year. Awards are expensed as compensation over their respective vesting periods or to the eligible retirement date if shorter. The Company records forfeitures on stock-based compensation as the participant terminates rather than estimating forfeitures.

Income Taxes

The Company's tax expense includes U.S. and international income taxes plus the provision for U.S. taxes on undistributed earnings of international subsidiaries not considered to be permanently invested. Tax credits and other incentives reduce tax expense in the year the credits are claimed. Certain items of income and expense are not reported in tax returns and financial statements in the same year. The tax effect of such temporary differences is reported as deferred income taxes. Deferred tax assets are recognized if it is more likely than not that the assets will be realized in future years. The Company establishes a valuation allowance for deferred tax assets for which realization is not likely.

The Company applies a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The Company recognizes in the consolidated financial statements the impact of a tax position if that position is more likely than not of being sustained upon examination by the taxing authorities based on the technical merits of the position.

The Company's tax positions are subject to ongoing examinations by the tax authorities. The Company operates within multiple taxing jurisdictions throughout the world and in the normal course of business is examined by taxing authorities in those jurisdictions. Adjustments to the uncertain tax positions are recorded when taxing authority examinations are completed, statutes of limitation are closed, changes in tax laws occur or as new information comes to light with regard to the technical merits of the tax position.

Earnings Per Share

Basic earnings per share are calculated by dividing net earnings attributable to Company's shareholders by the weighted average number of shares outstanding for the period. Diluted earnings per share is calculated by dividing net earnings attributable to Company's shareholders by the weighted average number of shares outstanding for the period, adjusted for the effect of an assumed exercise of all dilutive options outstanding at the end of the period, unless the impact of including these options is anti-dilutive.

Business Acquisitions

The Company acquires businesses as well as partial interests in businesses. Acquired businesses are accounted for using the acquisition method of accounting which requires the Company to record assets acquired and liabilities assumed at their respective fair values with the excess of the purchase price over estimated fair values recorded as goodwill.

The Company obtains information during due diligence and through other sources to establish respective fair values. Examples of factors and information that the Company uses to determine the fair values include: tangible and intangible asset valuations and appraisals, and evaluations of existing contingencies, liabilities, and product line information. If the initial valuation for an acquisition is incomplete by the end of the reporting period in which the acquisition occurred, the Company will record provisional estimates in the financial statements. The provisional estimates will be finalized as soon as information becomes available, but not later than one year from the acquisition date.

As part of purchase accounting for acquisitions, the Company values identified intangible assets using an income approach. Technology know-how is valued using an excess earnings method. Tradename and trademark assets are valued using a relief-from-royalty method. Non-compete agreements are valued using a with-and-without method. The Company applies judgment in estimating the fair value of intangible assets acquired, which involves the use of estimates and assumptions with respect to revenue growth rates, EBITDA margin percentages, royalty rate, technology obsolescence factors, useful lives of the assets and discount rates used in computing present values. In addition, the estimates of useful lives of these acquired intangibles are used to calculate depreciation and amortization expense. For additional information related to accounting for acquisitions, see Note 6, Business Combinations.

Investments in Unconsolidated Affiliates

Investments in non-consolidated affiliates, joint ventures and partnerships where the Company maintains significant influence over an entity, but does not have control are accounted for using the equity method. The Company records the carrying value of these investments within other noncurrent assets in the Consolidated Balance Sheets, and records the Company's proportional share of the investees' net earnings or losses within other expense (income). Investments in which the Company does not exercise significant influence are recorded at cost, and assessed for any other-than-temporary impairment when events or changes in circumstances indicate the carrying amount of the investment might not be recoverable.

The Company's equity-method net losses were $36 million, $10 million, and $1 million for the years ended December 31, 2022, 2021, and 2020 respectively. Loss from equity method investments for the year ended December 31, 2022 includes $36 million recorded in Other expense (income), net in the Consolidated Statements of Operations for a write-off of the Company's ownership position in a privately-held dental investment company following impairment of underlying investments held by the investment company and the Company's determination that the remaining investment is not recoverable.

Noncontrolling Interests

The Company reports noncontrolling interest (“NCI”) in a subsidiary as a separate component of Equity in the Consolidated Balance Sheets. Additionally, the Company reports the portion of net income (loss) and comprehensive income (loss) attributed to the Company and NCI separately in the Consolidated Statements of Operations, and in the Consolidated Statements of Comprehensive Income.

Segment Reporting

The Company has numerous operating businesses covering a wide range of products and geographic regions, primarily serving the professional dental market and to a lesser extent the consumable medical device market. The Company has two reportable segments and a description of the activities within these segments is included in Note 7, Segment and Geographic Information.

Fair Value Measurement

Recurring Basis

The Company records certain financial assets and liabilities at fair value in accordance with the accounting guidance, which defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date in current markets. The accounting guidance establishes a hierarchical disclosure framework associated with the level of pricing observability utilized in measuring financial instruments at fair value. The three broad levels defined by the fair value hierarchy are as follows:

Level 1 - Quoted prices are available in active markets for identical assets or liabilities as of the reported date.

Level 2 - Pricing inputs are other than quoted prices in active markets, which are either directly or indirectly observable as of the reported date. These financial instruments include derivative instruments whose fair value have been derived using a model where inputs to the model are directly observable in the market or can be derived principally from, or corroborated by observable market data.

Level 3 - Instruments that have little to no pricing observability as of the reported date. These financial instruments do not have two-way markets and are measured using management’s best estimate of fair value, where the inputs into the determination of fair value require significant management judgment or estimation.

The degree of judgment utilized in measuring the fair value of certain financial assets and liabilities generally correlates to the level of pricing observability. Pricing observability is impacted by a number of factors, including the type of financial instrument. Financial assets and liabilities with readily available active quoted prices or for which fair value can be measured from actively quoted prices generally will have a higher degree of pricing observability and a lesser degree of judgment utilized in measuring fair value. Conversely, financial assets and liabilities rarely traded or not quoted will generally have less, or no pricing observability and a higher degree of judgment utilized in measuring fair value.

The Company primarily applies the market approach for recurring fair value measurements and endeavors to utilize the best available information. Accordingly, the Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. Additionally, the Company considers its credit risks and its counterparties’ credit risks when determining the fair values of its financial assets and liabilities. The Company records its derivatives and contingent considerations on a recurring fair value basis.

The Company believes the carrying amounts of cash and cash equivalents, accounts receivable (net of allowance for doubtful accounts), prepaid expenses and other current assets, accounts payable, accrued liabilities, income taxes payable and notes payable approximate fair value due to the short-term nature of these instruments. The Company has presented the required disclosures in Note 21, Fair Value Measurement.

Non-Recurring Basis

When events or circumstances require an asset or liability to be measured at fair valued that otherwise is generally recorded based on another valuation method, such as, net realizable value, the Company will utilize the valuation techniques described above. The Company records its business combinations and impairments on a non-recurring basis.

Recently Adopted Accounting Pronouncements

In June 2016, the FASB issued ASU No. 2016-13 "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." This accounting standard changed the recognition and measurement of credit losses, including trade accounts receivable. Under previous accounting standards, a loss was recognized when the loss became probable of occurring. The new standard broadened the information that an entity must consider when developing expected credit loss estimates. The amendments in this update were effective for the fiscal years and interim periods ending after December 15, 2019. The amendments in this update were applied on a prospective basis for all periods presented with a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance was effective. The Company adopted this accounting standard on January 1, 2020. The adoption of this standard did not materially impact the Company's consolidated financial statements or related disclosures.

In August 2018, the FASB issued ASU No. 2018-14 "Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20): Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans." This accounting standard changed disclosure requirements for defined benefit plans, including removal and modification of existing disclosures. The amendments in this update were effective for the fiscal years ending after December 15, 2020. The amendments in this update were applied on a retrospective basis for all periods presented. The Company adopted this accounting standard on January 1, 2020. The adoption of this standard did not materially impact the Company's disclosures.

In December 2019, the FASB issued ASU No. 2019-12 "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes." This accounting standard simplified key provisions for accounting for income taxes, as part of the FASB's initiative to reduce complexity in accounting standards. The amendments eliminated certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. The amendments also clarified and simplified other aspects of the accounting for income taxes. The amendments in this update were effective for interim and fiscal period beginning after December 31, 2020. The Company adopted this accounting standard on January 1, 2020. The adoption of this standard did not materially impact the Company's consolidated financial statements or related disclosures.

Accounting Pronouncements Not Yet Adopted

In March 2020, the FASB issued ASU No. 2020-04 "Reference Rate Reform (Topic 848), Facilitation of the Effects of Reference Rate Reform on Financial Reporting", which was subsequently amended by ASU No. 2021-01 "Reference Rate Reform (Topic 848): Scope" in January 2021 and by ASU No. 2022-06 "Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848" in December 2022. The new standard provides optional expedients and exceptions to contracts, hedging relationships, and other transactions that reference the London Interbank Offer Rate ("LIBOR") or another rate expected to be discontinued due to the reference rate reform. This standard is permitted to be adopted any time through December 31, 2024, and does not apply to contract modifications made or hedging relationships entered into or evaluated after December 31, 2024. The Company does not expect this standard to have a material impact on its consolidated financial statements and related disclosures.

In October 2021, the FASB issued ASU No. 2021-08, "Business Combinations: Accounting for Contract Assets and Contract Liabilities from Contracts with Customers" (Topic 805), which requires contract assets and contract liabilities acquired in a business combination to be recognized and measured by the acquirer on the acquisition date in accordance with ASC 606, *Revenue from Contracts with Customers*, as if it had originated the contracts. The current requirement to measure contract assets and contract liabilities acquired in a business combination at fair value differs from the current approach. This standard is effective for the fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, and early adoption is permitted. The Company does not expect this standard to have a material impact on its consolidated financial statements and related disclosures.

NOTE 2 - REVENUE

Net sales disaggregated by product category were as follows:

	Year Ended December 31,		
(in millions)	2022	2021	2020
Equipment & Instruments	$ 678	$ 728	$ 577
Implants	570	626	475
CAD/CAM	503	574	455
Orthodontics	297	273	160
Healthcare	270	303	287
Technology & Equipment segment net sales	$ 2,318	$ 2,504	$ 1,954
Endodontic & Restorative	$ 1,167	$ 1,261	$ 961
Other Consumables	437	466	424
Consumables segment net sales	$ 1,604	$ 1,727	$ 1,385
Total net sales	$ 3,922	$ 4,231	$ 3,339

Technologies & Equipment Segment

Equipment & Instruments

The Equipment & Instruments product category consists of basic and high-tech dental equipment such as treatment centers, imaging equipment, motorized dental handpieces, and other instruments for dental practitioners and specialists. Imaging equipment serves as the starting point for the Company’s digital workflow offerings and consists of a broad range of diagnostic imaging systems for 2D or 3D, panoramic, and intra-oral applications. Treatment centers comprise a broad range of products from basic dental chairs to sophisticated chair-based units with integrated diagnostic, hygiene and ergonomic functionalities, as well as specialist centers used in preventive treatment and for training purposes. This product group also includes other lab equipment such as amalgamators, mixing machines and porcelain furnaces.

Implants

The Implants product offering includes technology to support signature digital workflows for implant systems, a portfolio of innovative dental implant products, bone regenerative and restorative solutions, and educational programs, all of which provide dental professionals with a completely new way of practicing implantology. The Implants business is supported by key technologies including custom abutments, advanced tapered immediate load screws and regenerative bone growth factor.

CAD/CAM

Dental CAD/CAM technologies are products designed for dental offices to support numerous digital dental procedures including dental restorations. This product category includes a full-chairside economical restoration of esthetic ceramic dentistry offering called CEREC, as well as stand-alone CAD/CAM, digital impressions ("DI") intraoral scanners, mills, and services. The full-chairside offering enables dentists to practice same day or single visit dentistry.

Orthodontics

The company’s Orthodontics product category primarily includes a dentist-directed aligner solution, SureSmile, and a direct-to-consumer aligner solution, Byte. The Orthodontics product category also includes a High Frequency Vibration ("HFV") technology device known as VPro or as HyperByte within Byte's product offering. The aligner offerings include software technology that enables aligner treatment planning and for SureSmile seamless connectivity of a digital workflow from diagnostics through treatment delivery.

Healthcare

This category consists mainly of urology catheters and other healthcare-related consumable products.

Consumables Segment

Dental consumable products consist of value-added dental supplies and small equipment used in dental offices for the treatment of patients. It also includes specialized treatment products used within the dental office and laboratory settings including products used in the preparation of dental appliances by dental laboratories.

Endodontic & Restorative Products

The Company's Endodontic & Restorative products frequently work together to provide a tandem solution in high-tech dental procedures. The Endodontic products include drills, filers, sealers, irrigation needles and other tools or single-use solutions which support root canal procedures. Restorative products include dental prosthetics, such as artificial teeth, dental ceramics, digital dentures, precious metal dental alloys, and crown and bridge porcelain products.

Other Consumables

The remaining consumables products include small equipment products such as intraoral curing light systems, dental diagnostic systems and ultrasonic scalers and polishers, as well as other dental supplies including dental anesthetics, prophylaxis paste, dental sealants, impression materials, tooth whiteners and topical fluoride.

Net sales disaggregated by geographic region were as follows:

	Year Ended December 31,		
(in millions)	2022	2021	2020
United States	$ 1,392	$ 1,480	$ 1,115
Europe	1,559	1,675	1,381
Rest of World	971	1,076	843
Total net sales	$ 3,922	$ 4,231	$ 3,339

Contract Assets and Liabilities

The Company normally does not have contract assets in the course of its business. Contract liabilities, which represent billings in excess of revenue recognized, are primarily related to advanced billings for customer aligner treatment where the performance obligation has not yet been fulfilled. The Company had deferred revenue of $91 million and $27 million recorded in Accrued liabilities and Other noncurrent liabilities, respectively, in the Consolidated Balance Sheets at December 31, 2022. The Company had deferred revenue of $74 million and $19 million recorded in Accrued liabilities and Other noncurrent liabilities, respectively, in the Consolidated Balance Sheets at December 31, 2021. The Company recognized revenue deferred as of December 31, 2021 of approximately $59 million during the current year. The amounts of deferred revenue previously disclosed as a contract liability in the aggregate at December 31, 2022 and December 31, 2021 were understated by $34 million and $25 million, respectively, in the 2022 Form 10-K. The amount disclosed for deferred revenue recognized during 2022 was previously understated by $6 million in the 2022 Form 10-K and has also been revised. These understatements relate only to the prior footnote disclosures and do not impact amounts that were recorded. Although the Company determined the errors were not material to the financial statements contained in the 2022 Form 10-K, the Company is revising this disclosure to correct for these errors. The Company expects to recognize a majority of the deferred revenue within the next twelve months.

Allowance for Doubtful Accounts

Accounts and notes receivable-trade, net are stated net of allowances for doubtful accounts and trade discounts, which were $14 million and $13 million at December 31, 2022 and 2021, respectively. For the years ended December 31, 2022 and 2021, changes to the provision for doubtful accounts including write-offs of accounts receivable that were previously reserved were insignificant. Changes to this provision are included in Selling, general, and administrative expenses in the Consolidated Statements of Operations.

NOTE 3 - STOCK COMPENSATION

The Company maintains the 2016 Omnibus Incentive Plan (the “Plan”) under which it may grant non-qualified stock options (“NQSOs”), incentive stock options, restricted stock, RSUs and stock appreciation rights, collectively referred to as “Awards.” Awards are granted at exercise prices that are equal to the closing stock price on the date of grant. The Company authorized grants under the Plan of 25 million shares of common stock, plus any unexercised portion of canceled or terminated stock options granted under the legacy DENTSPLY International Inc. 2010 and 2002 Equity Incentive Plans, as amended, and under the legacy Sirona Dental Systems, Inc. 2015 and 2006 Equity Incentive Plans, as amended. Each restricted stock and RSU issued is counted as a reduction of 3.09 shares of common stock available to be issued under the Plan. No key employee may be granted awards in excess of 1 million shares of common stock in any calendar year. The number of shares available for grant under the 2016 Plan at December 31, 2022 is 13 million.

The amounts of stock compensation expense recorded in the Company's Consolidated Statements of Operations for the years ended December 31, 2022, 2021 and 2020 were as follows:

	Year Ended December 31,		
(in millions)	2022	2021	2020
Cost of products sold	$ 3	$ 3	$ 1
Selling, general, and administrative expense	53	44	44
Research and development expense	3	2	1
Total stock based compensation expense	$ 59	$ 49	$ 46
Related deferred income tax benefit	$ 7	$ 6	$ 5

The Company uses the Black-Scholes option-pricing model to estimate the fair value of each option awarded. The average assumptions used to determine compensation cost for the Company’s NQSOs issued were as follows:

	Year Ended December 31,		
	2022	2021	2020
Weighted average fair value per share	$ 14.06	$ 15.90	$ 10.03
Expected dividend yield	1.09 %	0.68 %	0.84 %
Risk-free interest rate	2.23 %	0.79 %	0.77 %
Expected volatility	32.7 %	31.5 %	24.0 %
Expected life (years)	5.20	5.08	5.49

The total intrinsic value of options exercised for the years ended December 31, 2022, 2021 and 2020 was $1 million, $16 million and $3 million, respectively.

The total fair value of shares vested for the years ended December 31, 2022, 2021 and 2020 was $49 million, $76 million and $54 million, respectively.

The NQSO transactions for the year ended December 31, 2022 were as follows:

(in millions, except per share amounts)	Outstanding Shares	Outstanding Weighted Average Exercise Price	Outstanding Aggregate Intrinsic Value	Exercisable Shares	Exercisable Weighted Average Exercise Price	Exercisable Aggregate Intrinsic Value	Expected to Vest Shares	Expected to Vest Weighted Average Exercise Price	Expected to Vest Aggregate Intrinsic Value
December 31, 2021	3.2	$ 52.44	$ 15	2.2	$ 52.05	$ 11	1.0	$ 53.29	$ 4
Granted	0.8	48.18							
Exercised	(0.2)	42.57							
Cancelled	(0.5)	53.53							
Forfeited	(0.3)	53.42							
December 31, 2022	3.0	$ 51.64	$ —	1.9	$ 52.43	$ —	1.1	$ 50.21	$ —

There were 1.1 million NQSOs unvested at December 31, 2022. The remaining unamortized compensation cost related to NQSOs is $7 million, which will be expensed over the weighted average remaining vesting period of the options, or 2.1 years.

The weighted average remaining contractual term of all outstanding options, exercisable options and options expected to vest are 5.7 years, 4.2 years and 8.6 years, respectively.

Information about NQSOs outstanding for the year ended December 31, 2022 were as follows:

Range of Exercise Prices (in millions, except per share amounts and life)	Outstanding: Number Outstanding at December 31, 2022	Outstanding: Weighted Average Remaining Contractual Life (in years)	Outstanding: Weighted Average Exercise Price	Exercisable: Number Exercisable at December 31, 2022	Exercisable: Weighted Average Exercise Price
30.01 - 40.00	0.2	9.3	$ 31.35	—	$ 37.22
40.01 - 50.00	1.1	4.8	47.09	0.9	46.98
50.01 - 60.00	1.4	6.5	55.47	0.7	55.78
60.01 - 70.00	0.3	3.6	62.34	0.3	62.26
	3.0			1.9	

The unvested RSU transactions for the year ended December 31, 2022 were as follows:

(in millions, except per share amounts)	Unvested Restricted Stock Units: Shares	Unvested Restricted Stock Units: Weighted Average Grant Date Fair Value
Unvested at December 31, 2021	3.1	$ 53.52
Granted	3.3	39.73
Vested	(1.0)	37.76
Forfeited	(1.0)	42.31
Unvested at December 31, 2022	4.4	$ 45.63

The unamortized compensation cost related to RSUs is $67 million, which will be expensed over the remaining weighted average restricted period of the RSUs, or 1.9 years.

NOTE 4 - EARNINGS PER COMMON SHARE

The computation of basic and diluted earnings (loss) per common share for the years ended December 31 were as follows:

Basic Earnings (Loss) Per Common Share (in millions, except per share amounts)	2022	2021	2020
Net (loss) income attributable to Dentsply Sirona	$ (950)	$ 411	$ (73)
Weighted average common shares outstanding	215.5	218.4	219.2
Earnings (loss) per common share - basic	$ (4.41)	$ 1.88	$ (0.33)

Diluted Earnings (Loss) Per Common Share (in millions, except per share amounts)	2022	2021	2020
Net (loss) income attributable to Dentsply Sirona	$ (950)	$ 411	$ (73)
Weighted average common shares outstanding	215.5	218.4	219.2
Incremental weighted average shares from assumed exercise of dilutive options from stock-based compensation awards	—	1.8	—
Total weighted average diluted shares outstanding	215.5	220.2	219.2
Earnings (loss) per common share - diluted	$ (4.41)	$ 1.87	$ (0.33)

For the years ended December 31, 2022, 2021, and 2020, the Company excluded from the computation of weighted average diluted shares outstanding of 3.6 million, 1.0 million, and 3.1 million, respectively of equivalent shares of common stock from stock options and RSUs because their effect would be antidilutive.

The calculation of weighted average diluted common shares outstanding excluded 0.5 million and 0.9 million of potentially diluted common shares because the Company reported a net loss for the years ended December 31, 2022 and 2020, respectively.

NOTE 5 - COMPREHENSIVE (LOSS) INCOME

AOCI includes cumulative foreign currency translation adjustments related to consolidation of the Company's foreign subsidiaries, fair value adjustments related to the Company's derivative financial instruments, and actuarial gains and losses related to the Company's pension plans. These changes are recorded in AOCI net of any related tax adjustments. For the years ended December 31, 2022, 2021 and 2020, these tax adjustments were $100 million, $168 million and $216 million, respectively, primarily related to foreign currency translation adjustments.

The cumulative foreign currency translation adjustments included translation losses of $438 million and $250 million at December 31, 2022 and 2021, respectively, and which included losses of $84 million and $116 million, at December 31, 2022 and 2021, respectively, on loans designated as hedges of net investments.

Changes in AOCI, net of tax, by component for the years ended December 31, 2022 and 2021 were as follows:

(in millions)	Foreign Currency Translation Gain (Loss)	Gain and (Loss) on Cash Flow Hedges	Gain and (Loss) on Net Investment and Fair Value Hedges	Pension Liability Gain (Loss)	Total
Balance, net of tax, at December 31, 2021	$ (366)	$ (16)	$ (103)	$ (107)	$ (592)
Other comprehensive (loss) income before reclassifications and tax impact	(127)	(1)	39	116	27
Tax expense	(29)	—	(9)	(30)	(68)
Other comprehensive (loss) income, net of tax, before reclassifications	$ (156)	$ (1)	$ 30	$ 86	$ (41)
Amounts reclassified from accumulated other comprehensive income, net of tax	—	—	—	5	5
Net (decrease) increase in other comprehensive income	(156)	(1)	30	91	(36)
Balance, net of tax, at December 31, 2022	$ (522)	$ (17)	$ (73)	$ (16)	$ (628)

(in millions)	Foreign Currency Translation Gain (Loss)	Gain and (Loss) on Cash Flow Hedges	Gain and (Loss) on Net Investment and Fair Value Hedges	Pension Liability Gain (Loss)	Total
Balance, net of tax, at December 31, 2020	$ (187)	$ (25)	$ (119)	$ (133)	$ (464)
Other comprehensive (loss) income before reclassifications and tax impact	(146)	3	22	26	(95)
Tax expense	(33)	(1)	(6)	(8)	(48)
Other comprehensive (loss) income, net of tax, before reclassifications	$ (179)	$ 2	$ 16	$ 18	$ (143)
Amounts reclassified from accumulated other comprehensive income, net of tax	—	7	—	8	15
Net (decrease) increase in other comprehensive income	(179)	9	16	26	(128)
Balance, net of tax, at December 31, 2021	$ (366)	$ (16)	$ (103)	$ (107)	$ (592)

Reclassification out of AOCI to the Consolidated Statements of Operations for the years ended December 31, 2022, 2021, and 2020 were as follows:

	Amounts Reclassified from AOCI			
	Year Ended December 31,			
(in millions)	2022	2021	2020	Affected Line Item in the Consolidated Statements of Operations
Gain (Loss) on derivative financial instruments:				
Interest rate swaps	$ (3)	$ (4)	$ (4)	Interest expense, net
Foreign exchange forward contracts	3	(3)	2	Cost of products sold
Net loss before tax	$ —	$ (7)	$ (2)	
Tax impact	—	—	—	(Benefit) provision for income taxes
Net loss after tax	$ —	$ (7)	$ (2)	
Amortization of defined benefit pension and other postemployment benefit items:				
Amortization of prior service benefits	$ 1	$ 1	$ 1	(a)
Amortization of net actuarial losses	(8)	(12)	(9)	(a)
Net loss before tax	$ (7)	$ (11)	$ (8)	
Tax impact	2	3	2	(Benefit) provision for income taxes
Net loss after tax	$ (5)	$ (8)	$ (6)	
Total reclassifications for the period	$ (5)	$ (15)	$ (8)	

(a) These AOCI components are included in the computation of net periodic benefit cost for the years ended December 31, 2022, 2021, and 2020, respectively.

NOTE 6 - BUSINESS COMBINATIONS

Acquisitions

2021 Transactions

On July 1, 2021, the effective date of the transaction, the Company paid $7 million to acquire the remaining interest in the dental business of a partially owned affiliate based in Switzerland that primarily develops highly specialized software with a focus on CAD/CAM systems. The acquisition is expected to further accelerate the development of the Company's specialized software related to CAD/CAM systems.

The fair values of the assets acquired and liabilities assumed in connection with the acquisition of the affiliate included $4 million of Other current assets, $3 million of Intangible assets, $2 million of Current liabilities and $1 million of Other long-term liabilities. The cash paid and the $4 million fair value of the previously-held interest in the entity prior to the acquisition has been allocated on the basis of the estimates of fair values of assets acquired and liabilities assumed, resulting in the recording of $7 million in goodwill. This goodwill is considered to represent the value associated with the acquired workforce and synergies the two companies anticipate realizing as a combined company and is not expected to be deductible for tax purposes. Measurement period adjustments made to the fair values of the assets acquired and liabilities assumed during the years ended December 31, 2022 and 2021 were immaterial to the financial statements, resulting in an increase to goodwill of $2 million.

Identifiable intangible assets acquired were as follows:

(in millions, except for useful life)	Amount	Weighted Average Useful Life (in years)
In-process R&D	$ 3	Indefinite

On June 1, 2021, the effective date of the transaction, the Company paid $132 million to acquire substantially all of the assets of Propel Orthodontics LLC, a privately-held company based in New York and California ("Propel Orthodontics"). Propel Orthodontics manufactures and sells orthodontic devices and provides in-office and at-home orthodontic accessory devices to orthodontists and their patients primarily within the aligner market. The acquisition is expected to further accelerate the growth and profitability of the Company's combined aligners business.

The fair values of the assets acquired and liabilities assumed in connection with the Propel Orthodontics acquisition were as follows:

(in millions)	
Other current assets	$ 4
Intangible assets	66
Current liabilities	(1)
Net assets acquired	69
Goodwill	63
Purchase consideration	$ 132

The purchase price has been allocated on the basis of the estimates of fair values of assets acquired and liabilities assumed, resulting in the recording of $63 million in goodwill, which is considered to represent the value associated with the acquired workforce and synergies the two companies anticipate realizing as a combined company. The goodwill is expected to be deductible for tax purposes. Measurement period adjustments made to the fair values of the assets acquired and liabilities assumed during the years ended December 31, 2022 and 2021 were immaterial to the financial statements, resulting in a reduction to goodwill of $2 million.

Identifiable intangible assets acquired were as follows:

(in millions, except for useful life)		Amount	Weighted Average Useful Life (in years)
Developed technology	$	66	10

On January 21, 2021, the effective date of the transaction, the Company paid $94 million with the potential for additional earn-out provision payments of up to $10 million, to acquire 100% of the outstanding shares of Datum Dental, Ltd. ("Datum"), a privately-held producer and distributor of specialized regenerative dental material based in Israel. The fair value of the earn-out provision has been valued at $9 million as of the transaction date, resulting in a total purchase price of $103 million.

The fair values of the assets acquired and liabilities assumed in connection with the Datum acquisition were as follows:

(in millions)		
Cash and cash equivalents	$	2
Other current assets		2
Intangible assets		76
Current liabilities		(2)
Other long-term assets (liabilities), net		(14)
Net assets acquired		64
Goodwill		39
Purchase consideration	$	103

The purchase price has been allocated on the basis of the estimates of fair values of assets acquired and liabilities assumed, resulting in the recording of $39 million in goodwill, which is considered to represent the value associated with the acquired workforce and synergies the two companies anticipate realizing as a combined company. The goodwill is not deductible for tax purposes. Measurement period adjustments made to the fair values of the assets acquired and liabilities assumed during the year ended December 31, 2021 were immaterial to the financial statements, resulting in an increase to goodwill of $6 million.

Identifiable intangible assets acquired were as follows:

(in millions, except for useful life)		Amount	Weighted Average Useful Life (in years)
Developed technology	$	66	15
In-process R&D		10	Indefinite
Total	$	76	

In the year ended December 31, 2022, certain earn-out provisions were achieved and the Company made cash payments of $5 million to the former shareholders of Datum with no impact to the Company's Statement of Operations for the period. As of December 31, 2022, the remaining contingent consideration obligation was $4 million.

The results of operations for each of the acquired businesses above upon the effective date of each transaction have been included in the accompanying financial statements. These results, as well as the historical results for the above acquired businesses for the year ended December 31, 2021 are not material in relation to the Company’s net sales and earnings for that period. The Company therefore does not believe these acquisitions represent material transactions either individually or in the aggregate requiring the supplemental pro-forma information prescribed by ASC 805 and accordingly, this information is not presented.

Acquisition-related costs incurred for the year ended December 31, 2022 and 2021 were $1 million and $8 million, respectively, consisting primarily of legal and professional fees in relation to the Propel and Byte acquisitions and are recorded in SG&A expenses in the Consolidated Statements of Operations.

Investment in Affiliates

On June 4, 2021, the effective date of the transaction, the Company paid $16 million to acquire a minority interest in a UK based, privately-held provider of healthcare consumables. The investment is recorded as an equity method investment within Other noncurrent assets in the Consolidated Balance Sheets.

Divestitures

On April 1, 2021, the Company disposed of certain orthodontics businesses based in Japan previously included as part of the Technologies & Equipment segment in exchange for a cash receipt of $8 million. The divestiture resulted in an immaterial loss recorded in Other expense (income), net in the Consolidated Statements of Operations for the year ended December 31, 2021.

On February 1, 2021, the Company disposed of an investment casting business previously included as part of the Consumables segment in exchange for a cash receipt of $19 million. The divestiture resulted in a pre-tax gain of $13 million recorded in Other expense (income), net in the Consolidated Statements of Operations for the year ended December 31, 2021.

NOTE 7 - SEGMENT AND GEOGRAPHIC INFORMATION

The Company has two operating segments that are organized primarily by product and generally have overlapping geographical presence, customer bases, distribution channels, and regulatory oversight. These operating segments are also the Company's reportable segments in accordance with how the Company's chief operating decision-maker regularly reviews financial results and uses this information to evaluate the Company's performance and allocate resources.

The Company evaluates performance of the segments based on the net sales and adjusted operating income. Segment adjusted operating income is defined as operating income before income taxes and before certain corporate headquarters unallocated costs (including certain inter-segment eliminations which are generally based on estimated external selling prices and are eliminated during consolidation), goodwill impairments, intangible asset impairments and other costs, interest expense, net, other expense (income), net, amortization of intangible assets and depreciation resulting from the fair value step-up of property, plant, and equipment from business combinations.

A description of the products and services provided within each of the Company's two reportable segments is provided below.

Technologies & Equipment

This segment is responsible for the design, manufacture, and sales of the Company's dental technology and equipment products and healthcare products. These products include dental implants, CAD/CAM systems, orthodontic aligners, imaging systems, treatment centers, instruments, as well as medical devices.

Consumables

This segment is responsible for the design, manufacture, and sales of the Company's consumable products which include various preventive, restorative, endodontic, and dental laboratory products.

The Company's segment information for the years ended December 31 was as follows:

Net Sales (in millions)	Year Ended December 31, 2022	2021	2020
Technologies & Equipment	$ 2,318	$ 2,504	$ 1,954
Consumables	1,604	1,727	1,385
Total net sales	$ 3,922	$ 4,231	$ 3,339

Depreciation and Amortization (in millions)	Year Ended December 31, 2022	2021	2020
Technologies & Equipment	$ 273	$ 280	$ 261
Consumables	41	52	61
All Other (a)	14	15	12
Total	$ 328	$ 347	$ 334

(a) Includes amounts recorded at corporate headquarters.

Segment Adjusted Operating Income (in millions)	Year Ended December 31, 2022	2021	2020
Technologies & Equipment	$ 399	$ 543	$ 382
Consumables	495	539	316
Segment adjusted operating income	$ 894	$ 1,082	$ 698
Reconciling items (income) expense:			
All other (a)	318	229	269
Goodwill impairment	1,187	—	157
Intangible asset impairment and other costs	114	17	77
Interest expense, net	60	55	46
Other expense (income), net	58	8	1
Amortization of intangible assets	209	222	192
Depreciation resulting from the fair value step-up of property, plant, and equipment from business combinations	3	6	6
(Loss) income before income taxes	$ (1,055)	$ 545	$ (50)

(a) Includes the results of unassigned corporate headquarters costs and inter-segment eliminations.

Capital Expenditures (in millions)	Year Ended December 31, 2022	2021	2020
Technologies & Equipment	$ 101	$ 100	$ 50
Consumables	20	37	26
All Other (a)	23	22	11
Total	$ 144	$ 159	$ 87

(a) Includes capital expenditures of corporate headquarters.

Assets (in millions)	Year Ended December 31, 2022	2021
Technologies & Equipment	$ 5,518	$ 6,902
Consumables	1,928	2,123
All Other (a)	197	214
Total	$ 7,643	$ 9,239

(a) Includes the results of unassigned corporate headquarters costs and inter-segment eliminations.

Geographic Information

The following tables set forth information about the Company’s significant operations by geographic areas, for the years ended December 31, 2022, 2021, and 2020. Net sales reported below represent revenues from external customers in those respective countries based on the destination of shipments.

(in millions)	Year Ended December 31, 2022	2021	2020
Net sales			
United States	$ 1,393	$ 1,484	$ 1,116
Germany	447	482	432
Other Foreign	2,082	2,265	1,791
Total net sales	$ 3,922	$ 4,231	$ 3,339

Property, plant and equipment, net, represents those long-lived assets held by the operating businesses located in the respective geographic areas.

(in millions)	Year Ended December 31, 2022	2021
Property, plant, and equipment, net		
United States	$ 174	$ 166
Germany	275	309
Sweden	98	107
Other Foreign	214	191
Total property, plant, and equipment, net	$ 761	$ 773

Product and Customer Information

For information on the Company's net sales by product category, including a description of the revenue streams comprising each of the reportable segments, see Note 2, Revenue.

Concentration Risk

For the year ended December 31, 2021, no customer accounted for 10% or more of consolidated net sales or consolidated accounts receivable balance. Customers that accounted for 10% or more of net sales or accounts receivable for the years ended December 31, 2022 and 2020 were as follows:

	Year Ended December 31, 2022		2020	
	% of net sales	% of accounts receivable	% of net sales	% of accounts receivable
Henry Schein, Inc.	11 %	15 %	14 %	N/A
Patterson Companies, Inc.	N/A	12 %	10 %	18 %

NOTE 8 - OTHER EXPENSE (INCOME), NET

Other expense (income), net, were as follows:

	Year Ended December 31,		
(in millions)	2022	2021	2020
Foreign exchange transaction loss (gain)	$ 11	$ (6)	$ (13)
Other expense (income), net	47	14	14
Total other expense (income), net	$ 58	$ 8	$ 1

NOTE 9 - INVENTORIES, NET

Inventories, net were as follows:

(in millions)	Year Ended December 31, 2022	Year Ended December 31, 2021
Raw materials and supplies	$ 169	$ 139
Work-in-process	77	72
Finished goods	381	304
Inventories, net	$ 627	$ 515

The Company’s inventory reserve was $83 million and $86 million at December 31, 2022 and 2021, respectively. Inventories are stated at the lower of cost and net realizable value.

NOTE 10 - PROPERTY, PLANT AND EQUIPMENT, NET

Property, plant and equipment, net, were as follows:

	Year Ended December 31,	
(in millions)	2022	2021
Land	$ 48	$ 51
Buildings and improvements	546	561
Machinery and equipment	963	982
Capitalized software	400	353
Construction in progress	116	134
	$ 2,073	$ 2,081
Less: Accumulated depreciation and amortization	1,312	1,308
Property, plant and equipment, net	$ 761	$ 773

NOTE 11 - LEASES

The net present value of finance and operating lease right-of-use assets and liabilities were as follows:

(in millions, except percentages)	Location in the Consolidated Balance Sheets	Year Ended December 31, 2022	2021
Assets			
Finance leases	Property, plant, and equipment, net	$ 1	$ 2
Operating leases	Operating lease right-of-use assets, net	200	198
Total right-of-use assets		$ 201	$ 200
Liabilities			
Current liabilities			
Finance leases	Notes payable and current portion of long-term debt	$ 1	$ 1
Operating leases	Accrued liabilities	54	50
Noncurrent liabilities			
Finance leases	Long-term debt	1	1
Operating leases	Operating lease liabilities	149	149
Total lease liabilities		$ 205	$ 201
Supplemental information:			
Weighted-average discount rate			
Finance leases		3.5 %	3.2 %
Operating leases		3.5 %	3.3 %
Weighted-average remaining lease term in years			
Finance leases		4.1	4.3
Operating leases		5.1	5.3

The lease cost recognized in the Consolidated Statements of Operations were as follows:

(in millions)	Year Ended December 31, 2022	2021
Operating lease cost	$ 68	$ 67
Short-term lease cost	1	1
Variable lease cost	12	10
Total lease cost	$ 81	$ 78

The contractual maturity dates of the remaining lease liabilities as of December 31, 2022 were as follows:

(in millions)	Finance Leases	Operating Leases	Total
2023	$ 1	$ 61	$ 62
2024	1	50	51
2025	—	34	34
2026	—	25	25
2027	—	16	16
2028 and beyond	—	37	37
Total lease payments	$ 2	$ 223	$ 225
Less imputed interest	—	20	20
Present value of lease liabilities	$ 2	$ 203	$ 205

The supplemental cash flow information for leases were as follows:

	Year Ended December 31,		
(in millions)	2022	2021	2020
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows paid for operating leases	$ 66	$ 65	$ 56
Right-of-use assets obtained in exchange for new lease liabilities:			
Finance leases	$ —	$ 1	$ —
Operating leases	57	79	43

NOTE 12 - GOODWILL AND INTANGIBLE ASSETS

The Company assesses both goodwill and indefinite-lived intangible assets for impairment annually as of April 1 or more frequently if events or changes in circumstances indicate the asset might be impaired. The Company conducted its annual goodwill and indefinite-lived intangible assets impairment tests as of April 1, 2022, noting no impairment.

Third Quarter 2022 Impairment

In the third quarter of 2022, the Company experienced adverse macroeconomic factors as a result of weakened global demand, higher cost of capital, unfavorable foreign currency impacts, and increased raw material, supply chain, and service costs, which contributed to reduced forecasted revenues, lower operating margins, and reduced expectations for future cash flows. As a result, the Company identified indicators of a "more likely than not" impairment related to its Digital Dental Group and Equipment & Instruments reporting units within the Technologies & Equipment segment and certain indefinite-lived intangible assets, including within the above mentioned reporting units as well as the Consumables reporting unit within the Consumables segment. As such, a third quarter impairment test was performed (the "third quarter test").

During the third quarter test, the fair values of the two reporting units above were computed using a discounted cash flow model with inputs developed using both internal and market-based data. The discounted cash flow model uses five- to ten- year forecasted cash flows plus a terminal value based on capitalizing the last period's cash flows using a perpetual growth rate. The Company's significant assumptions in the discounted cash flow models include, but are not limited to, the discount rate of 11.0%, revenue growth rates (including perpetual growth rates), operating margin percentages, and net working capital changes of the reporting unit's business. These assumptions were developed in consideration of current market conditions and future expectations which include, but were not limited to, distribution channel changes, impact from competition, and new product developments. The Company also considered current and projected market and economic conditions. As a result, the Company recorded a pre-tax goodwill impairment charge related to the Digital Dental Group and Equipment & Instruments reporting units within the Technologies & Equipment segment of $1,100 million and $87 million, respectively, for the three months ended September 30, 2022. This charge was recorded in Goodwill impairment in the Consolidated Statements of Operations.

During the third quarter test, the fair values of intangible assets were computed using either an income approach, specifically a relief from royalty method, or a qualitative assessment. The Company's significant assumptions in the relief from royalty method include, but were not limited to, discount rates ranging from 11.0% to 12.5%, revenue growth rates (including perpetual growth rates) and royalty rates. As a result, the Company recorded an impairment charge of $66 million and $26 million for the Digital Dental Group and Equipment & Instruments reporting units, respectively, within the Technologies & Equipment segment, and a $2 million charge for the Consumables reporting unit within the Consumables segment, for its indefinite-lived intangible assets for the three months ended September 30, 2022. This charge was recorded in Intangible asset impairment and other costs in the Consolidated Statements of Operations.

Fourth Quarter 2022 Impairment

During the fourth quarter of 2022, the Company considered whether any events or changes in circumstances indicated that goodwill or indefinite-lived intangible assets may have been impaired. Based on a quantitative analysis performed, the Company believes there is no indication that the carrying value of any of its reporting units "more likely than not" exceeds fair value at December 31, 2022. Reductions of near-term forecasts and continued adverse macroeconomic factors, including the impact of foreign exchange rates, for specific tradenames within the Equipment & Instruments reporting unit within the Technologies & Equipment segment and the Consumables reporting unit within the Consumables segment, resulted in indicators of a "more likely than not" impairment for those indefinite-lived intangible assets. As such, an impairment test was performed in the fourth quarter. The fair values of these intangible assets were computed using an income approach, specifically a relief from royalty method. The Company's other significant inputs in the relief from royalty method in the fourth quarter were consistent to those described within the third quarter test above, with royalty rates remaining consistent with the third quarter test and discount rates ranging from 11.5% to 12.0%. As a result of the fourth quarter test, the Company recorded impairment charges of $2 million and $4 million for indefinite-lived intangible assets within the Equipment & Instruments and Consumables reporting units, respectively, for the three months ended December 31, 2022. These charges were recorded in Intangible asset impairment and other costs in the Consolidated Statements of Operations.

At December 31, 2022, the remaining goodwill related to the Digital Dental Group and Equipment & Instruments reporting units was $235 million and $193 million, respectively, and the carrying value of indefinite-lived intangible assets with impairments in the third or fourth quarter was $156 million, $15 million, and $39 million for the Digital Dental Group, Equipment & Instruments, and Consumables reporting units, respectively. As the fair value of these reporting units and indefinite-lived intangible assets continues to approximate carrying value as of December 31, 2022, any further decline in key assumptions could result in additional impairments in future periods. For the Company's reporting units and indefinite-lived intangible assets that were not impaired in the third or fourth quarter, the Company performed hypothetical sensitivity analyses by increasing the discount rate by 100 basis points and, in a separate test, reducing by 10% the fair value of the reporting units and indefinite-lived intangible assets. If discount rates were hypothetically increased by 100 basis points one reporting unit within the Technologies & Equipment segment and certain indefinite-lived intangibles within the Technologies & Equipment segment would have a fair value less than 10% in excess of book value. Goodwill associated with this reporting unit was $1,128 million at December 31, 2022, and the carrying value of these indefinite-lived intangible assets was $47 million at December 31, 2022.

Any deviation in actual financial results compared to the forecasted financial results or valuation assumptions used in the annual or interim tests, a decline in equity valuations, increases in interest rates, or changes in the use of intangible assets, among other factors, could have a material adverse effect to the fair value of either the reporting units or indefinite-lived intangibles assets and could results in a future impairment charge. There can be no assurance that the Company's future asset impairment testing will not result in a material charge to earnings.

2021 Annual Goodwill and Indefinite-Lived Intangibles Impairment and Testing

The Company performed the required annual impairment tests of goodwill and indefinite-lived intangibles as of April 1, 2021 consistent with the valuation approaches described above, which did not result in any impairment for the year ended December 31, 2021.

2020 Annual Goodwill and Indefinite-Lived Intangibles Impairment and Testing

During the three months ended March 31, 2020, the Company recorded an impairment charge of $157 million related to the goodwill associated with the Equipment & Instruments reporting unit. The impairment was a result of changes in forecasted revenues, operating margins, and discount rates due to negative impacts of the COVID-19 pandemic on customer demand for the Company's products, which caused a decline in revenue and profitability in the first quarter of 2020. To determine the fair value of each of the reporting units for which a triggering event was concluded to exist as of March 31, 2020, the Company utilized a discounted cash flow model, and utilized discount rates for each of the reporting units which ranged between 9.5% to 11.5%. As a result of these models which included updates to the estimates and assumptions resulting from the ongoing COVID-19 pandemic, the Company determined the goodwill associated with the Equipment & Instruments reporting unit was impaired. The impairment charge was recorded in Goodwill impairment in the Consolidated Statements of Operations.

The Company also concluded in the first quarter of 2020 that due to the negative effects of the COVID-19 pandemic on revenue and profitability, a triggering event also existed for all but two of the Company's indefinite-lived intangible assets as of March 31, 2020. The Company performed impairment tests for the indefinite-lived intangible assets using an income approach, more specifically a relief from royalty method. In the development of the forecasted cash flows, the Company applied significant judgment to determine key assumptions, including royalty rates, and discount rates (which ranged from 10.0% to 17.5%). The impairment test resulted in an impairment charge of $39 million related to certain tradenames and trademarks within the Equipment & Instruments reporting unit during the three months ended March 31, 2020. The impairment charge was driven by a decline in forecasted sales as a result of the COVID-19 pandemic as discussed above, as well as an unfavorable change in the discount rates. The impairment charge was recorded in Intangible asset impairment and other costs in the Consolidated Statement of Operations.

The Company further performed the required annual impairment tests of goodwill and indefinite-lived intangibles as of April 30, 2020 consistent with the valuation approaches described above, which did not result in any additional impairment for the year ended December 31, 2020.

A reconciliation of changes in the Company's goodwill by reportable segment were as follows:

(in millions)	Technologies & Equipment	Consumables	Total
Balance at December 31, 2020			
Goodwill	$ 5,985	$ 894	$ 6,879
Accumulated impairment losses	(2,893)	—	(2,893)
Goodwill, net	$ 3,092	$ 894	$ 3,986
Acquisition related additions (a)	109	—	109
Translation and other	(105)	(14)	(119)
Balance at December 31, 2021			
Goodwill	$ 5,989	$ 880	$ 6,869
Accumulated impairment losses	(2,893)	—	(2,893)
Goodwill, net	$ 3,096	$ 880	$ 3,976
Impairment	(1,187)	—	(1,187)
Translation and other	(87)	(14)	(101)
Balance at December 31, 2022			
Goodwill	$ 5,902	$ 866	$ 6,768
Accumulated impairment losses	(4,080)	—	(4,080)
Goodwill, net	$ 1,822	$ 866	$ 2,688

(a) Refer to Note 6, Business Combinations, for more information regarding recent acquisitions.

Identifiable definite-lived and indefinite-lived intangible assets at were as follows:

	Year Ended December 31,					
	2022			2021		
(in millions)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Developed technology and patents	$ 1,658	$ (848)	$ 810	$ 1,729	$ (762)	$ 967
Tradenames and trademarks	273	(96)	177	269	(79)	190
Licensing agreements	30	(26)	4	36	(32)	4
Customer relationships	1,057	(600)	457	1,091	(545)	546
Total definite-lived	$ 3,018	$ (1,570)	$ 1,448	$ 3,125	$ (1,418)	$ 1,707
Indefinite-lived tradenames and trademarks	450	—	450	598	—	598
In-process R&D (a)	5	—	5	14	—	14
Total indefinite-lived	455	—	455	612	—	612
Total identifiable intangible assets	$ 3,473	$ (1,570)	$ 1,903	$ 3,737	$ (1,418)	$ 2,319

(a) Intangible assets acquired in a business combination that are in-process and used in R&D activities are considered indefinite-lived until the completion or abandonment of the R&D efforts. The useful life and amortization of those assets will be determined once the R&D efforts are completed. During the third quarter of 2022, the completion of certain R&D activities occurred, resulting in the reclassification of $5 million of in-process R&D to in-service assets with a definite life. In the fourth quarter of 2022, the Company made the determination to abandon certain in-process R&D efforts, and recorded a $3 million impairment charge of in-process R&D assets.

Amortization expense for identifiable definite-lived intangible assets for the years ended December 31, 2022, 2021 and 2020 was $209 million, $222 million and $192 million, respectively. The annual estimated amortization expense related to these intangible assets for each of the five succeeding calendar years is $207 million, $211 million, $216 million, $142 million and $123 million for 2023, 2024, 2025, 2026 and 2027, respectively.

During the second quarter of 2021, the Company purchased certain developed technology rights for an initial payment of $3 million. The purchase consideration also includes contingent payments of $17 million to be made upon reaching certain regulatory and commercial milestones, which were not yet considered probable at December 31, 2022.

NOTE 13 - PREPAID EXPENSES AND OTHER CURRENT ASSETS

Prepaid expenses and other current assets were as follows:

	Year Ended December 31,	
(in millions)	2022	2021
Prepaid expenses	$ 104	$ 89
Value-added tax receivable	53	53
Deposits	24	22
Other current assets	88	84
Prepaid expenses and other current assets	$ 269	$ 248

NOTE 14 - ACCRUED LIABILITIES

Accrued liabilities were as follows:

(in millions)	Year Ended December 31, 2022	2021
Payroll, commissions, bonuses, other cash compensation and employee benefits	$ 156	$ 172
Sales and marketing programs	65	66
Reserve for dealer rebates	163	209
Restructuring costs	7	11
Accrued vacation and holidays	32	40
Professional and legal costs	27	19
Current portion of derivatives	19	3
General insurance	12	12
Warranty liabilities	22	28
Third party royalties	7	7
Deferred income	84	68
Accrued interest	9	8
Accrued property taxes	6	6
Current operating lease liabilities	54	50
Other	64	61
Accrued liabilities	$ 727	$ 760

NOTE 15 - FINANCING ARRANGEMENTS

Short-Term Debt

Short-term debt was as follows:

	Year Ended December 31,			
	2022		2021	
(in millions except percentages)	Principal Balance	Interest Rate	Principal Balance	Interest Rate
Corporate commercial paper facility	$ 95	5.1 %	$ 170	0.3 %
Other short-term borrowings	22	4.6 %	11	4.8 %
Add: Current portion of long-term debt	1		1	
Total short-term debt	$ 118		$ 182	
Maximum month-end short-term debt outstanding during the year	$ 395		$ 380	
Average amount of short-term debt outstanding during the year	289		265	
Weighted-average interest rate on short-term debt at year-end		5.0 %		0.6 %

Short-Term Borrowings

The Company has access to a $700 million multi-currency revolving credit facility ("2018 Credit Facility") through July 28, 2024. The facility is unsecured and contains certain affirmative and negative covenants relating to the operations and financial condition of the Company. The most restrictive of these covenants pertain to asset dispositions and prescribed ratios of indebtedness to total capital and operating income, plus depreciation and amortization to interest expense. The credit facility serves as a back-stop facility for the Company's commercial paper program.

The Company has a $500 million commercial paper facility. At December 31, 2022, the Company had borrowings of $95 million outstanding under this facility. The average balance outstanding for the commercial paper facility during the year ended December 31, 2022 was $269 million. At December 31, 2021, the Company had $170 million outstanding borrowings under this commercial paper facility. The Company also has access to $50 million in uncommitted short-term financing under lines of credit from various financial institutions, the availability of which is reduced by other short-term borrowings of $22 million.

Long-Term Debt

Long-term debt was as follows:

(in millions except percentages)	2022 Principal Balance	2022 Interest Rate	2021 Principal Balance	2021 Interest Rate
	Year Ended December 31,			
Private placement notes 70 million euros due October 2024	$ 75	1.0 %	$ 79	1.0 %
Private placement notes 25 million Swiss franc due December 2025	27	0.9 %	27	0.9 %
Private placement notes 97 million euros due December 2025	104	2.1 %	110	2.1 %
Private placement notes 26 million euros due February 2026	28	2.1 %	30	2.1 %
Private placement notes 58 million Swiss franc due August 2026	63	1.0 %	64	1.0 %
Private placement notes 106 million euros due August 2026	114	2.3 %	121	2.3 %
Private placement notes 70 million euros due October 2027	75	1.3 %	80	1.3 %
Private placement notes 8 million Swiss franc due December 2027	8	1.0 %	8	1.0 %
Private placement notes 15 million euros due December 2027	16	2.2 %	17	2.2 %
Private placement notes 140 million Swiss franc due August 2028	151	1.2 %	153	1.2 %
Private placement notes 70 million euros due October 2029	75	1.5 %	79	1.5 %
Fixed rate senior notes 750 million due June 2030	750	3.3 %	750	3.3 %
Private placement notes 70 million euros due October 2030	75	1.6 %	80	1.6 %
Private placement notes 45 million euros due February 2031	48	2.5 %	51	2.5 %
Private placement notes 65 million Swiss franc due August 2031	70	1.3 %	71	1.3 %
Private placement notes 12.6 billion Japanese yen due September 2031	96	1.0 %	109	1.0 %
Private placement notes 70 million euros due October 2031	75	1.7 %	80	1.7 %
Other borrowings, various currencies and rates	21		17	
Hedge accounting fair value adjustment[a]	(35)		(4)	
	$ 1,836		$ 1,922	
Less: Current portion				
(included in "Notes payable and current portion of long-term debt" in the Consolidated Balance Sheets)	1		1	
Less: Long-term portion of deferred financing costs	9		8	
Long-term portion	$ 1,826		$ 1,913	

(a) Represents the fair value of interest rate swap agreements entered into on a portion of the outstanding senior notes.

At December 31, 2022, the Company had $632 million borrowings available under unused lines of credit, including lines available under its short-term arrangements and revolving credit agreement.

The Company's revolving credit facility, term loans and senior notes contain certain affirmative and negative covenants relating to the Company's operations and financial condition. At December 31, 2022, the Company was in compliance with all debt covenants.

The contractual maturity dates of the Company's long-term borrowings as of December 31, 2022 were as follows:

(in millions)	
2023	$ 1
2024	88
2025	139
2026	204
2027	99
2028 and beyond	1,340
	$ 1,871

NOTE 16 - EQUITY

On July 28, 2021, the Board of Directors of the Company approved an increase to $1.0 billion in the value of shares of common stock that may be repurchased under the share repurchase program. Share repurchases may be made through open market purchases, Rule 10b5-1 plans, accelerated share repurchases, privately negotiated transactions or other transactions in such amounts and at such times as the Company considers appropriate based upon prevailing market and business conditions and other factors.

On March 8, 2022, the Company entered into an Accelerated Share Repurchase Agreement ("ASR Agreement") with a financial institution to purchase the Company's common stock based on the volume-weighted average price of the Company's common stock during the term of the agreement, less a discount.

(in millions, except per share amounts)		Initial Delivery			Final Settlement		
Agreement Date	Amount Paid	Shares Received	Price per share	Value of Shares as a % of Contract Value	Settlement Date	Total Shares Received	Average Price per Share
March 8, 2022	$ 150	2.4	$ 50.44	80 %	April 19, 2022	3.1	$ 48.22

The ASR agreement was accounted for as an initial delivery of common shares in a treasury stock transaction on March 9, 2022 of $120 million and a forward contract indexed to the Company's common stock for an amount of common shares to be determined on the final settlement date. The forward contract met all applicable criteria for equity classification and was not accounted for as a derivative instrument. Therefore, the forward contract was recorded as Capital in excess of par value and upon final settlement was recorded as Treasury Stock in the Consolidated Balance Sheets at December 31, 2022. The initial delivery and final settlement of common stock reduced the weighted average common shares outstanding for both basic and diluted EPS. The forward contract did not impact the weighted average common shares outstanding for diluted EPS.

For the years ended December 31, 2022, 2021 and 2020, the Company repurchased outstanding shares of common stock at a cost of $150 million, $200 million and $140 million, respectively. At December 31, 2022, the Company had authorization to repurchase $740 million in shares of common stock remaining under the share repurchase program.

For the years ended December 31, 2022, 2021 and 2020, the Company received proceeds of $6 million, $51 million and $11 million, respectively, primarily as a result of stock options exercised in the amount of 0.1 million, 1.1 million and 0.3 million in each of the years, respectively. It is the Company’s practice to issue shares from treasury stock when options are exercised.

Total outstanding shares of common stock and treasury stock were as follows:

(in millions)	Shares of Common Stock	Shares of Treasury Stock	Outstanding Shares
Balance at December 31, 2019	264.5	(43.2)	221.3
Shares of treasury stock issued	—	1.1	1.1
Repurchase of common stock at an average cost of $38.25	—	(3.7)	(3.7)
Balance at December 31, 2020	264.5	(45.8)	218.7
Shares of treasury stock issued	—	2.2	2.2
Repurchase of common stock at an average cost of $57.47	—	(3.5)	(3.5)
Balance at December 31, 2021	264.5	(47.1)	217.4
Shares of treasury stock issued	—	0.9	0.9
Repurchase of common stock at an average cost of $48.22	—	(3.1)	(3.1)
Balance at December 31, 2022	264.5	(49.3)	215.2

NOTE 17 - INCOME TAXES

The components of (loss) income before income taxes were as follows:

	Year Ended December 31,		
(in millions)	2022	2021	2020
United States	$ (531)	$ 51	$ (91)
Foreign	(524)	494	41
Total (loss) income before income taxes	$ (1,055)	$ 545	$ (50)

The components of the (benefit) provision for income taxes from operations were as follows:

	Year Ended December 31,		
(in millions)	2022	2021	2020
Current:			
U.S. federal	$ 1	$ 1	$ (5)
U.S. state	4	4	1
Foreign	118	154	89
Total	$ 123	$ 159	$ 85
Deferred:			
U.S. federal	$ (145)	$ 10	$ 4
U.S. state	(17)	2	(1)
Foreign	(66)	(37)	(65)
Total	$ (228)	$ (25)	$ (62)
Total (benefit) provision for income taxes	$ (105)	$ 134	$ 23

The reconciliation of the U.S. federal statutory tax rate to the effective rate were as follows:

	Year Ended December 31,					
(in millions)	2022		2021		2020	
Statutory U.S. federal income tax rate	$ (222)	21.0 %	$ 114	21.0 %	$ (11)	21.0 %
Effect of:						
State income taxes, net of federal benefit	(11)	1.0	4	0.8	(1)	1.1
Federal benefit of R&D and foreign tax credits	(8)	0.8	(5)	(0.9)	(9)	18.9
US other permanent differences	9	(0.9)	2	0.4	3	(6.1)
Tax effect of international operations	(5)	0.5	2	0.3	(5)	10.0
Global Intangible Low Taxed Income (GILTI)	20	(1.9)	13	2.4	7	(13.0)
Foreign Derived Intangible Income (FDII)	(8)	0.8	(7)	(1.3)	(6)	11.8
Net effect of tax audit activity	15	(1.4)	9	1.6	4	(8.2)
Tax effect of enacted statutory rate changes on Non-U.S. jurisdictions	(3)	0.3	10	1.9	—	(0.2)
Federal tax on unremitted earnings of certain foreign subsidiaries	1	(0.1)	(1)	(0.2)	3	(5.4)
Valuation allowance adjustments	(9)	0.8	(9)	(1.7)	8	(15.3)
Tax effect of impairment of goodwill and intangibles	114	(10.8)	—	—	30	(60.8)
Other	2	(0.2)	2	0.3	—	0.2
Effective income tax rate on operations	$ (105)	9.9 %	$ 134	24.6 %	$ 23	(46.0 %)

The tax effect of significant temporary differences giving rise to deferred tax assets and liabilities were as follows:

(in millions)	Year Ended December 31, 2022	2021
Deferred tax assets		
Commission and bonus accrual	$ 9	$ 6
Employee benefit accruals	46	51
Inventory	9	16
Insurance premium accruals	3	3
Miscellaneous accruals	37	27
Other	31	17
Net unrealized gains/losses included in AOCI	—	47
Lease right-of-use liability	48	47
Product warranty accruals	1	1
Foreign tax credit and R&D carryforward	40	49
Restructuring and other cost accruals	4	5
Sales and marketing accrual	9	14
Tax loss carryforwards and other tax attributes	654	275
Total deferred tax assets	$ 891	$ 558
Less: Valuation allowances	(645)	(267)
Total deferred tax assets, net	$ 246	$ 291
Deferred tax liabilities		
Identifiable intangible assets	$ (325)	$ (569)
Property, plant and equipment	(41)	(47)
Lease right-of-use asset	(47)	(47)
Net unrealized gains/losses included in AOCI	(13)	—
Taxes on unremitted earnings of foreign subsidiaries	(6)	(5)
Total deferred tax liabilities	(432)	(668)
Net deferred tax liabilities	$ (186)	$ (377)

Deferred tax assets and liabilities are included in the following Consolidated Balance Sheets line items at December 31 were as follows:

(in millions)	2022	2021
Assets		
Other noncurrent assets	$ 101	$ 14
Liabilities		
Deferred income taxes	$ 287	$ 391

The Company has $36 million of foreign tax credit carryforwards at December 31, 2022, of which $24 million will expire in 2025, $3 million will expire in 2027, and $9 million will expire at various times from 2028 through 2031.

The Company has tax loss carryforwards related to certain foreign and domestic subsidiaries of approximately $2,790 million at December 31, 2022, of which $2,525 million expires at various times through 2042 and $265 million may be carried forward indefinitely. Included in deferred income tax assets at December 31, 2022 are tax benefits of $601 million and $53 million, before valuation allowances, related to tax loss carryforwards and disallowed interest carryforwards, respectively. As of December 31, 2021 the Company's deferred tax assets included $229 million of tax loss carryforwards and $46 million of disallowed interest carryforwards. The increase from the prior year is primarily attributable to the re-establishment of Luxembourg net operating loss carryforwards of $1.5 billion. The realizability of such net operating losses was previously determined to be remote and therefore a related deferred tax asset was not recorded. As of December 31, 2022, the Company believes that these Luxembourg net operating losses are no longer remote such that it is appropriate to recognize an increase in the deferred tax asset of $382 million, with a corresponding increase to the valuation allowance.

The Company has recorded $591 million of valuation allowance to offset the tax benefit of net operating losses, $36 million to offset the tax benefit of foreign tax credits, and $18 million of valuation allowance for other deferred tax assets. The increase in the valuation allowance is primarily driven by the aforementioned Luxembourg net operating loss. The Company has recorded these valuation allowances due to the uncertainty that these assets can be realized in the future.

The Company has provided $6 million of withholding taxes on certain undistributed earnings of its foreign subsidiaries that the Company anticipates will be repatriated.

Undistributed earnings of foreign subsidiaries and related companies that are considered to be permanently invested amounted to $2,492 million at December 31, 2022 and $1,771 million at December 31, 2021. The Tax Cuts and Jobs Act imposed U.S. tax on all post-1986 foreign unrepatriated earnings accumulated through December 31, 2017. Unrepatriated earnings generated after December 31, 2017, are now subject to tax in the current year. All undistributed earnings are still subject to certain taxes upon repatriation, primarily where foreign withholding taxes apply. It is not practicable to calculate the unrecognized deferred tax liability on undistributed earnings.

Tax Contingencies

The total amount of gross unrecognized tax benefits at December 31, 2022 is approximately $55 million, including interest of which, approximately $55 million represents the amount of unrecognized tax benefits that, if recognized, would affect the effective income tax rate. It is reasonably possible that certain amounts of unrecognized tax benefits will significantly increase or decrease within twelve months of the reporting date of the Company's consolidated financial statements. Expiration of statutes of limitations in various jurisdictions during the next twelve months could include unrecognized tax benefits of approximately $11 million, if recognized, would affect the effective income tax rate.

The total amount of accrued interest and penalties were $6 million and $8 million at December 31, 2022 and 2021, respectively. The Company has consistently classified interest and penalties recognized in its consolidated financial statements as income taxes based on the accounting policy election of the Company. The Company recognized a tax benefit of $2 million and tax expense of $2 million for the years ended December 31, 2022 and 2021, respectively, related to interest and penalties.

The Company is subject to U.S. federal income tax as well as income tax of multiple state and foreign jurisdictions. The significant jurisdictions include the U.S., Germany, Sweden and Switzerland. The Company has substantially concluded all U.S. federal income tax matters for years through 2011. The Company is currently under audit for the tax years 2012, 2013, 2015 and 2016. For further information on the Internal Revenue Service ("IRS") audit, see Note 22, Commitments and Contingencies. The tax years 2014 through 2021 are subject to future potential tax audit adjustments. The Company concluded audits in Germany through the tax year 2013 and is currently under audit for the years 2014 through 2017. The tax years 2018 through 2021 are subject to future potential audit adjustments in Germany. The taxable years that remain open for Sweden are 2013 through 2021. For information related to Sweden, see Note 22, Commitments and Contingencies. The taxable years that remain open for Switzerland are 2011 through 2021.

The activity recorded for unrecognized tax benefits were as follows:

(in millions)	2022	2021	2020
Unrecognized tax benefits at beginning of period	$ 34	$ 27	$ 24
Gross change for prior-period positions	12	6	1
Gross change for current year positions	4	2	1
Increase due to effect of foreign currency translation	—	—	1
Decrease due to effect from foreign currency translation	(1)	(1)	—
Unrecognized tax benefits at end of period	$ 49	$ 34	$ 27

NOTE 18 - BENEFIT PLANS

Defined Contribution Plans

The Company maintains both U.S. and non-U.S. employee defined contribution plans. The primary U.S. plan, the Dentsply Sirona Inc. 401(k) Savings Plan (the "Plan"), allows eligible employees to contribute a portion of their cash compensation to the plan on a tax-deferred basis, and in most cases, the Company provides a matching contribution. The Plan includes various investment funds. The Company makes a discretionary cash contribution that is initially targeted to be 3% of compensation. Each eligible participant who elects to defer to the Plan will receive a matching contribution of 100% on the first 1% contributed and 50% on the next 5% contributed for a total maximum matching contribution of 3.5%. In addition to the primary U.S. plan, the Company also maintains various other U.S. and non-U.S. defined contribution and non-qualified deferred compensation plans. The annual expenses, net of forfeitures, were $41 million, $39 million and $36 million for the years ended December 31, 2022, 2021, and 2020, respectively.

Defined Benefit Plans

The Company maintains defined benefit pension plans for certain employees in Austria, France, Germany, Indonesia, Italy, Japan, the Netherlands, Norway, Sweden, Switzerland, Taiwan, and the U.S. These plans provide benefits based upon age, years of service and remuneration. Substantially all of the German and Swedish plans are unfunded book reserve plans. Most employees and retirees outside the U.S. are covered by government health plans.

The Company predominantly derives its discount rates by applying the specific spot rates along the yield curve to the relevant projected cash flows; or, in markets where there is an absence of a sufficiently deep corporate bond market, it uses liability durations in establishing its discount rates, which are observed from indices of high-grade corporate or government bond yield in the respective economic regions of the plan. For the large defined benefits pension plans, the Company uses a spot rate approach for the estimation of the Service cost and Interest cost components of benefit cost by applying the specific spot rates along the yield curve to the relevant projected cash flows.

Significant changes in the retirement plan benefit obligations for the year ended December 31, 2022 include a $162 million actuarial gain primarily attributable to the increase in discount rates, the effect of which is slightly offset by the change in inflation and salary increase assumptions in some plans. The changes also include a $1 million actuarial gain due to demographic assumption changes and a $14 million actuarial loss due to plan experience different than anticipated.

Significant changes in the retirement plan benefit obligations for the year ended December 31, 2021 include a $26 million actuarial gain primarily attributable to the increase in discount rates, the effect of which is slightly offset by the change in inflation and salary increase assumptions in some plans. The changes also include a $6 million actuarial gain due to demographic assumption changes and a $16 million actuarial loss due to plan experience different than anticipated.

Defined Benefit Pension Plan Assets

The primary investment strategy is to ensure that the assets of the plans, along with anticipated future contributions, will be invested in order that the benefit entitlements of employees, pensioners and beneficiaries covered under the plan can be met when due with high probability. Pension plan assets consist mainly of common stock and fixed income investments. The target allocations for defined benefit plan assets are 30% to 65% equity securities, 30% to 65% fixed income securities, 0% to 15% real estate, and 0% to 25% in all other types of investments. Equity securities include investments in companies located both in and outside the U.S. Equity securities in the defined benefit pension plans do not include Company common stock contributed directly by the Company. Fixed income securities include corporate bonds of companies from diversified industries, government bonds, mortgage notes and pledge letters. Other types of investments include investments in mutual funds, insurance contracts, hedge funds and real estate. These plan assets are not recorded in the Company’s Consolidated Balance Sheet as they are held in trust or other off-balance sheet investment vehicles.

The defined benefit pension plan assets maintained in Austria, Germany, Norway, the Netherlands, Switzerland and Taiwan all have separate investment policies but generally have an objective to achieve a long-term rate of return in excess of 2% while at the same time mitigating the impact of investment risk associated with investment categories that are expected to yield greater than average returns. In accordance with the investment policies, the plans’ assets were invested in the following investment categories: interest-bearing cash, U.S. and foreign equities, foreign fixed income securities (primarily corporate and government bonds), insurance company contracts, real estate and hedge funds.

Reconciliation of changes in the defined benefit obligations, fair value of assets and statement of funded status were as follows:

(in millions)	Year Ended December 31, 2022	2021
Change in Benefit Obligation		
Benefit obligation at beginning of year	$ 619	$ 675
Service cost	12	17
Interest cost	5	3
Participant contributions	4	4
Actuarial gains	(149)	(16)
Plan amendments	—	(1)
Acquisitions/Divestitures	—	(2)
Effect of exchange rate changes	(35)	(41)
Plan curtailments and settlements	(1)	(1)
Benefits paid	(15)	(19)
Benefit obligation at end of year	$ 440	$ 619
Change in Plan Assets		
Fair value of plan assets at beginning of year	$ 212	$ 213
Actual return on assets	(28)	10
Plan settlements	(1)	(1)
Acquisitions/Divestitures	—	(3)
Effect of exchange rate changes	(5)	(7)
Employer contributions	15	15
Participant contributions	4	4
Benefits paid	(15)	(19)
Fair value of plan assets at end of year	$ 182	$ 212
Funded status at end of year	$ (258)	$ (407)

The amounts recognized in the accompanying Consolidated Balance Sheets, net of tax effects, were as follows:

(in millions)	Location In The Consolidated Balance Sheets	Year Ended December 31, 2022	2021
Other noncurrent assets, net	Other noncurrent assets	$ 9	$ 2
Deferred tax asset	Other noncurrent assets	6	36
Total assets		$ 15	$ 38
Current liabilities	Accrued liabilities	(10)	(9)
Other noncurrent liabilities	Other noncurrent liabilities	(257)	(400)
Deferred tax liability	Deferred income taxes	(5)	(1)
Total liabilities		$ (272)	$ (410)
Accumulated other comprehensive income	Accumulated other comprehensive loss	7	105
Net amount recognized		$ (250)	$ (267)

Amounts recognized in AOCI were as follows:

(in millions)	Year Ended December 31, 2022	2021
Net actuarial loss	$ 12	$ 144
Net prior service cost	(4)	(4)
Before tax AOCI	$ 8	$ 140
Less: Deferred taxes	1	35
Net of tax AOCI	$ 7	$ 105

Information for pension plans with a projected or accumulated benefit obligation in excess of plan assets were as follows:

(in millions)	Year Ended December 31, 2022	2021
Projected benefit obligation	$ 283	$ 427
Accumulated benefit obligation	272	403
Fair value of plan assets	15	17

Components of net periodic benefit cost were as follows:

(in millions)	Year Ended December 31, 2022	2021	2020	Location in Consolidated Statements of Operations
Service cost	$ 5	$ 7	$ 6	Cost of products sold
Service cost	7	10	10	Selling, general and administrative expenses
Interest cost	5	3	5	Other expense (income), net
Expected return on plan assets	(4)	(4)	(4)	Other expense (income), net
Amortization of prior service credit	(1)	(1)	(1)	Other expense (income), net
Amortization of net actuarial loss	8	12	9	Other expense (income), net
Acquisitions/Divestitures	—	1	—	Other expense (income), net
Curtailment and settlement gains	(1)	(1)	—	Other expense (income), net
Net periodic benefit cost	$ 19	$ 27	$ 25	

Other changes in plan assets and benefit obligations recognized in AOCI were as follows:

(in millions)	Year Ended December 31, 2022	2021	2020
Net actuarial (gains) loss	$ (125)	$ (36)	$ 43
Amortization	(7)	(11)	(9)
Total recognized in AOCI	$ (132)	$ (47)	$ 34
Total recognized in net periodic benefit cost and AOCI	$ (113)	$ (20)	$ 59

Assumptions

The weighted average assumptions used to determine benefit obligations for the Company's plans, principally in foreign locations were as follows:

	Year Ended December 31,		
	2022	2021	2020
Interest crediting rate	2.5 %	1.3 %	1.3 %
Discount rate	3.2 %	1.1 %	0.6 %
Rate of compensation increase	2.6 %	2.6 %	2.4 %

The weighted average assumptions used to determine net periodic benefit cost for the Company's plans, principally in foreign locations were as follows:

	Year Ended December 31,		
	2022	2021	2020
Interest crediting rate	1.3 %	1.3 %	1.3 %
Discount rate	1.1 %	0.6 %	1.0 %
Expected return on plan assets	2.2 %	2.2 %	2.3 %
Rate of compensation increase	2.6 %	2.4 %	2.5 %
Measurement date	12/31/2022	12/31/2021	12/31/2020

To develop the assumptions for the expected long-term rate of return on assets, the Company considered the current level of expected returns on risk free investments (primarily U.S. government bonds), the historical level of the risk premium associated with the other asset classes in which the assets are invested and the expectations for future returns of each asset class. The expected return for each asset class was then weighted based on the target asset allocations to develop the assumptions for the expected long-term rate of return on assets.

Fair Value Measurements of Plan Assets

The fair value of the Company's pension plan assets at December 31, 2022 and 2021 are presented in the table below by asset category. Approximately 81% of the total plan assets are categorized as Level 1, and therefore, the values assigned to these pension assets are based on quoted prices available in active markets. For the other category levels, a description of the valuation is provided in Note 1, Significant Accounting Policies, under the "Fair Value Measurement" heading.

	December 31, 2022			
(in millions)	Total	Level 1	Level 2	Level 3
Assets Category				
Cash and cash equivalents	$ 15	$ 15	$ —	$ —
Equity securities:				
International	49	49	—	—
Fixed income securities:				
Fixed rate bonds (a)	67	67	—	—
Other types of investments:				
Mutual funds (b)	17	17	—	—
Insurance contracts	24	—	—	24
Hedge funds	9	—	—	9
Real estate	1	—	—	1
Total	$ 182	$ 148	$ —	$ 34

(in millions)	December 31, 2021 Total	Level 1	Level 2	Level 3
Assets Category				
Cash and cash equivalents	$ 17	$ 17	$ —	$ —
Equity securities:				
International	65	65	—	—
Fixed income securities:				
Fixed rate bonds (a)	66	66	—	—
Other types of investments:				
Mutual funds (b)	18	18	—	—
Insurance contracts	34	—	—	34
Hedge funds	11	—	—	11
Real estate	1	—	—	1
Total	$ 212	$ 166	$ —	$ 46

(a) This category includes fixed income securities invested primarily in Swiss bonds, foreign bonds denominated in Swiss francs, foreign currency bonds, mortgage notes and pledged letters.
(b) This category includes mutual funds balanced between moderate-income generation and moderate capital appreciation with investment allocations of approximately 50% equities and 50% fixed income investments.

A reconciliation from December 31, 2020 to December 31, 2022 for the plan assets categorized as Level 3 were as follows:

(in millions)	December 31, 2022 Insurance Contracts	Hedge Funds	Real Estate	Total
Balance at December 31, 2021	$ 34	$ 11	$ 1	$ 46
Actual return on plan assets:				
Relating to assets still held at the reporting date	(5)	(1)	—	(6)
Purchases, sales and settlements, net	(2)	(1)	—	(3)
Effect of exchange rate changes	(3)	—	—	(3)
Balance at December 31, 2022	$ 24	$ 9	$ 1	$ 34

(in millions)	December 31, 2021 Insurance Contracts	Hedge Funds	Real Estate	Total
Balance at December 31, 2020	$ 37	$ 12	$ —	$ 49
Actual return on plan assets:				
Relating to assets still held at the reporting date	(2)	1	1	—
Purchases, sales and settlements, net	(1)	(2)	—	(3)
Transfers in and/or out	2	—	—	2
Effect of exchange rate changes	(2)	—	—	(2)
Balance at December 31, 2021	$ 34	$ 11	$ 1	$ 46

Fair values for Level 3 assets are determined as follows:

Insurance Contracts: The value of the asset represents the mathematical reserve of the insurance policies and is calculated by the insurance firms using their own assumptions.

Hedge Funds: The investments are valued using the net asset value provided by the administrator of the fund, which is based on the fair value of the underlying securities.

Real Estate: Investment is stated by its appraised value.

Cash Flows

In 2023, the Company expects to make employer contributions of $17 million to its defined benefit pension plans.

Estimated Future Benefit Payments

Total benefits expected to be paid from the plans in the future were as follows:

(in millions)	Pension Benefits
2023	$ 25
2024	23
2025	24
2026	25
2027	26
2027-2031	128

NOTE 19 - INTANGIBLE ASSET IMPAIRMENT AND OTHER COSTS

During the year ended December 31, 2022, the Company recorded net intangible asset impairment and other costs of $114 million, which consists primarily of indefinite-lived asset impairment of $100 million and severance and other costs of $14 million.

During the year ended December 31, 2021, the Company recorded net intangible asset impairment and other costs of $20 million, which consists primarily of severance and other restructuring costs of $23 million, offset by adjustments to inventory reserve of $3 million.

During the year ended December 31, 2020, the Company recorded intangible asset impairment and other costs of $123 million which consists primarily of inventory write-downs of $31 million, accelerated depreciation of $14 million, severance costs of $23 million, indefinite-lived intangible asset impairment of $39 million, and other impairments of $8 million.

Intangible asset impairment and other costs for the years ended December 31, 2022, 2021 and 2020 were as follows:

Affected Line Item in the Consolidated Statements of Operations	Year Ended December 31,		
(in millions)	2022	2021	2020
Cost of products sold	$ —	$ (3)	$ 44
Selling, general, and administrative expenses	—	6	2
Intangible asset impairment and other costs	114	17	77
Total intangible asset impairment and other costs	$ 114	$ 20	$ 123

The Company's restructuring accruals at December 31, 2022 were as follows:

	Severance			
(in millions)	2020 and Prior Plans	2021 Plans	2022 Plans	Total
Balance at December 31, 2021	$ 5	$ 9	$ —	$ 14
Provisions and adjustments	1	1	9	11
Amounts applied	(3)	(6)	(5)	(14)
Change in estimates	(2)	(1)	(1)	(4)
Balance at December 31, 2022	$ 1	$ 3	$ 3	$ 7

	Other Restructuring Costs			
(in millions)	2020 and Prior Plans	2021 Plans	2022 Plans	Total
Balance at December 31, 2021	$ 4	$ —	$ —	$ 4
Provisions and adjustments	1	2	2	5
Amounts applied	(4)	(2)	(1)	(7)
Change in estimates	(1)	—	—	(1)
Balance at December 31, 2022	$ —	$ —	$ 1	$ 1

The cumulative amounts for the provisions and adjustments and amounts applied for all the plans by segment were as follows:

(in millions)	December 31, 2021	Provisions and Adjustments	Amounts Applied	Change in Estimates	December 31, 2022
Technologies & Equipment	$ 7	$ 4	$ (7)	$ (2)	$ 2
Consumables	11	8	(10)	(3)	6
All Other	—	4	(4)	—	—
Total	$ 18	$ 16	$ (21)	$ (5)	$ 8

The Company's restructuring accruals at December 31, 2021 were as follows:

	Severances			
(in millions)	2019 and Prior Plans	2020 Plans	2021 Plans	Total
Balance at December 31, 2020	$ 12	$ 17	$ —	$ 29
Provisions and adjustments	3	3	13	19
Amounts applied	(10)	(11)	(4)	(25)
Change in estimates	(2)	(7)	—	(9)
Balance at December 31, 2021	$ 3	$ 2	$ 9	$ 14

	Other Restructuring Costs			
(in millions)	2019 and Prior Plans	2020 Plans	2021 Plans	Total
Balance at December 31, 2020	$ 3	$ 2	$ —	$ 5
Provisions and adjustments	2	5	3	10
Amounts applied	(2)	(5)	(3)	(10)
Change in estimates	—	(1)	—	(1)
Balance at December 31, 2021	$ 3	$ 1	$ —	$ 4

The cumulative amounts for the provisions and adjustments and amounts applied for all the plans by segment were as follows:

(in millions)	December 31, 2020	Provisions and Adjustments	Amounts Applied	Change in Estimates	December 31, 2021
Technologies & Equipment	$ 16	$ 9	$ (14)	$ (4)	$ 7
Consumables	17	15	(16)	(5)	11
All Other	1	5	(5)	(1)	—
Total	$ 34	$ 29	$ (35)	$ (10)	$ 18

NOTE 20 - FINANCIAL INSTRUMENTS AND DERIVATIVES

Derivative Instruments and Hedging Activities

The Company’s activities expose it to a variety of market risks, which primarily include the risks related to the effects of changes in foreign currency exchange rates and interest rates. These financial exposures are monitored and managed by the Company as part of its overall risk management program. The objective of this risk management program is to reduce the volatility that these market risks may have on the Company’s operating results and cash flows. The Company employs derivative financial instruments to hedge certain anticipated transactions, firm commitments, or assets and liabilities denominated in foreign currencies. Additionally, the Company utilizes interest rate swaps to convert fixed rate debt into variable rate debt or vice versa. The Company does not hold derivative instruments for trading or speculative purposes.

The following summarizes the notional amounts of cash flow hedges, hedges of net investments, fair value hedges, and derivative instruments not designated as hedges for accounting purposes, by derivative instrument type at December 31, 2022 and the notional amounts expected to mature during the next 12 months:

(in millions)	Aggregate Notional Amount	Aggregate Notional Amount Maturing within 12 Months
Cash Flow Hedges		
Foreign exchange forward contracts	$ 185	$ 148
Total derivative instruments designated as cash flow hedges	$ 185	$ 148
Hedges of Net Investments		
Foreign exchange forward contracts	$ 171	$ 86
Cross currency basis swaps	286	—
Total derivative instruments designated as hedges of net investments	$ 457	$ 86
Fair Value Hedges		
Foreign exchange forward contracts	$ 92	$ 60
Interest rate swaps	250	—
Total derivative instruments designated as fair value hedges	$ 342	$ 60
Derivative Instruments not Designated as Hedges		
Foreign exchange forward contracts	$ 416	$ 416
Total derivative instruments not designated as hedges	$ 416	$ 416

Cash Flow Hedges

Foreign Exchange Risk Management

The Company hedges select anticipated foreign currency cash flows to reduce volatility in both cash flows and reported earnings. The Company designates certain foreign exchange forward contracts as cash flow hedges. As a result, the Company records the fair value of the contracts primarily through AOCI based on the assessed effectiveness of the foreign exchange forward contracts. The Company measures the effectiveness of cash flow hedges of anticipated transactions on a spot-to-spot basis rather than on a forward-to-forward basis. Accordingly, the spot-to-spot change in the derivative fair value will be deferred in AOCI and released and recorded in the Consolidated Statements of Operations in the same period that the hedged transaction is recorded. The time-value component of the fair value of the derivative is reported on a straight-line basis in Cost of products sold in the Consolidated Statements of Operations in the period which it is applicable. Any cash flows associated with these instruments are included in operating activities in the Consolidated Statements of Cash Flows.

These foreign exchange forward contracts generally have maturities up to 18 months, which is the period over which the Company is hedging exposures to variability of cash flows and the counterparties to the transactions are typically large international financial institutions.

Interest Rate Risk Management

The Company enters into interest rate swap contracts to manage interest rate risk on long-term debt instruments and not for speculative purposes. Any cash flows associated with these instruments are included in operating activities in the Consolidated Statements of Cash Flows.

On May 26, 2020, the Company paid $31 million to settle the $150 million notional T-Lock contract, which partially hedged the interest rate risk of the $750 million senior unsecured notes. This loss is amortized over the ten-year life of the notes. At December 31, 2022, $23 million of this loss is remaining to be amortized from AOCI in future periods.

AOCI Release

Overall, the derivatives designated as cash flow hedges are considered to be highly effective for accounting purposes. At December 31, 2022, the Company expects to reclassify $4 million of deferred net losses on cash flow hedges recorded in AOCI in the Consolidated Statements of Operations during the next 12 months. For the rollforward of derivative instruments designated as cash flow hedges in AOCI see Note 5, Comprehensive (Loss) Income.

Hedges of Net Investments in Foreign Operations

The Company has significant investments in foreign subsidiaries. The net assets of these subsidiaries are exposed to volatility in currency exchange rates. The Company employs both derivative and non-derivative financial instruments to hedge a portion of this exposure. The derivative instruments consist of foreign exchange forward contracts and cross-currency basis swaps. The non-derivative instruments consist of foreign currency denominated debt held at the parent company level. Translation gains and losses related to the net assets of the foreign subsidiaries are offset by gains and losses in the aforementioned instruments, which are designated as hedges of net investments and are included in AOCI. The time-value component of the fair value of the derivative is reported on a straight-line basis in Other expense (income), net in the Consolidated Statements of Operations in the applicable period. Any cash flows associated with these instruments are included in investing activities in the Consolidated Statements of Cash Flows except for derivative instruments that include an other-than-insignificant financing element, for which all cash flows are classified as financing activities in the Consolidated Statements of Cash Flows.

The fair value of the foreign exchange forward contracts and cross-currency basis swaps is the estimated amount the Company would receive or pay at the reporting date, taking into account the effective interest rates, and foreign exchange rates. The effective portion of the change in the value of these derivatives is recorded in AOCI, net of tax effects.

On July 2, 2021, the Company entered into a cross-currency basis swap of a notional amount of $300 million, which matures on June 3, 2030. The cross-currency basis swap is designated as a hedge of net investments. This contract effectively converts a portion of the $750 million bond coupon from 3.3% to 1.7%, which will result in a net reduction of interest expense.

On May 25, 2021, the Company re-established its euro net investment hedge portfolio by entering into eight foreign exchange forward contracts, each with a notional amount of 10 million euro. The original contracts have quarterly maturity dates through March 2023. The Company enters into additional foreign exchange contracts as individual contracts within the portfolio mature. As of December 31, 2022, the euro net investment hedge portfolio has an aggregate notional value of 160 million euro with maturity dates through December 2024.

Fair Value Hedges

Foreign Exchange Risk Management

The Company has intercompany loans denominated in Swedish kronor that are exposed to volatility in currency exchange rates. The Company employs derivative financial instruments to hedge these exposures. The Company accounts for these designated foreign exchange forward contracts as fair value hedges. The Company measures the effectiveness of fair value hedges of anticipated transactions on a spot-to-spot basis rather than on a forward-to-forward basis. Accordingly, the spot-to-spot change in the derivative fair value will be recorded in Other expense (income), net in the Consolidated Statements of Operations. The time-value component of the fair value of the derivative is reported on a straight-line basis in Other expense (income), net in the Consolidated Statements of Operations in the applicable period. Any cash flows associated with these instruments are included in operating activities in the Consolidated Statements of Cash Flows.

Interest Rate Risk Management

On July 1, 2021, the Company entered into variable interest rate swaps with a notional amount of $250 million, which effectively converted a portion of the underlying fixed rate of 3.3% on the $750 million Senior Notes due June 2030 to a variable interest rate. Of the $250 million notional amount, $100 million has a term of five-years maturing on June 1, 2026 and $150 million has a term of nine years maturing on March 1, 2030.

Derivative Instruments Not Designated as Hedges

The Company enters into derivative instruments with the intent to partially mitigate the foreign exchange revaluation risk associated with recorded assets and liabilities that are denominated in a non-functional currency. The Company primarily uses foreign exchange forward contracts to hedge these risks. The gains and losses on these derivative transactions offset the gains and losses generated by the revaluation of the underlying non-functional currency balances and are recorded in Other expense (income), net in the Consolidated Statements of Operations. Any cash flows associated with these instruments are included in operating activities in the Consolidated Statements of Cash Flows.

Derivative Instrument Activity

The amount of gains (losses) recorded in the Company's Consolidated Balance Sheets and Consolidated Statements of Operations related to all derivative instruments were as follows:

(in millions)	Year Ended December 31, 2022 Gain (Loss) recognized in AOCI	Consolidated Statements of Operations Location	Effective Portion Reclassified from AOCI into Income (Expense)	Ineffective Portion Recognized in Income (Expense)	Recognized in Income (Expense)
Cash Flow Hedges					
Foreign exchange forward contracts	$ (1)	Cost of products sold	$ 3	$ —	$ —
Interest rate swaps	—	Interest expense, net	(3)	—	—
Total for cash flow hedging	$ (1)		$ —	$ —	$ —
Hedges of Net Investments					
Cross currency basis swaps	$ 30	Interest expense, net	$ —	$ —	$ 5
Foreign exchange forward contracts	11	Other expense (income), net	—	2	—
Total for net investment hedging	$ 41		$ —	$ 2	$ 5
Fair Value Hedges					
Foreign exchange forward contracts	$ (2)	Other expense (income), net	$ —	$ 1	$ 26
Interest rate swap	—	Interest expense, net	—	—	(1)
Total for fair value hedging	$ (2)		$ —	$ 1	$ 25

(in millions)	Year Ended December 31, 2021 Gain (Loss) recognized in AOCI	Consolidated Statements of Operations Location	Effective Portion Reclassified from AOCI into Income (Expense)	Ineffective Portion Recognized in Income (Expense)	Recognized in Income (Expense)
Cash Flow Hedges					
Foreign exchange forward contracts	$ 3	Cost of products sold	$ (3)	$ 2	$ —
Interest rate swaps	—	Interest expense, net	(4)	—	—
Total for cash flow hedging	$ 3		$ (7)	$ 2	$ —
Hedges of Net Investments					
Cross currency basis swaps	$ 13	Interest expense, net	$ —	$ —	$ 6
Foreign exchange forward contracts	10	Other expense (income), net	—	1	—
Total for net investment hedging	$ 23		$ —	$ 1	$ 6
Fair Value Hedges					
Foreign exchange forward contracts	$ (1)	Other expense (income), net	$ —	$ 1	$ 23
Interest rate swap	—	Interest expense, net	—	—	1
Total for fair value hedging	$ (1)		$ —	$ 1	$ 24

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(in millions)	Year Ended December 31, 2020 Gain (Loss) recognized in AOCI	Consolidated Statements of Operations Location	Effective Portion Reclassified from AOCI into Income (Expense)	Ineffective Portion Recognized in Income (Expense)	Recognized in Income (Expense)
Cash Flow Hedges					
Foreign exchange forward contracts	$ (2)	Cost of products sold	$ 2	$ 4	$ —
Interest rate swaps	(16)	Interest expense, net	(4)	—	—
Total for cash flow hedging	$ (18)		$ (2)	$ 4	$ —
Hedges of Net Investments					
Cross currency basis swaps	$ (26)	Interest expense, net	$ —	$ —	$ 9
Foreign exchange forward contracts	6	Other expense (income), net	—	6	—
Total for net investment hedging	$ (20)		$ —	$ 6	$ 9
Fair Value Hedges					
Foreign exchange forward contracts	$ (3)	Interest expense, net	$ —	$ 3	$ —
Total for fair value hedging	$ (3)		$ —	$ 3	$ —

(in millions)	Consolidated Statements of Operations Location	Gain (Loss) Recognized December 31, 2022	2021	2020
Derivative Instruments not Designated as Hedges				
Foreign exchange forward contracts	Other expense (income), net	$ 4	$ (9)	$ 7
Total for instruments not designated as hedges		$ 4	$ (9)	$ 7

Consolidated Balance Sheets Location of Derivative Fair Values

The fair value and the location of the Company's derivatives in the Consolidated Balance Sheets were as follows:

	Year Ended December 31, 2022			
(in millions)	Prepaid Expenses and Other Current Assets	Other Noncurrent Assets	Accrued Liabilities	Other Noncurrent Liabilities
Designated as Hedges:				
Foreign exchange forward contracts	$ 32	$ 3	$ 5	$ 2
Interest rate swaps	—	—	9	25
Cross currency basis swaps	4	22	—	—
Total	$ 36	$ 25	$ 14	$ 27
Not Designated as Hedges:				
Foreign exchange forward contracts	$ 3	$ —	$ 5	$ —
Total	$ 3	$ —	$ 5	$ —

	Year Ended December 31, 2021			
(in millions)	Prepaid Expenses and Other Current Assets	Other Noncurrent Assets	Accrued Liabilities	Other Noncurrent Liabilities
Designated as Hedges:				
Foreign exchange forward contracts	$ 18	$ 11	$ 2	$ 1
Interest rate swaps	5	—	—	9
Cross currency basis swaps	4	—	—	7
Total	$ 27	$ 11	$ 2	$ 17
Not Designated as Hedges:				
Foreign exchange forward contracts	$ 1	$ —	$ 1	$ —
Total	$ 1	$ —	$ 1	$ —

Balance Sheet Offsetting

Substantially all of the Company's derivative contracts are subject to netting arrangements; whereby the right to offset occurs in the event of default or termination in accordance with the terms of the arrangements with the counterparty. While these contracts contain the enforceable right to offset through netting arrangements with the same counterparty, the Company elects to present them on a gross basis in the Consolidated Balance Sheets.

Offsetting of financial assets and liabilities under netting arrangements at December 31, 2022 were as follows:

				Gross Amounts Not Offset in the Consolidated Balance Sheets		
(in millions)	Gross Amounts Recognized	Gross Amounts Offset in the Consolidated Balance Sheets	Net Amounts Presented in the Consolidated Balance Sheets	Financial Instruments	Cash Collateral Received/Pledged	Net Amount
Assets						
Foreign exchange forward contracts	$ 38	$ —	$ 38	$ (7)	$ —	$ 31
Cross currency basis swaps	26	—	26	(12)	—	14
Total assets	$ 64	$ —	$ 64	$ (19)	$ —	$ 45
Liabilities						
Foreign exchange forward contracts	$ 12	$ —	$ 12	$ (10)	$ —	$ 2
Interest rate swaps	34	—	34	(9)	—	25
Total liabilities	$ 46	$ —	$ 46	$ (19)	$ —	$ 27

Offsetting of financial assets and liabilities under netting arrangements at December 31, 2021 were as follows:

				Gross Amounts Not Offset in the Consolidated Balance Sheets		
(in millions)	Gross Amounts Recognized	Gross Amounts Offset in the Consolidated Balance Sheets	Net Amounts Presented in the Consolidated Balance Sheets	Financial Instruments	Cash Collateral Received/Pledged	Net Amount
Assets						
Foreign exchange forward contracts	$ 31	$ —	$ 31	$ (9)	$ —	$ 22
Total assets	$ 31	$ —	$ 31	$ (9)	$ —	$ 22
Liabilities						
Foreign exchange forward contracts	$ 4	$ —	$ 4	$ (4)	$ —	$ —
Interest rate swaps	4	—	4	(2)	—	2
Cross currency basis swaps	4	—	4	(3)	—	1
Total liabilities	$ 12	$ —	$ 12	$ (9)	$ —	$ 3

NOTE 21 - FAIR VALUE MEASUREMENT

The estimated fair value and carrying value of the Company's total debt was $1,769 million and $1,944 million, respectively, at December 31, 2022. At December 31, 2021, the estimated the fair value and carrying value was $2,239 million and $2,095 million, respectively. The fair value of long-term debt is based on recent trade information in the financial markets of the Company’s public debt or is determined by discounting future cash flows using interest rates available at December 31, 2022 to companies with similar credit ratings for issues with similar terms and maturities. It is considered a Level 2 fair value measurement for disclosure purposes.

Assets and liabilities measured at fair value on a recurring basis

The Company’s financial assets and liabilities set forth by level within the fair value hierarchy that were accounted for at fair value on a recurring basis were as follows:

	Year Ended December 31, 2022			
(in millions)	Total	Level 1	Level 2	Level 3
Assets				
Cross currency interest rate swaps	$ 26	$ —	$ 26	$ —
Foreign exchange forward contracts	38	—	38	—
Total assets	$ 64	$ —	$ 64	$ —
Liabilities				
Interest rate swaps	$ 34	$ —	$ 34	$ —
Foreign exchange forward contracts	12	—	12	—
Contingent considerations on acquisitions	4	—	—	4
Total liabilities	$ 50	$ —	$ 46	$ 4

	Year Ended December 31, 2021			
(in millions)	Total	Level 1	Level 2	Level 3
Assets				
Interest rate swaps	$ 5	$ —	$ 5	$ —
Cross currency interest rate swaps	4	—	4	—
Foreign exchange forward contracts	30	—	30	—
Total assets	$ 39	$ —	$ 39	$ —
Liabilities				
Interest rate swaps	$ 9	$ —	$ 9	$ —
Cross currency interest rate swaps	7	—	7	—
Foreign exchange forward contracts	4	—	4	—
Contingent considerations on acquisitions	10	—	—	10
Total liabilities	$ 30	$ —	$ 20	$ 10

Derivative valuations are based on observable inputs to the valuation model including interest rates, foreign currency exchange rates, and credit risks. The Company utilizes interest rates swaps and foreign exchange forward contracts that are considered cash flow hedges. In addition, the Company at times employs certain cross currency interest rate swaps and foreign exchange forward contracts that are considered hedges of net investment in foreign operations. Both types of designated derivative instruments are further discussed in Note 20, Financial Instruments and Derivatives.

Assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (level 3)

The Company's Level 3 liabilities at December 31, 2022 are related to earn-out obligations from acquisitions and licensing arrangements. The following table presents a reconciliation of the Company's Level 3 holdings measured at fair value on a recurring basis using unobservable inputs:

(in millions)	Level 3
Balance, December 31, 2020	$ 5
Issuance of contingent consideration from business acquisition (a)	9
Payments	(4)
Balance, December 31, 2021	$ 10
Payments	(6)
Balance, December 31, 2022	$ 4

(a) Refer to Note 6, "Business Combinations" for more information regarding recent acquisitions.

There were no additional purchases or transfers of Level 3 financial instruments in 2022 and 2021.

NOTE 22 - COMMITMENTS AND CONTINGENCIES

Contingencies

On January 25, 2018, Futuredontics, Inc., a former wholly-owned subsidiary of the Company, received service of a purported class action lawsuit brought by Henry Olivares and other similarly situated individuals in the Superior Court of the State of California for the County of Los Angeles. In January 2019, an amended complaint was filed adding another named plaintiff, Rachael Clarke, and various claims. The plaintiff class alleges several violations of the California wage and hours laws, including, but not limited to, failure to provide rest and meal breaks and the failure to pay overtime. The parties have engaged in written and other discovery. On February 5, 2019, Plaintiff Calethia Holt (represented by the same counsel as Mr. Olivares and Ms. Clarke) filed a separate representative action in Los Angeles Superior Court alleging a single violation of the Private Attorneys' General Act that is based on the same underlying claims as the Olivares/Clarke lawsuit. On April 5, 2019, Plaintiff Kendra Cato filed a similar action in Los Angeles Superior Court alleging a single violation of the Private Attorneys' General Act that is based on the same underlying claims as the Olivares/Clarke lawsuit. The Company has agreed to resolve all three actions (Olivares, Holt, and Cato). The court in Cato approved the settlement in that case, the settlement payment has been made, and the court dismissed the lawsuit. The parties have also reached a settlement in the Olivares and Holt class action, and the court has approved the settlement. The settlement amount, which is immaterial to the financial statements, has been recorded as an accrued liability within the Company's consolidated balance sheet as of December 31, 2022.

On June 7, 2018, and August 9, 2018, two putative class action suits were filed, and later consolidated, in the Supreme Court of the State of New York, County of New York claiming that the Company and certain individual defendants, violated U.S. securities laws (the "State Court Action") by making material misrepresentations and omitting required information in the December 4, 2015 registration statement filed with the SEC in connection with the 2016 merger of Sirona Dental Systems Inc. ("Sirona") with DENTSPLY International Inc. (the "Merger"). The amended complaint alleges that the defendants failed to disclose, among other things, that a distributor had purchased excessive inventory of legacy Sirona products and that three distributors of the Company's products had been engaging in anticompetitive conduct. The plaintiffs seek to recover damages on behalf of a class of former Sirona shareholders who exchanged their shares for shares of the Company's stock in the Merger. On September 26, 2019, the Court granted the Company's motion to dismiss all claims and a judgment dismissing the case was subsequently entered. On February 4, 2020, the Court denied plaintiffs' post-judgment motion to vacate or modify the judgment and to grant them leave to amend their complaint. The plaintiffs appealed the dismissal and the denial of the post-judgment motion to the Supreme Court of the State of New York, Appellate Division, First Department, and the Company cross-appealed select rulings in the Court's decision dismissing the action. The plaintiffs' appeals and the Company's cross-appeal were consolidated and argued on January 12, 2021. On February 2, 2021, the Appellate Division issued its decision upholding the dismissal of the State Court Action with prejudice on statute of limitations grounds. The Plaintiffs did not appeal the Appellate Division decision.

On December 19, 2018, a related putative class action was filed in the U.S. District Court for the Eastern District of New York against the Company and certain individual defendants (the "Federal Class Action"). The plaintiff makes similar allegations and asserts the same claims as those asserted in the State Court Action. In addition, the plaintiff alleges that the defendants violated U.S. securities laws by making false and misleading statements in quarterly and annual reports and other public statements between February 20, 2014, and August 7, 2018. The plaintiff asserts claims on behalf of a putative class consisting of (a) all purchasers of the Company's stock during the period February 20, 2014 through August 7, 2018 and (b) former shareholders of Sirona who exchanged their shares of Sirona stock for shares of the Company's stock in the Merger. The Company moved to dismiss the amended complaint on August 15, 2019. The plaintiff filed its second amended complaint on January 22, 2021, and the Company filed a motion to dismiss the second amended complaint on March 8, 2021. Briefing on the motion to dismiss was fully submitted on May 21, 2021, and that motion is currently pending before the Court.

On June 2, 2022, the Company was named as a defendant in a putative class action filed in the U.S. District Court for the Southern District of Ohio captioned City of Miami General Employees' & Sanitation Employees' Retirement Trust v. Casey, Jr. et al., No. 2:22-cv-02371 (S.D. Ohio), and on July 28, 2022, the Company was named as a defendant in a putative class action filed in the U.S. District Court for the Southern District of New York captioned San Antonio Fire and Police Pension Fund v. Dentsply Sirona Inc. et al., No. 1:22-cv-06339 (together, the "Securities Litigation"). The complaints in the Securities Litigation are substantially similar and both allege that, during the period from June 9, 2021 through May 9, 2022, the Company, Mr. Donald M. Casey Jr., the Company's former Chief Executive Officer, and Mr. Jorge Gomez, the Company's former Chief Financial Officer, violated U.S. securities laws by, among other things, making materially false and misleading statements or omissions, including regarding the manner in which the Company recognizes revenue tied to distributor rebate and incentive programs.

No specific amounts of damages have been alleged in these lawsuits. The Company will continue to incur legal fees in connection with these pending cases, including expenses for the reimbursement of legal fees of present and former officers and directors under indemnification obligations. The expense of continuing to defend such litigation may be significant. The Company intends to defend these lawsuits vigorously, but there can be no assurance that the Company will be successful in any defense. If any of the lawsuits are decided adversely, the Company may be liable for significant damages directly or under our indemnification obligations, which could adversely affect our business, results of operations and cash flows. At this stage, the Company is are unable to assess whether any material loss or adverse effect is reasonably possible as a result of these lawsuits or estimate the range of any potential loss.

As a result of an audit by the IRS for fiscal years 2012 through 2013, on February 11, 2019, the IRS issued to the Company a “30-day letter” and a Revenue Agent’s Report (“RAR”), relating to the Company’s worthless stock deduction in 2013 in the amount of $546 million. The RAR disallows the deduction and, after adjusting the Company’s net operating loss carryforward, asserts that the Company is entitled to a refund of $5 million for 2012, has no tax liability for 2013, and owes a deficiency of $17 million in tax for 2014, excluding interest. In accordance with ASC 740, the Company recorded the tax benefit associated with the worthless stock deduction in the Company’s 2012 financial statements. In March 2019, the Company submitted a formal protest disputing on multiple grounds the proposed taxes. The Company and its advisors discussed its position with the IRS Appeals Office Team on October 28, 2020 and, on November 13, 2020, submitted a supplemental response to questions raised by the Appeals Team. After an extended review by the IRS Appeals Office team, no resolution was reached in the appeals process. It is anticipated that a statutory notice of deficiency for 2014 will soon be issued and, subsequently, the Company will file a petition in U.S. Tax Court contesting the 2014 deficiency. If the Company is not successful in defending its position, the potential additional income tax and interest attributable to 2015 and possibly later years is likely to be material due to the resulting loss of net operating loss carryforwards. The Company believes the IRS' position is without merit and believes that it is more likely-than-not the Company’s position will be sustained in litigation. The Company has not accrued a liability relating to the proposed tax adjustments. However, the outcome of this dispute involves a number of uncertainties, including those inherent in the valuation of various assets at the time of the worthless stock deduction, and those relating to the application of the Internal Revenue Code and other federal income tax authorities and judicial precedent. Accordingly, there can be no assurance that the dispute with the IRS will be resolved favorably. If determined adversely, the dispute would result in a current period charge to earnings and could have a material adverse effect in the consolidated results of operations, financial position, and liquidity of the Company.

The Swedish Tax Agency has disallowed certain of the Company’s interest expense deductions for the tax years from 2013 to 2018. The Company has appealed the disallowance to the Swedish Administrative Court. With respect to such deductions taken in the tax years from 2013 to 2014, the Court ruled against the Company on July 5, 2017. On August 7, 2017, the Company appealed the unfavorable decision of the Swedish Administrative Court. On December 22, 2022, the Administrative Court of Appeal granted the Company a large part of the disputed interest deductions for tax years 2013 to 2014. If the same assessment were to be applied also in the pending cases regarding tax years 2015 to 2018, the Company would incur a total tax expense of $7 million in the aggregate. In order to pursue further judicial relief, The Supreme Administrative Court of Sweden would have to attract the case. In consultation with its advisors the Company believes that the likelihood of the Supreme Administrative Court of Sweden attraction of the case is remote. While the Company continues to maintain the position that the deductions are appropriate under local tax law, our ability to pursue further remedies is limited. As a result, the Company recorded tax expense of $7 million related to this matter in its financial statements in the fourth quarter of 2022.

In addition to the matters disclosed above, the Company is, from time to time, subject to a variety of litigation and similar proceedings incidental to its business. These legal matters primarily involve claims for damages arising out of the use of the Company’s products and services and claims relating to intellectual property matters including patent infringement, employment matters, tax matters, commercial disputes, competition and sales and trading practices, personal injury, and insurance coverage. The Company may also become subject to lawsuits as a result of past or future acquisitions or as a result of liabilities retained from, or representations, warranties or indemnities provided in connection with, divested businesses. Some of these lawsuits may include claims for punitive and consequential, as well as compensatory damages. Based upon the Company’s experience, current information, and applicable law, it does not believe that these proceedings and claims will have a material adverse effect on its consolidated results of operations, financial position, or liquidity. However, in the event of unexpected further developments, it is possible that the ultimate resolution of these matters, or other similar matters, if unfavorable, may be materially adverse to the Company’s business, financial condition, results of operations, or liquidity.

While the Company maintains general, product, property, workers’ compensation, automobile, cargo, aviation, crime, fiduciary and directors’ and officers’ liability insurance up to certain limits that cover certain of these claims, this insurance may be insufficient or unavailable to cover such losses. In addition, while the Company believes it is entitled to indemnification from third parties for some of these claims, these rights may also be insufficient or unavailable to cover such losses.

Commitments

Purchase Commitments

The Company has certain non-cancelable future commitments primarily related to long-term supply contracts for key components and raw materials. At December 31, 2022, non-cancelable purchase commitments are as follows:

(in millions)	
2023	$ 176
2024	145
2025	48
2026	43
2027	—
Thereafter	—
Total	$ 412

Off-Balance Sheet Arrangements

As of December 31, 2022, we had no material off-balance sheet arrangements that have, or are reasonably likely to have, a current or future material effect on our consolidated financial condition, results of operations, liquidity, capital expenditures or capital resources other than certain items disclosed in the sections above.

Indemnification

In the normal course of business to facilitate sale of our products and services, we indemnify certain parties: customers, vendors, lessors, and other parties with respect to certain matters, including, but not limited to, services to be provided by us and intellectual property infringement claims made by third parties. In addition, we have entered into indemnification agreements with our directors and our executive officers that will require us, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. Several of these agreements limit the time within which an indemnification claim can be made and the amount of the claim.

It is not possible to make a reasonable estimate of the maximum potential amount under these indemnification agreements due to the unique facts and circumstances involved in each particular agreement. Additionally, we have a limited history of prior indemnification claims and the payments we have made under such agreements have not had a material effect on our results of operations, cash flows or financial position. As of December 31, 2022, we did not have any material indemnification claims that were probable or reasonably possible. However, to the extent that valid indemnification claims arise in the future, future payments by us could be significant and could have a material adverse effect on our results of operations or cash flows in a particular period.

Other Commitments

At December 31, 2022, we were obligated under various lease agreements. Please refer to Note 11, Leases, for additional details.

At December 31, 2022, we were obligated under various defined benefit pension plans in the U.S. and other countries that cover employees who meet eligibility requirements. Please refer to Note 18, Benefit Plans, for additional details.

NOTE 23 - SUBSEQUENT EVENTS

On February 14, 2023, the Board of Directors of the Company approved a plan to restructure the Company's business to improve operational performance and drive shareholder value creation. The plan includes a restructuring of the business through a new operating model with five business units, optimization of central functions and overall management infrastructure, and other efforts aimed at cost savings. The restructuring plan anticipates a reduction in the Company's global workforce of approximately 8% to 10%, subject to co-determination processes with employee representative groups in countries where required. The Company expects to incur up to $165 million in one-time charges, comprising $130 million in restructuring expenditures and charges, the majority of which will be expensed as cash expenditures in 2023, primarily related to employee transition, severance payments and employee benefits; and $35 million in other non-recurring costs related to the restructuring activity which mostly consist of legal, consulting and other professional service fees. The estimates of these charges and their timing are subject to several assumptions, including local law requirements in various jurisdictions and co-determination aspects in countries where required. Actual amounts may differ materially from estimates. In addition, the Company may incur other charges or cash expenditures in connection with this plan which are not currently contemplated.

SCHEDULE II

DENTSPLY SIRONA INC. AND SUBSIDIARIES
VALUATION AND QUALIFYING ACCOUNTS
FOR THE YEARS ENDED DECEMBER 31, 2022, 2021, and 2020

		Additions				
Description (in millions)	Balance at Beginning of Period	Charged (Credited) To Costs And Expenses	Charged to Other Accounts	Write-offs Net of Recoveries	Translation Adjustment	Balance at End of Period
Allowance for doubtful accounts:						
For the Year Ended December 31,						
2020	$ 29	$ 1	$ (2)	$ (12)	$ 2	$ 18
2021	18	2	(3)	(2)	(2)	13
2022	13	7	(2)	(3)	(1)	14
Inventory valuation reserve:						
For the Year Ended December 31,						
2020	$ 85	$ 62	$ —	$ (33)	$ 3	$ 117
2021	117	17	—	(41)	(7)	86
2022	86	20	—	(17)	(7)	82
Deferred tax asset valuation allowance:						
For the Year Ended December 31,						
2020	$ 288	$ (5)	$ —	$ (2)	$ 6	$ 287
2021	287	(10)	—	(3)	(7)	267
2022 (a)	267	3	382	(1)	(6)	645

(a) The increase charged to other accounts represents an increase in deferred tax assets related to the re-establishment of Luxembourg net operating loss carryforwards for which a corresponding increase to the valuation allowance was also recorded, with no net impact to tax expense. For details, refer to Note 17 *Income Taxes* in the preceding financial statements.

Item 9A. Controls and Procedures

<u>Segregation of Duties for Manual Journal Entries</u>

As described in the Explanatory Note to this Form 10-K/A and the Company’s Current Report on Form 8-K filed on August 2, 2023, subsequent to the filing of the 2022 Form 10-K, management concluded that a previously identified control deficiency related to the segregation of duties specific to the creation of manual journal entries rose to the level of a material weakness in internal control over financial reporting that existed as of December 31, 2022. To the knowledge of the Company's principal executive officer and principal financial officer, the additional internal control material weakness did not result in a material misstatement of the Company's consolidated financial statements included in the 2022 Form 10-K.

<u>Internal Investigation and Accounting Errors</u>

As described in the Explanatory Note to the Form 10-K for the year ended December 31, 2021 as amended and filed on November 7, 2022 (the "2021 Form 10-K/A"), the Audit and Finance Committee, assisted by independent legal counsel and forensic accountants, commenced an internal investigation in March 2022 of allegations regarding certain financial reporting matters submitted by current and former employees of the Company, which was completed in the fourth quarter of 2022 (the "Investigation").

The findings of the Investigation are described in the Explanatory Note of the 2021 Form 10-K/A referenced above.

Distinct from the matters pertaining to the Investigation, and as a consequence of a separate but concurrent accounting review, management identified certain errors in the manner in which it recognized variable consideration related to certain incentive programs. During this review, it was also determined that the Company utilized incorrect accounting and assumptions in the determination of estimates related to its sales returns provisions, warranty reserve provisions, and variable consideration.

In connection with the Investigation and the subsequent accounting review in 2022, management reevaluated the effectiveness of the Company's internal control over financial reporting and identified control deficiencies related to these matters, which the Company concluded represented material weaknesses in the Company's internal control over financial reporting as of December 31, 2021.

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

The Company has established disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in the reports we file or submit under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

The Company's management, with the participation of the Chief Executive Officer and the Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act as of December 31, 2022, the end of the period covered by this report, and concluded the Company's disclosure controls and procedures are not effective due to the material weaknesses in internal control over financial reporting described in Management's Report on Internal Control Over Financial Reporting included under Item 8 of this Form 10-K/A.

Management's Report on Internal Control Over Financial Reporting

Management's report on the Company's internal control over financial reporting, including the description of the material weaknesses determined to exist as of December 31, 2022, is included under Item 8 of this Form 10-K/A.

Remediation Plan and Status

While the material weaknesses previously disclosed have not yet been remediated as of December 31, 2022, management is devoting substantial resources to the ongoing implementation of remediation efforts to address the material weaknesses described herein, including the newly identified material weakness relating to segregation of duties, as well as other identified areas of risk. These remediation efforts, summarized below, which either have already been implemented or are continuing to be implemented, are intended to address both the identified material weaknesses and to enhance the Company's overall internal control over financial reporting and disclosure controls and procedures.

With oversight from the Audit and Finance Committee and input from the Board of Directors, management is continuing to enhance and implement changes in processes, systems, and controls to remediate the material weaknesses described in Management's Report on Internal Control Over Financial Reporting and to improve our internal control over financial reporting as noted below. Management and the Board of Directors, including the Audit and Finance Committee, are working to remediate the material weaknesses identified herein. Actions taken to date include:

a. Appointment of a new Chief Executive Officer, a new Chief Financial Officer and a new Chief Accounting Officer;
b. Termination of certain members of senior management as well as non-executive employees for violations of the Code of Ethics and Business Conduct;
c. Reviewed and enhanced the Company's Code of Ethics and Business Conduct including to clarify responsibilities related to the Company's financial reporting and disclosures;
d. Implementation of general training programs on revenue recognition for commercial and finance personnel;
e. Established requirements and provided trainings for employees who have a role in negotiating, assessing, agreeing, and accounting for customer incentive arrangements with distributors;
f. Implemented commercial contracting policies and provided training on new processes to individuals responsible for execution, oversight and review of customer incentive arrangements with customers; and
g. Implemented written policies and procedures to provide governance and establish responsibility for oversight of incentive arrangements provided to customers in North America, including the appropriate delegation of authority for such approvals.

In addition to the remedial actions taken to date, the Company is taking, or plans to take, the following actions, among others, to remediate the material weaknesses identified herein:

a. Provide incremental training to Company personnel on the updated Code of Ethics and Business Conduct;
b. Implement written policies and procedures to provide governance and establish responsibility for oversight of incentive arrangements provided to customers in China, including the appropriate delegation of authority for such approvals;
c. Formalize written policies and procedures to provide governance and establish responsibility for guidelines, documentation and oversight of product returns from customers when a contractual right to return exists in a customer agreement;
d. Enhance processes to ensure all applicable terms and conditions for incentive-based programs and customer agreements are timely communicated to individuals responsible for accounting and financial reporting;
e. Strengthen internal controls over the accounting for customer incentive arrangements, including implementing: (i) formal controls to continuously review and document the methodology and assumptions used in estimating variable based incentives and (ii) formal controls to ensure the accuracy of the estimated accrued liability analysis;
f. Evaluate finance and commercial operations talent and address identified gaps; and
g. Establish a recurring cadence for future training programs on revenue recognition for commercial and finance personnel.

In addition, the Company took the following remedial actions to improve disclosure controls and procedures:

a. Enhanced existing Disclosure Committee responsibilities through adoption of a formal charter, which identifies members and sets forth the roles and responsibilities of the Disclosure Committee, among other requirements; and
b. Implemented additional and enhanced existing sub-certifications and internal management representation letters, including providing training on the purpose of the sub-certification and the process for evaluating the representations.

In connection with the newly identified material weakness relating to segregation of duties, the Company is taking, or plans to take, the following remedial actions:

a. Implement further segregation of duties in the performance of controls around manual journal entries, including restrictions to user access rights in our general ledger systems to post manual journal entries, to ensure that reviewers of manual journal entries do not also have the ability to create and post such entries;
b. Modify existing processes to enhance use of approval workflows in our process to document, support and review manual journal entries; and
c. Enhance the global policy on manual journal entries, including clarification of review and approval of authorization matrices, and training of requisite personnel.

Management developed a detailed plan and timetable for the implementation of the foregoing remediation efforts and continues to oversee the effective execution of the plan. In addition, under the direction of the Audit and Finance Committee, management will continue to identify and implement actions to improve the effectiveness of its disclosure controls and procedures and internal control over financial reporting, including plans to enhance its resources and training with respect to financial reporting and disclosure responsibilities and make necessary changes to policies and procedures to improve the overall effectiveness of such controls.

Management believes the foregoing efforts will effectively remediate the material weaknesses described above. As the Company continues to evaluate and improve its internal control over financial reporting and disclosure controls and procedures, management may determine to take additional measures to improve controls or determine to modify the remediation plan described above. The Company is working to remediate the material weaknesses as efficiently and effectively as possible with the goal of remediating each of the material weaknesses described above as soon as possible. Procedures to implement this remediation plan have to date required significant amounts of time, allocation of internal resources and external costs, and remaining remediation efforts will continue to place significant demands on financial and operational resources until this plan is completed.

As of the filing of this Form 10-K/A, the material weaknesses described above have not been remediated. The material weaknesses described above cannot be considered remediated until the applicable controls have operated for a sufficient period of time and management has concluded, through testing, that these controls are designed and operating effectively. Accordingly, management will continue to monitor and evaluate the effectiveness of our internal control over financial reporting in the activities affected by the material weaknesses described above.

Changes in Internal Control Over Financial Reporting

There have been no changes in the Company’s internal control over financial reporting that occurred during the quarter ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, its internal control over financial reporting.

PART IV

Item 15. Exhibits and Financial Statement Schedule

a. Documents filed as part of this Report

1. Financial Statements:

Management's Report on Internal Control Over Financial Reporting
Report of Independent Registered Public Accounting Firm (PCAOB ID 238)
Consolidated Statements of Operations for the years ended December 31, 2022, 2021 and 2020
Consolidated Statements of Comprehensive Income for the years ended December 31, 2022, 2021 and 2020
Consolidated Balance Sheets as of December 31, 2022 and 2021
Consolidated Statements of Equity for the years ended December 31, 2022, 2021 and 2020
Consolidated Statements of Cash Flows for the years ended December 31, 2022, 2021 and 2020
Notes to Consolidated Financial Statements

2. Financial Statement Schedules:

The following financial statement schedule is included in this report: Schedule II - Valuation and Qualifying Accounts for the Years Ended December 31, 2022, 2021 and 2020.

All other schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required to be included herein under the related instructions or are inapplicable and, therefore, have been omitted.

3. Exhibits

The Exhibits listed below are filed or incorporated by reference as part of the Company’s Form 10-K.

Exhibit Number		Description
2.1		Agreement and Plan of Merger, dated as of September 15, 2015, by and among DENTSPLY International Inc., Sirona Dental Systems, Inc. and Dawkins Merger Sub Inc. (8)
2.2		Equity Purchase Agreement, dated as of December 31, 2020, by and among Dentsply Sirona Inc., Straight Smile, LLC, the members of Straight Smile, LLC and Member Representative SSB, LLC (25)
3.1	(a)	Second Amended and Restated Certificate of Incorporation (10)
	(b)	Certificate of Amendment to Second Amended and Restated Certificate of Incorporation of Dentsply Sirona Inc., dated as of May 23, 2018 (14)
3.2		Sixth Amended and Restated By-Laws, dated as of May 25, 2022 (28)
4.1	(a)	United States Commercial Paper Dealer Agreement dated as of March 28, 2002 between the Company and Citigroup Global Markets Inc. (formerly known as Salomon Smith Barney Inc.) (formerly Exhibit 4.1(b)) (2)
	(b)	First Amendment to the United States Commercial Paper Dealer Agreement dated as of March 28, 2002 between the Company and Citigroup Global Markets Inc. (formerly known as Salomon Smith Barney Inc.) (7)
4.2	(a)	United States Commercial Paper Dealer Agreement dated as of August 18, 2011 between the Company and J.P. Morgan Securities LLC (7)
	(b)	First Amendment to the United States Commercial Paper Dealer Agreement dated as of August 18, 2011 between the Company and J.P. Morgan Securities LLC (7)
4.3		$700 Million Credit Agreement, dated as of July 27, 2018 final maturity in July 26, 2024, by and among the Company, the subsidiary borrowers party thereto, the lenders party thereto, JPMorgan Chase Bank, N.A. as administrative agent, Citibank N.A. as Syndication Agent, and Wells Fargo Bank, N.A., Commerzbank AG, New York Branch, MUFG Bank, Ltd., Unicredit Bank AG New York Branch, and TD Bank, N.A. as co-documentation agents, and J.P. Morgan Chase Bank, N.A. and Citibank, N.A., as Joint Bookrunners and Joint Lead Arrangers (15)
4.4		Description of the Registrant's Securities (22)

Exhibit Number		Description
4.5		Form of Indenture (5)
4.6		Supplemental Indenture, dated August 23, 2011 between DENTSPLY International Inc., as Issuer and Wells Fargo, National Association, as Trustee (6)
4.7	(a)	12.55 Billion Japanese Yen Term Loan Agreement between the Company and Bank of Tokyo dated September 22, 2014 due September 28, 2019, between the Company, The Bank of Tokyo-Mitsubishi UFJ, LTD as Sole Lead Arranger, Development Bank of Japan, Inc. as Co-Arranger, The Bank of Tokyo-Mitsubishi UFJ, LTD, as Administrative Agent (7)
	(b)	First Amendment to 12.55 Billion Japanese Yen Term Loan Agreement dated December 18, 2015 between the Company and Bank of Tokyo-Mitsubishi UFJ, LTD (9)
4.8		United States Commercial Paper issuing and paying Agency Agreement dated as of November 4, 2014, between the Company and U.S. Bank N.A. (7)
4.9		Note Purchase Agreement, dated December 11, 2015, by and among the Company, Metropolitan Life Insurance Company, Prudential Retirement Insurance and Annuity Company, C.M. Life Insurance Company, The Northwestern Mutual Life Insurance Company, The Lincoln National Life Insurance Company, Manulife Life Insurance Company, Manufacturers Life Reinsurance Limited, Nationwide Life Insurance Company, United of Omaha Life Insurance Company and the other purchasers listed in Schedule A thereto (9)
4.10		Note Purchase Agreement, dated October 27, 2016, by and among the Company, Metropolitan Life Insurance Company, New York Life Insurance Company, Nationwide Life Insurance Company, The Northwestern Mutual Life Insurance Company, Massachusetts Mutual Life Insurance Company, Allianz Life Insurance Company of North America, Hartford Life and Accident Insurance Company, The Lincoln National Life Insurance Company, The Guardian Life Insurance Company of America, Great-West Life & Annuity Insurance Company, The Prudential Insurance Company of America, and the other purchasers listed in Schedule A thereto (10)
4.11		Note Purchase Agreement, dated June 24, 2019, by and among the Company and Brighthouse Life Insurance Company, Metlife Insurance K.K., The Northwestern Mutual Life Insurance Company, Hartford Fire Insurance Company, and Hartford Life and Accident Insurance Company. (19)
4.12		Indenture, dated as of May 26, 2020, between DENTSPLY SIRONA Inc. and Wells Fargo Bank, National Association. (23)
4.13		First Supplemental Indenture, dated as of May 26, 2020, between DENTSPLY SIRONA Inc. and Wells Fargo Bank, National Association. (23)
4.14		Form of 3.250% Notes due 2030 (included in Exhibit 4.13). (23)
4.15		Consent Memorandum, dated August 11, 2022, by and among DENTSPLY SIRONA Inc., the Subsidiary Borrowers from time to time party thereto, the lender parties thereto and JPMorgan Chase Bank, N.A., as administrative agent. (32)
4.16		Note Purchase Agreement Amendment and Consent, dated August 26, 2022, by and among DENTSPLY SIRONA Inc. and each of the holders of Notes parties thereto, with respect to that certain Note Purchase Agreement, dated December 11, 2015, by and among the Issuers and the holders of Notes set forth therein. (32)
4.17		Note Purchase and Guarantee Agreement Amendment and Consent, dated August 26, 2022, by and among DENTSPLY SIRONA Inc., Sirona Dental Services GmbH and each of the holders of Notes parties thereto, with respect to that certain Note Purchase Agreement and Guarantee Agreement, dated October 27, 2016, by and among the Issuers and the holders of Notes set forth therein. (32)
4.18		Note Purchase Agreement Amendment and Consent, dated August 26, 2022, by and among DENTSPLY SIRONA Inc. and each of the holders of Notes parties thereto, with respect to that certain Note Purchase Agreement, dated June 24, 2019, by and among the Issuers and the holders of Notes set forth therein. (32)
4.19		Consent Memorandum, dated September 14, 2022, by and among DENTSPLY SIRONA Inc., the Subsidiary Borrowers from time to time party thereto, the lender parties thereto and JPMorgan Chase Bank, N.A., as administrative agent. (32)
4.20		Consent Memorandum, dated November 4, 2022, by and among DENTSPLY SIRONA Inc., the Subsidiary Borrowers from time to time party thereto, the lender parties thereto and JPMorgan Chase Bank, N.A., as administrative agent. (32)
4.21		Note Purchase Agreement Amendment No. 2 and Consent, dated November 5, 2022, by and among DENTSPLY SIRONA Inc and each of the holders of Notes parties thereto, with respect to that certain Note Purchase Agreement, dated December 11, 2015, by and among the Issuers and the holders of Notes set forth therein. (32)

Exhibit Number		Description
4.22		Note Purchase and Guarantee Agreement Amendment No. 2 and Consent, dated November 5, 2022, by and among DENTSPLY SIRONA Inc, Sirona Dental Services GmbH and each of the holders of Notes parties thereto, with respect to that certain Note Purchase Agreement and Guarantee Agreement, dated October 27, 2016, by and among the Issuers and the holders of Notes set forth therein. (32)
4.23		Note Purchase Agreement Amendment No. 2 and Consent, dated November 5, 2022, by and among DENTSPLY SIRONA Inc and each of the holders of Notes parties thereto, with respect to that certain Note Purchase Agreement, dated June 24, 2019, by and among the Issuers and the holders of Notes set forth therein. (32)
10.1		Restricted Stock Unit Deferral Plan* (9)
10.2	(a)	Trust Agreement for the Company's Employee Stock Ownership Plan between the Company and T. Rowe Price Trust Company dated as of November 1, 2000 (1)
	(b)	Plan Recordkeeping Agreement for the Company's Employee Stock Ownership Plan between the Company and T. Rowe Price Trust Company dated as of November 1, 2000 (1)
10.3		DENTSPLY Supplemental Saving Plan Agreement dated as of December 10, 2007* (3)
10.4		DENTSPLY SIRONA Inc. Directors' Deferred Compensation Plan, as amended and restated January 1, 2019* (17)
10.5		DENTSPLY SIRONA Inc. Supplemental Executive Retirement Plan, as amended and restated January 1, 2019* (17)
10.6		AZ Trade Marks License Agreement, dated January 18, 2001 between AstraZeneca AB and Maillefer Instruments Holdings, S.A. (1)
10.7		2010 Equity Incentive Plan, amended and restated* (9)
10.8		DENTSPLY SIRONA Inc. 2016 Omnibus Incentive Plan, as amended and restated effective February 14, 2018* (13)
10.9		Sirona Dental Systems, Inc. Equity Incentive Plan, as Amended* (10)
10.10	(a)	Employment Agreement, dated February 12, 2018, between DENTSPLY SIRONA Inc. and Donald M. Casey Jr.* (11)
	(b)	First Amendment to Employment Agreement, dated August 3, 2018, by and between DENTSPLY SIRONA Inc. and Donald M. Casey Jr.* (17)
	(c)	Second Amendment dated as of March 5, 2019 to Employment Agreement by and between DENTSPLY SIRONA Inc. and Donald M. Casey, Jr.* (18)
10.11	(a)	Form of DENTSPLY SIRONA Inc. Indemnification Agreement* (12)
	(b)	Form of Amended and Restated DENTSPLY SIRONA Inc. Indemnification Agreement dated as of December 15, 2021* (27)
	(c)	Form of Amended and Restated DENTSPLY SIRONA Inc. Indemnification Agreement dated as of December 14, 2022 (Filed herewith)
10.12		Form of Option Grant Notice Under the DENTSPLY SIRONA Inc. 2016 Omnibus Incentive Plan as amended and restated* (12)
10.13		Form of Restricted Share Unit Grant Notice Under the DENTSPLY SIRONA Inc. 2016 Omnibus Incentive Plan as amended and restated* (12)
10.14		Form of Performance Restricted Share Unit Grant Notice Under the DENTSPLY SIRONA Inc. 2016 Omnibus Incentive Plan as amended and restated* (12)
10.15		Employee Stock Purchase Plan, dated May 23, 2018* (16)
10.16	(a)	Non-Employee Director Compensation Policy, effective March 27, 2019* (21)
	(b)	Non-Employee Director Compensation Policy, effective May 22, 2019* (20)
	(c)	Non-Employee Director Compensation Policy, effective January 1, 2020* (22)
	(d)	Non-Employee Director Compensation Policy, effective September 30, 2020* (24)
	(e)	Non-Employee Director Compensation Policy, effective February 23, 2022* (27)
10.17		Form of Performance Restricted Stock Unit Award Agreement* (18)

Exhibit Number	Description
10.18	Form of Restricted Share Unit Grant Notice for Directors under the DENTSPLY SIRONA Inc. 2016 Omnibus Incentive Plan as amended and restated* (20)
10.19	Amended and Restated Restricted Stock Unit Deferral Plan, effective July 31, 2019* (20)
10.20	Offer Letter, dated June 27, 2019, between DENTSPLY SIRONA Inc. and Jorge Gomez* (20)
10.21	Interim Chief Executive Officer Employment Agreement by and between DENTSPLY SIRONA Inc. and John P. Groetelaars, dated April 16, 2022 (29)
10.22	Interim Chief Financial Officer Employment Agreement by and between DENTSPLY SIRONA Inc. and Barbara W. Bodem, dated April 16, 2022 (29)
10.23	Dentsply Sirona Inc. Key Employee Severance Benefits Plan, dated May 25, 2022* (29)
10.24	Dentsply Sirona Inc. Amended and Restated Key Employee Severance Benefits Plan, dated September 22, 2022. (32)
10.25	Employment Agreement between DENTSPLY SIRONA Inc. and Simon D. Campion, entered into as of August 22, 2022. (30)
10.26	First Amendment to the Interim Chief Financial Officer Employment Agreement between DENTSPLY SIRONA Inc. and Barbara W. Bodem, dated as of September 22, 2022. (31)
10.27	Offer Letter between DENTSPLY SIRONA Inc. and Glenn Coleman, entered into as of September 22, 2022. (31)
21.1	Subsidiaries of the Company (33)
23.1	Consent of Independent Registered Public Accounting Firm - PricewaterhouseCoopers LLP (Filed herewith)
31.1	Section 302 Certification Statements Chief Executive Officer (Filed herewith)
31.2	Section 302 Certification Statements Chief Financial Officer (Filed herewith)
32	Section 906 Certification Statement (Furnished herewith)
101.INS	Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Extension Labels Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

*Management contract or compensatory plan.

(1) Incorporated by reference to exhibit included in the Company's Form 10-K for the fiscal year ended December 31, 2000, File 0-16211.

(2) Incorporated by reference to exhibit included in the Company's Form 10-K for the fiscal year ended December 31, 2002, File 0-16211.

(3) Incorporated by reference to exhibit included in the Company's Form 10-K for the fiscal year ended December 31, 2007, File No. 0-16211.

(4) Incorporated by reference to exhibit included in the Company's Form 10-K for the fiscal year ended December 31, 2008, File No. 0-16211.

(5) Incorporated by reference to exhibit included in the Company's Registration Statement on Form S-3 dated August 15, 2011 (No. 333-176307).

(6) Incorporated by reference to exhibit included in the Company's Form 8-K dated August 29, 2011, File no. 0-16211.

(7) Incorporated by reference to exhibit included in the Company's Form 10-K for the fiscal year ended December 31, 2014, File no. 0-16211.

(8) Incorporated by reference to exhibit included in the Company's Form 8-K dated September 16, 2015, File no. 0-16211.

(9) Incorporated by reference to exhibit included in the Company's Form 10-K for the fiscal year ended December 31, 2015, File no. 0-16211.

(10) Incorporated by reference to exhibit included in the Company's Form 10-K for the fiscal year ended December 31, 2016, File no. 0-16211.

(11) Incorporated by reference to exhibit included in the Company’s Form 8-K, dated January 17, 2018, File no.0-16211.

(12) Incorporated by reference to exhibit included in the Company’s Form 8-K, dated February 15, 2018, File no.0-16211.

(13) Incorporated by reference to exhibit included in the Company’s Form 10-K for the fiscal year ended December 31, 2017, File no. 0-16211.

(14) Incorporated by reference to exhibit included in the Company’s Form 8-K, dated May 23, 2018, File no.0-16211.

(15) Incorporated by reference to exhibit included in the Company’s Form 8-K, dated July 30, 2018, File no.0-16211.

(16) Incorporated by reference to exhibit included in the Company’s Form 10-Q for the quarterly period ended June 30, 2018, File no. 0-16211.

(17) Incorporated by reference to exhibit included in the Company's Form 10-K for the fiscal year ended December 31, 2018, File no. 0-16211.

(18) Incorporated by reference to exhibit included in the Company's Form 8-K, dated March 8, 2019, File no. 0-16211.

(19) Incorporated by reference to exhibit included in the Company's Form 8-K, dated June 26, 2019, File no. 0-16211.

(20) Incorporated by reference to exhibit included in the Company's Form 10-Q for the quarterly period ended June 30, 2019, File no. 0-16211.

(21) Incorporated by reference to exhibit included in the Company’s Form 10-Q for the quarterly period ended March 31, 2019, File no. 0-16211.

(22) Incorporated by reference to exhibit included in the Company’s Form 10-K for the fiscal year ended December 31, 2019, File no. 0-16211.

(23) Incorporated by reference to exhibit included in the Company's Form 8-K, dated May 26, 2020, File no. 0-16211.

(24) Incorporated by reference to exhibit included in the Company’s Form 10-Q for the quarterly period ended September 30, 2020, File no. 0-16211.

(25) Incorporated by reference to exhibit included in the Company's Form 8-K, dated January 4, 2021, File no. 0-16211.

(26) Incorporated by reference to exhibit included in the Company’s Form 10-Q for the quarterly period ended June 30, 2021, File no. 0-16211.

(27) Incorporated by reference to exhibit included in the Company's Form 10-K for the fiscal year ended December 31, 2021, File no. 0-16211.

(28) Incorporated by reference to exhibit included in the Company's Form 8-K, dated May 31, 2022, File no. 0-16211.

(29) Incorporated by reference to exhibit included in the Company’s Form 10-Q for the quarterly period ended June 30, 2022, File no. 0-16211.

(30) Incorporated by reference to exhibit included in the Company's Form 8-K, dated August 25, 2022, File no. 0-16211.

(31) Incorporated by reference to exhibit included in the Company's Form 8-K, dated September 22,, 2022, File no. 0-16211.

(32) Incorporated by reference to exhibit included in the Company’s Form 10-Q for the quarterly period ended September 30, 2022, File no. 0-16211.

(33) Incorporated by reference to exhibit included in the Company’s Form 10-K for the fiscal year ended December 31, 2022, File no. 0-16211.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

DENTSPLY SIRONA Inc.

By: */s/* *Glenn G. Coleman*
Glenn G. Coleman
Executive Vice President and
Chief Financial Officer

Date: August 7, 2023

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-225168) of Dentsply Sirona Inc. of our report dated March 1, 2023, except with respect to our opinion on internal control over financial reporting insofar as it relates to the effects of the matter discussed in the penultimate paragraph of Management's Report on Internal Control Over Financial Reporting, as to which the date is August 7, 2023, relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K/A.

/s/ PricewaterhouseCoopers LLP

Charlotte, North Carolina
August 7, 2023

Exhibit 31.1

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Simon D. Campion, certify that:

1. I have reviewed this Form 10-K/A of DENTSPLY SIRONA Inc;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Simon D. Campion

Simon D. Campion
Chief Executive Officer

Date: August 7, 2023

Exhibit 31.2

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Glenn G. Coleman, certify that:

1. I have reviewed this Form 10-K/A of DENTSPLY SIRONA Inc;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Glenn G. Coleman
Glenn G. Coleman
Executive Vice President
Chief Financial Officer

Date: August 7, 2023

Exhibit 32

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of DENTSPLY SIRONA Inc. (the "Company") on Form 10-K/A for the year ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Simon D. Campion, Chief Executive Officer of the Company and Glenn G. Coleman, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of our knowledge and belief:

(1) The Report fully complies with the requirements of Sections 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company as of the date of the Report.

/s/ *Simon D. Campion*
Simon D. Campion
Chief Executive Officer

/s/ *Glenn G. Coleman*
Glenn G. Coleman
Executive Vice President and Chief Financial Officer

Date: August 7, 2023