MGC DIAGNOSTICS Corp Form SC 13G/A February 14, 2017

(a) [_]

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No. 10) *

		MGC DIAGNOSTICS CORPO	RATION
	(Name	of Issuer)	
	Common	Stock, \$0.10 par value	
	(Title of Clas	ss of Securities)	
		552768103	
	(CUSIP	Number) December 30, 2016	
(Date	e of Event Which Re	equires Filing of this	Statement)
Check the appropriate Schedule is filed:	e box to designate	the rule pursuant to w	hich this
[X] Rule 13d-1()		
[_] Rule 13d-1(3)		
[_] Rule 13d-1((£		
initial filing on the	nis form with respe ent amendment conta	be filled out for a rect to the subject classining information whice	s of securities,
deemed to be "filed" Act of 1934 ("Act") of the Act but shall see the Notes).	for the purpose of or otherwise subject be subject to all	der of this cover page E Section 18 of the Sec et to the liabilities o other provisions of th	urities Exchange of that section e Act (however,
			Page 2 of 8 Pages
(1) NAMES OF REPORT	TING PERSONS.	OVE PERSONS (entities	
Renaissance Te	chnologies LLC	26-0385758	
(2) CHECK THE APPRO	PRIATE BOX IF A MEM	 MBER OF A GROUP (SEE IN	STRUCTIONS):

	(b) [_]			
(3)	SEC USE ONLY			
(4)	CITIZENSHIP OR PLACE OF C	 RGANIZATION		
	Delaware			
			(5)	SOLE VOTING POWER
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:				267,040
			(6)	SHARED VOTING POWER
				0
			(7)	SOLE DISPOSITIVE POWER
				267,040
			(8)	SHARED DISPOSITIVE POWER
				0
(9)	AGGREGATE AMOUNT BENEFIC	IALLY OWNED BY EAC	H REI	PORTING PERSON
		267,040		
(10)	CHECK BOX IF THE AGGREGA	TE AMOUNT IN ROW (9) EX	CLUDES CERTAIN SHARES
	(SEE INSTRUCTIONS)			[_]
(11)	PERCENT OF CLASS REPRES	ENTED BY AMOUNT IN	ROW	(9)
		6.10 %		
(12)	TYPE OF REPORTING PERSON	(SEE INSTRUCTIONS)	
		Page 2 of 8 pag	es	
		Page 3 of 8 pag		
	 IP NO. 552768103	13G		Page 3 of 8 Page
(1)	NAMES OF REPORTING PERSO	NS.		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 ORC	GANIZATION
Delaware	
	(5) SOLE VOTING POWER
NUMBER OF SHARES BENEFICIALLY OWNED	267,040
BY EACH REPORTING PERSON WITH:	(6) SHARED VOTING POWER
	0
	(7) SOLE DISPOSITIVE POWER
	267,040
	(8) SHARED DISPOSITIVE POWER
	0
(9) AGGREGATE AMOUNT BENEFICIA	ALLY OWNED BY EACH REPORTING PERSON
	267,040
(10) CHECK BOX IF THE AGGREGATE (SEE INSTRUCTIONS)	E AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
(11) PERCENT OF CLASS REPRESEN	VIED BY AMOUNT IN ROW (9)
6	5.10 %
(12) TYPE OF REPORTING PERSON	(SEE INSTRUCTIONS)
	Page 3 of 8 pages
CUSIP NO. 552768103	13G Page 4 of 8 Page:
Item 1.	
(a) Name of Issuer	
MGC DIAGNOSTICS CORPORA	ATION
(b) Address of Issuer's Pri	ncipal Executive Offices.
350 Oak Grove Parkway,	Saint Paul, Minnesota 55127-8599
Item 2.	
(a) Name of Person Filing:	
	peing filed by Renaissance Technologies LLC ce Technologies 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, \$0.10 par value

(e) CUSIP Number.

552768103

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- Item 3. If this statement is filed pursuant to Rule 13d-1(b) or 13-d-2(b) or (c), check whether the person filing is a:
- (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: 267,040 shares

RTHC: 267,040 shares, comprising the shares beneficially owned by RTHC, because of RTHC's majority ownership of RTC.

(b) Percent of Class.

RTC: 6.10 % RTHC: 6.10 %

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

RTC: 267,040 RTHC: 267,040

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

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

RTC: 267,040 RTHC: 267,040

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

RTC: 0 RTHC: 0

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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: [_]

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

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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 14, 2017

Renaissance Technologies LLC

By: Mark Silber

Executive Vice President

Renaissance Technologies Holdings Corporation

By: Mark Silber
Vice President

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

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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, \$0.10 par value of MGC DIAGNOSTICS CORPORATION.

Date: February 14, 2017

Renaissance Technologies LLC

By: Mark Silber

Executive Vice President

Renaissance Technologies Holdings Corporation

By: Mark Silber Vice President

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