MGC DIAGNOSTICS Corp Form SC 13G/A February 12, 2015

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No. 8) *

	MGC DIAGNOSTICS CORPORA	ATION
(Name	of Issuer)	
Common	Stock, \$0.10 par value	
(Title of Cla	ss of Securities)	
	552768103	
(CUSIP	Number) December 31, 2014	
(Date of Event Which R	equires Filing of this St	atement)
Check the appropriate box to designate Schedule is filed:	the rule pursuant to whi	ch this
[X] Rule 13d-1(b)		
[_] Rule 13d-1(c)		
[_] Rule 13d-1(d)		
*The remainder of this cover page shal initial filing on this form with resp and for any subsequent amendment cont the disclosures provided in a prior c	ect to the subject class aining information which	of securities,
The information required in the remain deemed to be "filed" for the purpose o Act of 1934 ("Act") or otherwise subje of the Act but shall be subject to all see the Notes).	f Section 18 of the Secur ct to the liabilities of	rities Exchange that section
CUSIP NO. 552768103	13G 	Page 2 of 8 Pages
(1) NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF A	BOVE PERSONS (entities or	nly).
Renaissance Technologies LLC	26-0385758	
(2) CHECK THE APPROPRIATE BOX IF A ME (a) [_]	MBER OF A GROUP (SEE INST	TRUCTIONS):

	(b) [_]			
(3)	SEC USE ONLY			
(4)	CITIZENSHIP OR PLACE OF O	RGANIZATION		
	Delaware 			
			(5)	SOLE VOTING POWER
NUMBER OF SHARES BENEFICIALLY OWNED				250,340
BY EACH REPORTING PERSON WITH:		(6)	SHARED VOTING POWER	
	I BROOM WITH.		(0)	
				0
		(7)	SOLE DISPOSITIVE POWER	
			250,340	
			(8)	SHARED DISPOSITIVE POWER
				0
(0)	ACCRECATE AMOUNT DEVICETO	TALLY OUNDD DV DAG		DODELNG DEDGON
(9)	9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			PORIING PERSON
		250,340		
(10)	(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARE (SEE INSTRUCTIONS)			XCLUDES CERTAIN SHARES
				[_]
(11)	PERCENT OF CLASS REPRES	ENTED BY AMOUNT IN	ROW	(9)
		5.96 %		
(12)	TYPE OF REPORTING PERSON	(SEE INSTRUCTIONS)	
		Page 2 of 8 pag		
		Page 3 of 8 page		=======================================
CUS	 IP NO. 552768103	13G		 Page 3 of 8 Page
	NAMES OF REPORTING PERSO	NS.		
	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 ORGA	ANIZATION
Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED	(5) SOLE VOTING POWER 250,340
BY EACH REPORTING PERSON WITH:	(6) SHARED VOTING POWER 0
	(7) SOLE DISPOSITIVE POWER 250,340
	(8) SHARED DISPOSITIVE POWER 0
	LLY OWNED BY EACH REPORTING PERSON
(10) CHECK BOX IF THE AGGREGATE (SEE INSTRUCTIONS)	AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES
(11) PERCENT OF CLASS REPRESENT	TED BY AMOUNT IN ROW (9)
5.	96 %
(12) TYPE OF REPORTING PERSON (S	
	Page 3 of 8 pages
CUSIP NO. 552768103	13G Page 4 of 8 Page:
(a) Name of Issuer	
MGC DIAGNOSTICS CORPORAT	CION
(b) Address of Issuer's Prin	ncipal Executive Offices.
350 Oak Grove Parkway,	Saint Paul, Minnesota 55127-8599
Item 2.	
(a) Name of Person Filing:	
	eing filed by Renaissance Technologies LLC e 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

Page 4 of 8 pages

- 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: 250,340 shares

RTHC: 250,340 shares, comprising the shares beneficially owned by RTHC, because of RTHC's majority ownership of RTC.

(b) Percent of Class.

RTC: 5.96 % RTHC: 5.96 %

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

RTC: 250,340 RTHC: 250,340

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

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

RTC: 250,340 RTHC: 250,340

(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: [_]

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 12, 2015

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 $18\ U.S.C.\ 1001$).

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, \$0.10 par value of MGC DIAGNOSTICS CORPORATION.

Date: February 12, 2015

Renaissance Technologies LLC

By: Mark Silber

Executive Vice President

Renaissance Technologies Holdings Corporation

By: Mark Silber Vice President

Page 8 of 8 Pages