

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

SCHEDULE 13G
Under the Securities Exchange Act of 1934
(Amendment No.)*

DENTSPLY SIRONA Inc.

(Name of Issuer)

Common Stock, par value \$.01 per share

(Title of Class of Securities)

24906P109

(CUSIP Number)

April 16, 2018

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAME OF REPORTING PERSONS Generation Investment Management LLP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION England and Wales	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 90,449
	6	SHARED VOTING POWER 11,711,857
	7	SOLE DISPOSITIVE POWER 90,449
	8	SHARED DISPOSITIVE POWER 11,711,857
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 11,802,306	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="radio"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.2%	
12	TYPE OF REPORTING PERSON IA	

1	NAME OF REPORTING PERSONS Generation Investment Management US LLP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 5,542,686
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 5,542,686
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 5,542,686	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="radio"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 2.4%	
12	TYPE OF REPORTING PERSON IA	

1	NAME OF REPORTING PERSONS Generation IM Fund plc	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Ireland	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 3,492,627
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 3,492,627
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,492,627	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="radio"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 1.5%	
12	TYPE OF REPORTING PERSON CO	

1	NAME OF REPORTING PERSONS Generation IM Global Equity Fund LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="radio"/> (b) <input type="radio"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 2,905,596
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 2,905,596
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,905,596	
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="radio"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 1.3%	
12	TYPE OF REPORTING PERSON OO	

Item 1. (a) Name of Issuer

DENTSPLY SIRONA Inc.

(b) Address of Issuer's Principal Executive Offices

221 West Philadelphia Street, York, PA 17401-2991

Item 2. (a) Name of Person Filing

Generation Investment Management LLP;

Generation Investment Management US LLP;

Generation IM Fund plc; and

Generation IM Global Equity Fund LLC.

(b) Address of Principal Business Office, or, if none, Residence

Generation Investment Management LLP: 20 Air Street, 7th floor, London, United Kingdom W1B 5AN.

Generation Investment Management US LLP: 555 Mission Street, Suite 3400, San Francisco, CA 94105.

Generation IM Fund plc: Georges Court, 54-62 Townsend Street, Dublin 2, Ireland

Generation IM Global Equity Fund LLC: 555 Mission Street, Suite 3400, San Francisco, CA 94105.

(c) Citizenship

Generation Investment Management LLP – England and Wales

Generation Investment Management US LLP - Delaware

Generation IM Fund plc - Ireland

Generation IM Global Equity Fund LLC - Delaware

(d) Title of Class of Securities

Common Stock, par value \$.01 per share

(e) CUSIP No.:

24906P109

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);
- (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
- (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);
- (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);
- (e) An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
- (h) A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) A non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J);
- (k) A group, in accordance with §240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J), please specify the type of institution:_____

Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:

See the response(s) to Item 9 on the attached cover pages.

(b) Percent of class:

See the response(s) to Item 11 on the attached cover pages.

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote: See the response(s) to Item 5 on the attached cover pages.

(ii) Shared power to vote or to direct the vote: See the response(s) to Item 6 on the attached cover pages.

(iii) Sole power to dispose or to direct the disposition of: See the response(s) to Item 7 on the attached cover pages.

(iv) Shared power to dispose or to direct the disposition of: See the response(s) to Item 8 on the attached cover pages.

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the Reporting Person has ceased to be the beneficial owner of more than 5 percent of the class of securities, check the following:

Not applicable

Item 6. Ownership of More Than Five Percent on Behalf of Another Person

Not Applicable

Item 7. Identification and Classification of the Subsidiary which Acquired the Security Being Reported on by the Parent Holding Company or Control Person

Not Applicable

Item 8. Identification and Classification of Members of the Group

Not Applicable

Item 9. Notice of Dissolution of Group

Not Applicable

Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: April 26, 2018

GENERATION INVESTMENT MANAGEMENT LLP

By: /s/ Alexander Marshall

Name: Alexander Marshall

Title: General Counsel & Chief Compliance Officer

GENERATION INVESTMENT MANAGEMENT US LLP

By: Generation Investment Management Services LLC

Its: Partner

By: /s/ Peter Harris

Name: Peter Harris

GENERATION IM FUND PLC

By: /s/ Peter Harris

Name: Peter Harris

Title: Director

GENERATION IM GLOBAL EQUITY FUND LLC

By: /s/ Peter Harris

Name: Peter Harris

INDEX TO EXHIBITS

Exhibit No. Exhibit

99.1 Joint Filing Agreement

Exhibit 99.1

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G is filed on behalf of each of the undersigned and that all subsequent amendments to such statement on Schedule 13G shall be filed on behalf of each of the undersigned without the necessity of filing additional joint filing statements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments and for the completeness and accuracy of the information concerning him or it contained therein, but shall not be responsible for the completeness and accuracy of the information concerning the other entity or person, except to the extent that he or it knows or has reason to believe that such information is inaccurate.

Dated: April 26, 2018

GENERATION INVESTMENT MANAGEMENT LLP

By: /s/ Alexander Marshall

Name: Alexander Marshall

Title: General Counsel & Chief Compliance Officer

GENERATION INVESTMENT MANAGEMENT US LLP

By: Generation Investment Management Services LLC

Its: Partner

By: /s/ Peter Harris

Name: Peter Harris

GENERATION IM FUND PLC

By: /s/ Peter Harris

Name: Peter Harris

Title: Director

GENERATION IM GLOBAL EQUITY FUND LLC

By: /s/ Peter Harris

Name: Peter Harris