

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, 2005

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,
2005 and 2004.

Statements of Changes in Net Assets Available for Plan Benefits for the
Years Ended December 31, 2005 and 2004.

Supplemental Schedule of Assets (Held at End of Year) as of December 31,
2005.

2. Exhibits:

The following exhibits are submitted herewith:

Exhibit 23.1 - Consent of 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, 2006

\s\ William R. Jellison
William R. Jellison
Senior Vice President, Chief Financial Officer
and Member of the DENTSPLY International Inc.
ESOP and 401(k) Committee

DENTSPLY International Inc.
401(k) Savings Plan

Financial Report

December 31, 2005

DENTSPLY International Inc. 401(k) Savings Plan

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Report of Independent Registered Public Accounting Firm

To the ESOP and 401(k) Committee
DENTSPLY International Inc. 401(k) Savings Plan

We have audited the accompanying statements of net assets available for benefits of DENTSPLY International Inc. 401(k) Savings Plan (Plan) as of December 31, 2005 and 2004, and the related statements of changes in net assets available for benefits for the years 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 audits.

We conducted our audits in accordance with the Standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also 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, as well as evaluating the overall financial statement presentation. We believe our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2005 and 2004, and the changes in net assets available for benefits for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Our audits were 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) as of December 31, 2005 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 is the responsibility of the Plan's management. 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 20, 2006

DENTSPLY International Inc. 401(k) Savings Plan

Statements of Net Assets Available for Benefits
December 31, 2005 and 2004

Assets

Cash and cash equivalents	\$	4	\$	88,070
		-----		-----
Investments, at fair value:				
Shares of Registered Investment Companies:				
Fidelity Magellan Fund		8,164,829		8,357,817
Morgan Stanley International Equity, B		1,581,228		1,017,226
PIMCO Total Return Fund		1,108,164		1,069,272
TRP Balanced Fund		4,920,412		4,751,373
TRP Blue Chip Growth Fund		15,440,387		15,538,050
TRP Equity Income Fund		6,086,249		5,916,793
TRP Extended Equity Market Index		1,332,003		1,129,748
TRP New Horizons Fund		3,974,695		3,014,173
TRP Retirement Income Fund		153,497		775
TRP Retirement 2005 Fund		35,443		33,666
TRP Retirement 2010 Fund		681,160		566,074
TRP Retirement 2015 Fund		702,324		362,958
TRP Retirement 2020 Fund		672,926		431,021
TRP Retirement 2025 Fund		727,152		362,021
TRP Retirement 2030 Fund		1,480,902		625,323
TRP Retirement 2035 Fund		710,621		335,273
TRP Retirement 2040 Fund		744,831		318,889
TRP Retirement 2045 Fund		26,353		-
TRP Science & Technology Fund		1,439,714		1,452,348
TRP Spectrum Income Fund		3,164,253		3,548,459
TRP Summit Cash Reserves		4,402,518		4,200,343
Shares of Common Trusts:				
TRP Equity Index Trust		6,934,536		7,857,941
Common Stock:				
DENTSPLY International Inc. common stock		9,902,627		10,798,320
Investment, at cost:				
Participant loans		1,704,847		1,538,771
		-----		-----
Total Investments		76,091,671		73,226,634
		-----		-----
Receivables:				
Participants' contributions		287,403		257,924
Glenroe Technologies 401(k) Savings Plan conversion receivable		123,388		-
		-----		-----
Total Receivables		410,791		257,924
		-----		-----
Net Assets Available for Benefits	\$	76,502,466	\$	73,572,628
		=====		=====

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, 2005 and 2004

	2005	2004
	----	----
Investment Income		
Net appreciation in fair value of investments	\$ 1,265,675	\$ 6,633,628
Interest and dividends	1,812,987	1,099,036

	-----	-----
	3,078,662	7,732,664
	-----	-----
Contributions		
Participants	7,630,969	7,314,483
Participant rollovers	975,221	1,409,567
	-----	-----
	8,606,190	8,724,050
	-----	-----
Plan Asset Transfer from Glenroe Technologies 401(k) Savings Plan	123,388	-
	-----	-----
Benefits Paid to Participants	(8,869,020)	(8,945,352)
	-----	-----
Administrative Expenses	(9,382)	(9,035)
	-----	-----
Net Increase	2,929,838	7,502,327
Net Assets Available for Benefits - Beginning of Year	73,572,628	66,070,301
	-----	-----
Net Assets Available for Benefits - End of Year	\$76,502,466	\$73,572,628
	=====	=====

See notes to financial statements.

DENTSPLY International Inc. 401(k) Savings Plan

Notes to Financial Statements
December 31, 2005 and 2004

Note 1 - Description of Plan

The following brief description of the DENTSPLY International Inc. 401(k) Savings Plan (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. (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 ESOP and 401(k) Committee (Committee). At December 31, 2005 and 2004, T. Rowe Price Trust Company (TRP) was the trustee (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, 2005 and 2004, T. Rowe Price Trust Company was the recordkeeper of 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.

DENTSPLY International Inc. 401(k) Savings Plan

Notes to Financial Statements
December 31, 2005 and 2004

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 loan 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.

Administrative Costs

Significant administrative costs of the Plan are absorbed by the Company.

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.

DENTSPLY International Inc. 401(k) Savings Plan

Notes to Financial Statements
December 31, 2005 and 2004

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	2005	2004
-------------	------	------

At Fair Value as Determined by

Quoted Market Prices:

Shares of Registered Investment

Companies:

Fidelity Magellan Fund	\$ 8,164,829	\$ 8,357,817
TRP Balanced Fund	4,920,412	4,751,373
TRP Blue Chip Growth Fund	15,440,387	15,538,050
TRP Equity Income Fund	6,086,249	5,916,793

TRP New Horizons Fund	3,974,695	3,014,173
TRP Summit Cash Reserves	4,402,518	4,200,343
Other registered investment companies	14,560,571	11,253,053
Shares of Common Stock:		
DENTSPLY International Inc. common stock	9,902,627	10,798,320
At Estimated Fair Value:		
Shares of Common Trusts:		
TRP Equity Index Trust	6,934,536	7,857,941
At Cost, which Approximates Fair Value:		
Participant loans	1,704,847	1,538,771
	-----	-----
	\$76,091,671	\$73,226,634
	=====	=====

During the years ended December 31, 2005 and 2004, the Plan's investments (including investments bought, sold, as well as held during the year) appreciated in fair value by \$1,265,675 and \$6,633,628, respectively.

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DENTSPLY International Inc. 401(k) Savings Plan

Notes to Financial Statements
December 31, 2005 and 2004

Note 3 - Investments (Continued)

The net appreciation in fair value of investments (including gains and losses on investments bought, sold, as well as held during the year) for each significant class of investments, consist of the following for the years ended December 31:

	2005	2004
	----	----
Investments, at fair value as determined by quoted market prices:		
Registered Investment Companies	\$1,409,709	\$3,509,959
Common stock	(462,536)	2,357,722
Investments, at estimated fair value:		
Common trust	318,502	765,947
	-----	-----
	\$1,265,675	\$6,633,628
	=====	=====

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.

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DENTSPLY International Inc. 401(k) Savings Plan

Notes to Financial Statements
December 31, 2005 and 2004

Note 6 - Related Party Transactions

During 2005 and 2004, 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. common stock. The transactions in these investments are party-in-interest transactions which are exempt from prohibited transaction rules of ERISA.

Note 7 - Plan Merger

Effective December 31, 2005, the Plan assets of the Glenroe Technologies 401(k) Savings Plan were merged with and into the Plan as a result of an acquisition made by the Company during 2005. As of December 31, 2005, assets totaling \$123,388 were receivable by the Plan.

Note 8 - Subsequent Event

The Board of Directors of the Company approved, in principle, a plan to combine the Plan with the Employee Stock Ownership Plan operated by the Company to form a single KSOP Plan. It is the Company's intention to complete this combination during the 2006 calendar year.

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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, 2005

(d) (e)

(b) (c) * * Current

(a) Identity of issue Description of investment Cost Value

(a)	(b)	(c)	(d)	(e)
Identity of issue	Description of investment	Cost	Value	
	Fidelity Magellan Fund	Mutual Fund	N/A	\$ 8,164,829
	Morgan Stanley International Equity, B	Mutual Fund	N/A	1,581,228
	PIMCO Total Return Fund	Mutual Fund	N/A	1,108,164
*	TRP Balanced Fund	Mutual Fund	N/A	4,920,412
*	TRP Blue Chip Growth	Mutual Fund	N/A	15,440,387
*	TRP Equity Income Fund	Mutual Fund	N/A	6,086,249
*	TRP Extended Equity Market Index	Mutual Fund	N/A	1,332,003
*	TRP New Horizons Fund	Mutual Fund	N/A	3,974,695
*	TRP Retirement Income Fund	Mutual Fund	N/A	153,497
*	TRP Retirement 2005 Fund	Mutual Fund	N/A	35,443
*	TRP Retirement 2010 Fund	Mutual Fund	N/A	681,160
*	TRP Retirement 2015 Fund	Mutual Fund	N/A	702,324
*	TRP Retirement 2020 Fund	Mutual Fund	N/A	672,926
*	TRP Retirement 2025 Fund	Mutual Fund	N/A	727,152
*	TRP Retirement 2030 Fund	Mutual Fund	N/A	1,480,902
*	TRP Retirement 2035 Fund	Mutual Fund	N/A	710,621
*	TRP Retirement 2040 Fund	Mutual Fund	N/A	744,831
*	TRP Retirement 2045 Fund	Mutual Fund	N/A	26,353
*	TRP Science & Technology Fund	Mutual Fund	N/A	1,439,714
*	TRP Spectrum Income Fund	Mutual Fund	N/A	3,164,253
*	TRP Summit Cash Reserves	Mutual Fund	N/A	4,402,518
*	TRP Equity Index Trust	Common Trust	N/A	6,934,536
*	DENTSPLY International Inc. Common Stock	Common Stock	N/A	9,902,627

*	Participant Loans	5% - 10.5%	0	1,704,847 -----
		Total Investments		\$76,091,671 =====

<FN>

* Party-in-interest
 * * Historical cost has not been presented since all investments are
 participant directed.
 </FN>

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 33-897896) of DENTSPLY International Inc. of our report dated June 20, 2006, 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, 2005.

/s/Beard Miller Company LLP

York, Pennsylvania
June 26, 2006