

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 11-K

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

(Mark One):

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE
ACT OF 1934.

For the fiscal year ended December 31, 2003

OR

 TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934.

For the transition period from to .

Commission file number 0-16211

A. Full title of the plan and the address of the plan, if different from that
of the issuer named below:

DENTSPLY International Inc. 401(k) Savings Plan

B. Name of issuer of the securities held pursuant to the plan and the address
of its principal executive office:

DENTSPLY International Inc. 221 West Philadelphia Street,
York, Pennsylvania 17405-0872

REQUIRED INFORMATION

1. Financial Statements:

The following financial information, including the Report of Independent
Registered Public Accounting Firm thereon of the DENTSPLY International Inc.
401(k) Savings Plan are submitted herewith:

Statements of Net Assets Available for Plan Benefits as of December 31,
2003 and 2002.

Statements of Changes in Net Assets Available for Plan Benefits for the
Years Ended December 31, 2003 and 2002.

Supplemental Schedule of Assets (Held at End of Year) as of December 31,
2003.

2. Exhibits:

The following exhibits are submitted herewith:

Exhibit (A) - Consent of Beard Miller Company LLP - Independent
Registered Public Accounting Firm

Exhibit (B) - Consent of PricewaterhouseCoopers LLP - Independent
Registered Public Accounting Firm

Exhibit (C) - Report of PricewaterhouseCoopers LLP - Independent
Registered Public Accounting Firm

SIGNATURE

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

DENTSPLY International Inc.
401(k) Savings Plan

Date: June 28, 2004

\\s\ Bret W. Wise
Bret W. Wise
Senior Vice President, Chief Financial Officer
and Member of the DENTSPLY International Inc.
401(k) Savings Plan Committee

DENTSPLY International Inc.
401(k) Savings Plan

Financial Report

December 31, 2003

DENTSPLY International Inc. 401(k) Savings Plan

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Report of Independent Registered Public Accounting Firm

To the 401(k) Committee
DENTSPLY International Inc. 401(k) Savings Plan
York, Pennsylvania

We have audited the accompanying statement of net assets available for benefits of DENTSPLY International Inc. 401(k) Savings Plan (Plan) as of December 31, 2003, and the related statement of changes in net assets available for benefits for the year then ended. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of DENTSPLY International Inc. 401(k) Savings Plan as of and for the year ended December 31, 2002, were audited by other auditors whose report dated June 25, 2003, expressed an unqualified opinion on those statements.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe our audit provides a reasonable basis for our opinion.

In our opinion, the 2003 financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2003, and the changes in net assets available for benefits for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary schedule of assets (held at end of year) is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplementary schedule has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ Beard Miller Company LLP

York, Pennsylvania
June 21, 2004

DENTSPLY International Inc. 401(k) Savings Plan

Statements of Net Assets Available for Benefits

December 31,
2003 2002

 Assets

Cash and cash equivalents	\$	22	\$	17,445
		-----		-----
Investments, at fair value:				
Shares of Registered Investment Companies:				
Fidelity Magellan Fund		8,397,775		6,098,952
PIMCO Total Return Fund		918,599		599,404
TRP Balanced Fund		4,295,574		3,382,829
TRP Blue Chip Growth Fund		14,577,674		10,317,774
TRP Equity Income Fund		4,867,694		3,245,508
TRP Extended Equity Market Index		573,619		223,162
TRP International Stock Fund		471,483		156,521
TRP New Horizons Fund		2,134,901		1,038,048
TRP Personal Strategy Balanced Fund		576,011		251,525
TRP Personal Strategy Growth Fund		772,482		368,099
TRP Personal Strategy Income Fund		270,018		223,263
TRP Science & Technology Fund		1,286,491		560,869
TRP Spectrum Income Fund		3,247,997		1,995,786
TRP Summit Cash Reserves		5,236,995		4,505,358
Shares of Common Trusts:				
TRP Equity Index Trust		7,425,950		5,524,317
DENTSPLY International Inc. Stock Fund		9,236,163		7,239,866
Participant loans		1,517,545		1,407,520
		-----		-----
Total Investments		65,806,971		47,138,801
		-----		-----
Receivables:		263,308		242,970
Participants' contributions				
Austenal, Inc. 401(k) Plan Conversion Receivable		0		2,378,063
		-----		-----
Total Receivables		263,308		2,621,033
		-----		-----
Net Assets Available for Benefits	\$	66,070,301	\$	49,777,279
		=====		=====

See notes to financial statements.

DENTSPLY International Inc. 401(k) Savings Plan

Statements of Changes in Net Assets Available for Benefits

	Years Ended December 31,	
	2003	2002
Investment Income		
Net appreciation (depreciation) in fair value of investments	\$11,410,432	\$(7,700,366)
Interest and dividends	695,371	526,898
	-----	-----
	12,105,803	(7,173,468)
	-----	-----

Contributions

Participants	7,528,603	7,778,540
Participant rollovers	1,410,002	2,129,879
	-----	-----
	8,938,605	9,908,419
	-----	-----
Plan Asset transfer from:		
Austenal, Inc. 401(k) Plan	0	2,378,063
	-----	-----
Benefits Paid to Participants	(4,742,101)	(5,040,864)
	-----	-----
Administrative Expenses	(9,285)	(8,592)
	-----	-----
Net Increase	16,293,022	63,558
Net Assets Available for Benefits -		
Beginning of Year	49,777,279	49,713,721
	-----	-----
Net Assets Available for Benefits -		
End of Year	\$66,070,301	\$49,777,279
	=====	=====

See notes to financial statements.

DENTSPLY International Inc. 401(k) Savings Plan

Notes to Financial Statements

Note 1 - Description of Plan

The following brief description of the DENTSPLY International Inc. 401(k) Savings Plan (the "Plan") is provided for general information purposes only. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

General

The Plan is a contributory defined contribution plan covering all full-time employees of DENTSPLY International Inc. (the "Company") and its wholly-owned subsidiaries in the United States who are employed in or on temporary assignment outside the United States. The Plan was established January 1, 1992, and amended, thereafter, several times.

The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 ("ERISA").

Plan Administration

The Plan is administered by the 401(k) Savings Plan Committee (the "Committee"). At December 31, 2003 and 2002, T. Rowe Price Trust Company ("TRP") was the trustee (the "Trustee") and custodian of the Plan's assets. The Committee and Trustee of the Plan are appointed by the Board of Directors of the Company. At December 31, 2003 and 2002, T. Rowe Price Trust Company was the recordkeeper of the Plan. Expenses incurred in connection with the administration of the Plan are paid

by the Company or the Plan.

Officers or employees of the Company perform certain administrative functions. No such officer or employees receive compensation from the Plan.

Contributions

Each year, participants may contribute up to 100 percent of their pre-tax annual compensation, as defined by the Plan, in multiples of one percent except for certain highly compensated participants who are subject to limitations. Participants may also contribute amounts representing rollovers from other qualified defined benefit or contribution plans. The Company does not make matching contributions to the Plan. The participants may direct their contributions into several different investment options.

Participant Accounts

Each participant's account is credited with the participant's contributions and an allocation of Plan earnings (including unrealized appreciation or depreciation of Plan assets) and charged with an allocation of administrative expenses, if any. Allocations are based on participant earnings or account balances, as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Vesting

Participants are immediately vested in their contributions and earnings thereon.

Note 1 - Description of Plan (Continued)

Payment of Benefits

Participants are entitled to receive a distribution equal to their vested account balances upon death, retirement, termination or permanent disability. Participants may elect to receive benefits in either a lump-sum payment, periodic installments limited in duration by the provisions of the Plan, or by the purchase and delivery of a life annuity or qualified joint and survivor annuity contract. Assets may be withdrawn by participants in the case of personal financial hardship upon approval of the Plan Administrator.

Participant Loans

Participants may borrow from their accounts the lesser of \$50,000 or 50 percent of their vested account balance (subject to a \$1,000 minimum balance). Participants are charged a \$50 fee for loans, which is paid directly from their account. Loan terms may not exceed five years; except for loans to facilitate the purchase of a primary residence. The loans bear interest at a rate commensurate with local prevailing rates as determined by the Plan administrator. Principal and interest are paid ratably through payroll

deductions.

Note 2 - Summary of Accounting Policies

A summary of the significant accounting policies consistently applied in the preparation of the accompanying financial statements follows:

Basis of Accounting

The financial statements of the Plan are prepared on the accrual basis of accounting.

Valuation of Investments

The Plan's investments are stated at fair value. Shares of registered investment companies are valued at quoted market prices which represent the net asset value of shares held by the Plan at year-end. Common/collective funds are valued at net unit value as determined by the Trustee, which represents the fair market value. Common stock is valued at its quoted market price. Participant loans are valued at cost, which approximates fair value.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Investments of the Plan are exposed to various risks, such as interest rate, market, and credit. Due to the level of risk associated with certain investments and the level of uncertainty related to changes in the value of investments, it is at least reasonably possible that changes in risks in the near term would materially affect investment assets reported in the statements of net assets available for benefits and the statements of changes in net assets available for benefits.

Note 2 - Summary of Accounting Policies (Continued)

Payment of Benefits

Benefit payments to participants are recorded when paid.

Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the Plan administrator to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

Note 3 - Investments

The Plan's investments are held by the T. Rowe Price Trust Company. The following table presents the fair value of investments. Investments that represent five percent or more of the Plan's net assets available for benefits are separately identified as of December 31:

Investments	2003	2002
-------------	------	------

At Quoted Market Prices:		
Mutual funds:		
Fidelity Magellan Fund	\$ 8,397,775	\$ 6,098,952
TRP Balanced Fund	4,295,574	3,382,829
TRP Blue Chip Growth Fund	14,577,674	10,317,774
TRP Equity Income Fund	4,867,694	3,245,508
TRP Summit Cash Reserves	5,236,995	4,505,358
At Net Unit Value, which		
Approximates Fair Value:		
TRP Equity Index Trust	7,425,950	5,524,317
At Quoted Market Price:		
DENTSPLY International Inc.		
Stock Fund	9,236,163	7,239,866

The net appreciation (depreciation) in fair value of investments (including investments bought, sold, as well as held during the year) amounted to \$11,410,432 and (\$7,700,366) for the years ended December 31, 2003 and 2002, respectively.

The net appreciation (depreciation) in fair value of investments for each significant class of investments, consist of the following for the years ended December 31:

	2003	2002

Common stock	\$ 1,633,179	\$ 606,922
Common trust	1,647,126	(1,547,562)
Mutual funds	8,130,127	(6,759,726)
	-----	-----
	\$11,410,432	(\$7,700,366)
	=====	=====

Note 4 - Plan Termination

Although it has not expressed any intent to do so, the Company has the right under the Plan to terminate the Plan at any time, subject to the provisions of ERISA.

Note 5 - Income Tax Status

The Internal Revenue Service has determined and informed the Company by a letter dated May 23, 2002, that the Plan and related trust are designed in accordance with applicable sections of the Internal Revenue Code. Although the Plan has been amended since receiving the letter, the Plan administrator and the Plan's advisors believe that the Plan is currently designed and being operated in compliance with the applicable requirements of the Internal Revenue Code. Therefore, they believe the Plan was qualified and the related trust was tax-exempt as of the financial statement date.

Note 6 - Related Party Transactions

During 2003 and 2002, certain Plan investments were shares of registered investment companies and a common trust managed by T. Rowe Price Trust Company. In addition, the Plan offers an investment in the DENTSPLY International Inc. Stock Fund. The transactions in these investments are party-in-interest transactions which are exempt from prohibited transaction rules of ERISA.

Note 7 - Plan Mergers

Effective December 31, 2002, the assets of the Austenal, Inc. 401(k) Plan, totaling \$2,378,063, were merged with and into the Plan as a result of an acquisition made by the Company during 2002.

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DENTSPLY International Inc. 401(k) Savings Plan

Employer Identification Number : 39-1434669
Plan Number : 004
Form 5500 - Schedule H - Line 4i
Schedule of Assets (Held at End of Year)
December 31, 2003

(a)	(b) Identity of issue	(c) Description of investment	(d) * * Cost	(e) Current Value
			\$	\$
	Fidelity Magellan Fund	Mutual Fund	N/A	8,397,775
	PIMCO Total Return Fund	Mutual Fund	N/A	918,599
*	TRP Balanced Fund	Mutual Fund	N/A	4,295,574
*	TRP Blue Chip Growth	Mutual Fund	N/A	14,577,674
*	TRP Equity Income Fund	Mutual Fund	N/A	4,867,694
*	TRP Extended Equity Market Index	Mutual Fund	N/A	573,619
*	TRP International Stock Fund	Mutual Fund	N/A	471,483
*	TRP New Horizons Fund	Mutual Fund	N/A	2,134,901
*	TRP Personal Strategy Balanced	Mutual Fund	N/A	576,011
*	TRP Personal Strategy Growth	Mutual Fund	N/A	772,482
*	TRP Personal Strategy Income	Mutual Fund	N/A	270,018
*	TRP Science & Technology Fund	Mutual Fund	N/A	1,286,491
*	TRP Spectrum Income Fund	Mutual Fund	N/A	3,247,997
*	TRP Summit Cash Reserves	Mutual Fund	N/A	5,236,995
*	TRP Equity Index Trust	Common Trust	N/A	7,425,950
*	DENTSPLY International Inc. Stock Fund	Common Stock	N/A	9,236,163
*	Participant Loans	5.0%-10.5%	0	1,517,545
		Total Investments		65,806,971 =====

<FN>

* Party-in-interest

* * Historical cost has not been presented since all investments are participant directed.

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Exhibit (A)

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 33-89786) of DENTSPLY International Inc. of our report dated June 21, 2004 relating to the financial statements of the DENTSPLY International Inc. 401(k) Savings Plan, which appears in this Form 11-K for the year ended December 31, 2003.

/s/ Beard Miller Company LLP

York, PA
June 28, 2004

Exhibit (B)

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 33-89786) of DENTSPLY International Inc. of our report dated June 25, 2003 relating to the financial statements of the DENTSPLY International Inc. 401(k) Savings Plan, which appears in this Form 11-K.

/s/ PricewaterhouseCoopers LLP

Philadelphia, PA

June 28, 2004

Exhibit (C)

Report of Independent Registered Public Accounting Firm

To the Participants and Administrator of the
DENTSPLY International Inc. 401(k) Savings Plan

In our opinion, the accompanying statement of net assets available for benefits and the related statement of changes in net assets available for benefits present fairly, in all material respects, the net assets available for benefits of the DENTSPLY International Inc. 401(k) Savings Plan (the "Plan") at December 31, 2002, and the changes in net assets available for benefits for the year then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Philadelphia, PA

June 25, 2003