MGC DIAGNOSTICS Corp Form SC 13G/A February 14, 2018

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No. 11)*

	MGC DIAGNOSTICS	S CORPORATION
	(Name of Issuer)	
	Common Stock, par value	e \$0.10 per share
	(Title of Class of Securities))
	552768103	
	(CUSIP Number) December 29, 20	017
(Date of	f Event Which Requires Filing of	f this Statement)
Check the appropriate bo	ox to designate the rule pursuar	nt to which this
[X] Rule 13d-1(b)		
[_] Rule 13d-1(c)		
[_] Rule 13d-1(d)		
initial filing on this and for any subsequent	cover page shall be filled out form with respect to the subject amendment containing informations of the page.	ct class of securities,
deemed to be "filed" for Act of 1934 ("Act") or o	d in the remainder of this cover r the purpose of Section 18 of t otherwise subject to the liabili subject to all other provisions	the Securities Exchange ities of that section
CUSIP NO. 552768103	13G	 Page 2 of 8 Pages
(1) NAMES OF REPORTING I.R.S. IDENTIFICA	G PERSONS. ATION NOS. OF ABOVE PERSONS (ent	tities only).
Renaissance Techno	ologies LLC 26-0385758	
(2) CHECK THE APPROPRIA	ATE BOX IF A MEMBER OF A GROUP	(SEE INSTRUCTIONS):

	(b) [_]			
(3)	SEC USE ONLY			
(4)	CITIZENSHIP OR PLACE OF C	PRGANIZATION		
	Delaware 			
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:			(5)	SOLE VOTING POWER
	BENEFICIALLY OWNED			2,099
			(6)	SHARED VOTING POWER
				0
			(7)	SOLE DISPOSITIVE POWER
				2,099
			(8)	SHARED DISPOSITIVE POWER
				0
(9)	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
		2,099		
(10)	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES			
	(SEE INSTRUCTIONS)			[_]
(11)	PERCENT OF CLASS REPRES	ENTED BY AMOUNT IN	ROW	(9)
		0.05 %		
(12)	TYPE OF REPORTING PERSON	(SEE INSTRUCTIONS)	
		Page 2 of 8 page	es	
====				
	 IP NO. 552768103	13G		 Page 3 of 8 Page
(1)	NAMES OF REPORTING PERSO		NS (1	ENTITIES ONLY).
	RENAISSANCE TECHNOLOGIES	HOLDINGS CORPORAT	ION	13-3127734
(2)	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) [_] (b) [_]			
(3)	SEC USE ONLY			

(4) CITIZENSHIP OR PLACE OF ORGANIZA	ATION
Delaware	
	(5) SOLE VOTING POWER
NUMBER OF SHARES BENEFICIALLY OWNED	2,099
BY EACH REPORTING PERSON WITH:	(6) SHARED VOTING POWER
	0
	(7) SOLE DISPOSITIVE POWER
	2,099
	(8) SHARED DISPOSITIVE POWER
	0
(9) AGGREGATE AMOUNT BENEFICIALLY C	WNED BY EACH REPORTING PERSON
2,099	
(10) CHECK BOX IF THE AGGREGATE AMOU (SEE INSTRUCTIONS) [_]	JNT IN ROW (9) EXCLUDES CERTAIN SHARES
(11) PERCENT OF CLASS REPRESENTED E	BY AMOUNT IN ROW (9)
0.05 %	5
(12) TYPE OF REPORTING PERSON (SEE I	INSTRUCTIONS)
Page	e 3 of 8 pages
CUSIP NO. 552768103	13G Page 4 of 8 Page:
Item 1.	
(a) Name of Issuer	
MGC DIAGNOSTICS CORPORATION	
(b) Address of Issuer's Principa	al Executive Offices.
350 Oak Grove Parkway, Sair	nt Paul, Minnesota 55127-8599
Item 2.	
(a) Name of Person Filing:	
	filed by Renaissance Technologies LLC chnologies Holdings Corporation ("RTHC").

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

The principal business address of the reporting persons is:

800 Third Avenue New York, New York 10022

(c) Citizenship.

RTC is a Delaware limited liability company, and RTHC is a Delaware corporation.

(d) Title of Class of Securities.

Common Stock, par value \$0.10 per share

(e) CUSIP Number.

552768103

Page 4 of 8 pages

- (a) [_] Broker or dealer registered under section 15 of the Act.
- (b) [_] Bank as defined in section 3(a)(6) of the Act.
- (c) [_] Insurance Company as defined in section 3(a)(19) of the Act.
- (d) [_] Investment Company registered under section 8 of the Investment Company Act.
- (e) [x] Investment Adviser in accordance with Sec.240.13d-1(b) (1) (ii) (E).
- (f) [_] Employee Benefit Plan or Endowment Fund in accordance with Sec. 240.13d-1 (b) (1) (ii) (F).
- (g) [_] Parent holding company, in accordance with Sec.240.13d-1(b)(1)(ii)(G).
- (h) $[_]$ A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act.
- (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.
- (j) $[_]$ Group, in accordance with Sec.240.13d-1(b)(1)(ii)(J).

Item 4. Ownership.

(a) Amount beneficially owned.

RTC: 2,099 shares

RTHC: 2,099 shares, comprising the shares beneficially owned by RTHC, because of RTHC's majority ownership of RTC.

(b) Percent of Class.

RTC: 0.05 % RTHC: 0.05 %

- (c) Number of shares as to which the person has:
 - (i) sole power to vote or to direct the vote:

RTC: 2,099 RTHC: 2,099

(ii) Shared power to vote or to direct the vote: 0

(iii) sole power to dispose or to direct the disposition of:

RTC: 2,099 RTHC: 2,099

(iv) Shared power to dispose or to direct the disposition of:

RTC: 0 RTHC: 0

Page 5 of 8 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 five percent of the class of securities, check the following: [X]

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

Certain funds and accounts managed by RTC have the right to receive dividends and proceeds from the sale of the securities which are the subject of this report.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company.

Not applicable

Item 8. Identification and Classification of Members of the Group.

Not applicable

Item 9. Notice of Dissolution of a Group.

Not applicable

Page 6 of 8 pages

Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and 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.

Date: February 13, 2018

Renaissance Technologies LLC

By: /s/ Mark Silber
Executive Vice President

Renaissance Technologies Holdings Corporation

By: /s/ Mark Silber Vice President

Attention: Intentional misstatements or omissions of fact constitute Federal criminal violations (See $18\ U.S.C.\ 1001$).

Page 7 of 8 Pages

EXHIBIT 99.1

AGREEMENT REGARDING JOINT FILING

UNDER RULE 13D-1(K) OF THE EXCHANGE ACT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, each of the undersigned agrees to the filing on behalf of each of a Statement on Schedule 13G, and all amendments thereto, with respect to the shares of Common Stock, par value \$0.10 per share of MGC DIAGNOSTICS CORPORATION.

Date: February 13, 2018

Renaissance Technologies LLC

By: /s/ Mark Silber
Executive Vice President

Renaissance Technologies Holdings Corporation

By: /s/ Mark Silber Vice President

Page 8 of 8 Pages