

VEECO INSTRUMENTS INC

FORM 8-K (Current report filing)

Filed 07/02/97 for the Period Ending 05/13/97

Address TERMINAL DRIVE

PLAINVIEW, NY 11803

Telephone 516 677-0200

CIK 0000103145

Symbol VECO

SIC Code 3559 - Special Industry Machinery, Not Elsewhere Classified

Industry Semiconductors

Sector Technology

Fiscal Year 12/31

VEECO INSTRUMENTS INC

FORM 8-K

(Unscheduled Material Events)

Filed 7/2/1997 For Period Ending 5/13/1997

Address TERMINAL DR

PLAINVIEW, New York 11803

Telephone 516-349-8300
CIK 0000103145
Industry Semiconductors

Sector Technology

Fiscal Year 12/31



SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 13, 1997

VEECO INSTRUMENTS INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware 0-16244 11-2989601

(State or Other (Commission (IRS Employer Jurisdiction of File Number) Identification No.)
Incorporation)

<u>Terminal Drive, Plainview, New York 11803</u> (Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: (516) 349-8300

Not Applicable

(Former Name or Former Address, if Changed Since Last Report)

Item 5. OTHER EVENTS.

Reference is made to Attachment 2 to the OEM Agreement for Acquisition of IBM Products between International Business Machines Corporation and Veeco Instruments Inc. dated as of May 13, 1997 which is included as an exhibit hereto.

Item 7 FINANCIAL STATEMENTS AND EXHIBITS.

(c) Exhibits.

EXHIBIT NO.	EXHIBIT
10.31	Attachment 2 to the OEM Agreement for Acquisition of IBM Products between International Business Machines Corporation

Products between International Business Machines Corporation and Veeco Instruments Inc. dated as of May 13, 1997 (filed herewith; confidential treatment has been requested for certain portions; confidential portions have been filed separately with the Securities and Exchange Commission).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

VEECO INSTRUMENTS INC.

Date: July 2, 1997 By: /s/ Edward H. Braun

Edward H. Braun Chairman, Chief Executive Officer and President

EXHIBIT INDEX

Exhibit

10.31 Attachment 2 to the OEM Agreement for Acquisition of IBM Products between International Business Machines Corporation and Veeco Instruments Inc. dated as of May 13, 1997 (filed herewith; confidential treatment has been requested for certain portions; confidential portions have been filed separately with the Securities and Exchange Commission).

[XXX] Indicates that text has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

ATTACHMENT 2 PRODUCT OFFERING - SXM 200M (MANUAL)

This ATTACHMENT 2 to AGREEMENT Number B95245-00 is entered into by and between International Business Machines Corporation (IBM), through its Manufacturing Technology Center (MTC) with an address for purposes of this ATTACHMENT at 1798 NW 40th Street, Boca Raton, FL 33429 and Veeco Instruments, Inc. (Veeco), with an address at Terminal Drive, Plainview, New York 11808.

WHEREAS, this ATTACHMENT describes the terms under which IBM through its MTC, will develop a new PRODUCT referred to as a SXM 200M (Manual) and provide specific hardware, software and services related thereto as specified herein.

WHEREAS, further, IBM agrees to complete the development effort as set forth herein and IBM agrees to provide to Veeco a PRODUCT utilizing IBM's Atomic Force Microscope technology, which PRODUCT will conform to the specifications and functions set forth in Exhibit 1.

WHEREAS, further, Veeco agrees to market and resell the PRODUCT to END-USERS.

NOW THEREFORE, in consideration of the promises and the terms, covenants and conditions herein contained, the parties hereby agree as follows:

SECTION 1.0 DEFINITIONS

The capitalized words and terms in the AGREEMENT shall apply and the capitalized terms in this ATTACHMENT shall have the following meanings:

- 1.1 For purposes of this ATTACHMENT, "PRODUCT" is the "SXM 200M (Manual)", as described herein and specified in Exhibit 1, including all features, components and subassemblies.
- 1.2 "MATERIALS" are items (other than PRODUCT and IBM CODE that IBM delivers to Veeco. They include programming tools, documentation, reports, designs, drawings and code.

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- 1.3 An "INVENTION" is an idea, know-how, technique, invention, discovery or improvement embodied in the PRODUCT or MATERIAL delivered under this ATTACHMENT. An INVENTION must be conceived or reduced to practice by IBM personnel or Veeco personnel in performance of work required under this ATTACHMENT. An INVENTION made by Veeco's personnel with IBM's personnel is a "JOINT INVENTION."
- 1.4 A DERIVATIVE WORK shall mean a work which is based upon one or more preexisting works, such as a revision, enhancement, modification, translation, abridgment, condensation, expansion, or any other form in which such preexisting work may be recast, transformed, or adapted, and which, if prepared without authorization of the owner of the copyright in such preexisting work, would constitute a copyright infringement. For purposes hereof, a DERIVATIVE WORK shall also include any compilation that incorporates such a preexisting work.

SECTION 2.0 PRODUCT DEVELOPMENT

- 2.1 IBM agrees to perform those tasks necessary and appropriate to the development of the PRODUCT in accordance with the schedule ("Implementation Schedule") and the specifications set forth in Exhibit 1 hereto, including, without limitation, designing, programming, testing, evaluating, making necessary revisions to and manufacturing prototypes of the PRODUCT (the "IBM Development Work"). IBM shall furnish to Veeco monthly status reports with respect to its development of the PRODUCT.
- 2.2 Within thirty (30) days of receiving the first three (3) PRODUCT prototypes as set forth in the Implementation Schedule, IBM and Veeco shall each evaluate the PRODUCT and state in writing (i) whether the PRODUCT is capable of operating in accordance with the specifications and functions set forth in Exhibit 1, (ii) any identified defects, and (iii) proposed revisions (the "First Review Period").

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- 2.3 Within ninety (90) days of the conclusion of the First Review Period, IBM shall incorporate and effect any suggestions jointly agreed to by the parties and cure any identified defects in the PRODUCT ("PRODUCT Completion Date").
- 2.4 Within sixty (60) days of the PRODUCT Completion Date, IBM shall produce the manuals and other documentation as set forth in Exhibit 3 to this ATTACHMENT.

SECTION 3.0 IBM POST DEVELOPMENT RESPONSIBILITIES

3.1 IBM agrees to provide Veeco with the number of PRODUCT units specified in accepted purchase orders according to the terms of the AGREEMENT and this ATTACHMENT.

SECTION 4.0 VEECO POST DEVELOPMENT RESPONSIBILITIES

- 4.1 Veeco agrees to a) market PRODUCT units to END-USERS; b) integrate any VEECO CODE or documentation to PRODUCT units, if applicable; c) affix the Veeco logo to PRODUCT units; and d) utilize the IBM supplied Maintenance Parts for maintaining PRODUCT units.
- 4.2 Veeco will provide a non-binding sales forecast to IBM. The forecast will summarize Veeco's quantity requirements including approximate shipping release dates for each of the next twelve (12) months. Veeco will update and submit the forecast to IBM quarterly.
- 4.3 Veeco shall provide IBM with a non-binding Market Support Plan. Veeco and IBM agree to meet every three (3) months to discuss items of the Market Support Plan pertaining to the sales and the marketing of the PRODUCT, which the parties deem appropriate.
- 4.4 Veeco shall use commercially reasonable efforts to provide IBM with market feedback from the field based on customer acceptance, customer satisfaction, price/ performance directions, and industry segmentation for the Equipment. This feedback shall be summarized in writing and provided to IBM every three (3) months for review and comments.

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- 4.5 Veeco shall, at its own expense, inventory and maintain Maintenance Parts as supplied by IBM to support the PRODUCT to END-USERS.
- 4.6 Veeco shall pay IBM a one time non-recurring fee in accordance with Section 5.0 and the prices for PRODUCT units purchased by Veeco in accordance with Section 6.0.

SECTION 5.0 NON-RECURRING FEE

- d) [XXXXX XXXXXXXX XXXXXXX XXXXXXXX] upon the completion of Milestone #5;
- f) [XXX XXXXXX XXXXXXX XXXXXXX XXXXXXXXX] upon the completion of Milestone #7.
- 5.2 In the event that IBM does not meet a particular Milestone in accordance with the Implementation Schedule as set forth in Exhibit 1, Veeco and IBM agree to meet within thirty (30) days to determine the cause of failure in meeting the Milestone.

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As a result of such meeting, IBM will establish an action plan within thirty (30) days identifying specific actions needed to meet the Milestone, and the parties may negotiate a new Implementation Schedule, if required.

If, after the actions described above are taken, and IBM is unable to complete a Milestone in its entirety, IBM shall so notify Veeco in writing. Upon such notification, the parties agree to negotiate in good faith a monetary settlement, only to the extent IBM is the sole cause of such failure. Veeco's sole and exclusive remedy shall be to recover monies from IBM as full payment and final settlement and satisfaction of any and all claims under this Section 5.0. Such settlement shall not be greater than the monies that have been paid to IBM by Veeco under this ATTACHMENT.

SECTION 6.0 PRICE

The price for PRODUCT units are as follows:

PRODUCT DESCRIPTION	QUANTITY PER ORDER	PRICE PER UNIT
STANDARD CONFIGURATION	[x x xx]	[x xxxxxxx]
STANDARD CONFIGURATION PLUS THE CD CONFIGURATION	[x x xx]	[x xxxxxxx]

- 6.1 Any requests by Veeco for customization, engineering and special deviations from the then-current specifications as identified in Exhibit 1 will be negotiated and written under a separate agreement.
- 6.2 IBM agrees to maintain the prices indicated in Section 5.0 above for the first twelve (12) months of this ATTACHMENT. Thereafter, IBM reserves the right to increase prices. In the event of a price increase, IBM shall issue a written notice which shall become effective ninety (90) days thereafter. However, such increase will not apply to Purchase Orders accepted by IBM prior to the date of notice of a price increase.

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- 6.3 The parties shall use commercially reasonable efforts to agree on and document through written amendment to this ATTACHMENT those Maintenance Parts and Options applicable to the PRODUCT units IBM sells to Veeco for so long as IBM makes such parts available.
- 6.4 In the event that Veeco does not meet its payment obligations as defined herein, and provided IBM has performed all of its obligations under this ATTACHMENT, IBM may require Veeco to establish and provide to IBM a letter of credit in favor of IBM, under the same terms and conditions of the letter of credit as identified in Exhibit 2 to the AGREEMENT within thirty (30) days from written notice to Veeco by IBM. Failure by Veeco to provide such letter of credit to IBM in the time stated above shall be deemed a material breach of this ATTACHMENT.

SECTION 7.0 TERMS AND TERMINATION

- 7.1 The Term of this ATTACHMENT shall commence on the date signed by the last signatory hereto, and shall expire three (3) years following the PRODUCT Completion Date, unless terminated in accordance with Section 17.3 of the AGREEMENT or extended or renewed in accordance with Section 7.2, below.
- 7.2 Unless this ATTACHMENT is terminated in accordance with Section 17.0 of the AGREEMENT, Veeco shall have the right to exercise a two (2) year term extension option. Veeco shall notify IBM of its intent to exercise this renewal option a minimum of six (6) months prior to the expiration date of this ATTACHMENT. If Veeco does not notify IBM of its desire to extend the term of this ATTACHMENT within the aforementioned six (6) month time period, then Veeco will be deemed to have waived its right to extend the term of this ATTACHMENT.

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SECTION 8.0 LEAD TIME AND AVAILABILITY

- 8.1 The lead time for delivery on initial orders (i.e. orders placed for the first five (5) PRODUCT units) is six (6) months after receipt of order. The lead time for delivery on all subsequent orders is four
- (4) to six (6) months after receipt of order.
- 8.2 Orders for PRODUCT units by Veeco will be filled by IBM based on the priority by which such orders are received by IBM. IBM agrees to negotiate in good faith with Veeco in the event Veeco requests a change to an established delivery schedule.

SECTION 9.0 ORDER QUANTITY AND PROCESS

- 9.1 Veeco agrees to order PRODUCT units in minimum lot quantities of five
- (5) units. Veeco agrees to provide IBM with a ten percent (10%) down payment with each purchase order on all PRODUCT units, provided, however, that in no event shall Veeco be required to maintain an aggregate down payment with respect to PRODUCT units ordered, in excess of one hundred sixty thousand dollars (\$160,000). The balance is due and payable upon acceptance of each PRODUCT unit.
- 9.2 IBM will supply a monthly production plan and summary describing raw materials, subassemblies, and finished goods inventory relative to Veeco open orders.
- 9.3 Veeco agrees to provide IBM a Purchase Order for a quantity equal to or greater than [XXXXXX XXXX] PRODUCT units at the time of execution of this ATTACHMENT and agrees to purchase such units in accordance with the terms of this ATTACHMENT (the "Initial Purchase Order"). Veeco agrees to accept PRODUCT units from the Initial Purchase Order in accordance with the following: a) [XXXXX XXX] prototype PRODUCT units as set forth in the Implementation Schedule; b) [XXXX XXX] PRODUCT units three (3) months after the First Review Period (the PRODUCT Completion Date); and c) [XXX XXX] PRODUCT units four (4) months after the First Review Period or Dec. 31, 1997, whichever comes first. Notwithstanding any other provision in this ATTACHMENT,

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if Veeco fails to provide a Purchase Order to IBM as stated herein, the parties agree that such failure will constitute default by Veeco and IBM may terminate this ATTACHMENT pursuant to Section 17.0 of the AGREEMENT.

9.4 Purchase orders issued by Veeco for PRODUCTS listed in this ATTACHMENT shall be sent to the following address:

IBM Corporation 1798 NW 40th St. Internal Zip 2105 Boca Raton, FL 33429

SECTION 10.0 PAYMENT TERMS

10.1 Notwithstanding Section 10.1 of the Agreement, IBM shall invoice Veeco for all PRODUCT units under this ATTACHMENT upon the acceptance date of such PRODUCT units, in accordance with Section 14.0, herein. Payment shall be due and payable in U.S. currency within sixty

(60) days of the acceptance date of such PRODUCTS.

SECTION 11.0 TITLE AND RISK OF LOSS

- 11.1 Notwithstanding Section 7.0 of the AGREEMENT, title to each PRODUCT unit and risk of loss or damage to each PRODUCT unit shall pass to Veeco upon Veeco's acceptance of each PRODUCT unit from IBM in accordance with Section 14.0, herein.
- 11.2 IBM agrees to use commercially reasonable efforts to keep accepted PRODUCT units awaiting shipment at MTC's Boca Raton facility for a period not to exceed on hundred twenty (120) days from the time of Veeco's acceptance of each PRODUCT unit, at no charge to Veeco.
- 11.3 Notwithstanding the above, if during IBM's possession of the PRODUCT units, and in the exercise of its sole discretion IBM requires the PRODUCT units to be moved to another location, IBM shall notify Veeco in writing thirty (30) days prior to moving the PRODUCT units. In that event, Veeco shall pay all costs related to such move including but not limited to transportation and

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shall be obligated to pay for all storage fees associated with such move.

SECTION 12.0 MANAGING COORDINATORS

- 12.1 The Managing Coordinator for IBM is Mike Servedio.
- 12.2 The Managing Coordinator for Veeco is Tim Stultz.

SECTION 13.0 SHIPMENT

- 13.1 IBM shall ship PRODUCT units in this ATTACHMENT only to Veeco's designated domestic U.S. location. The parties may arrange for IBM to ship to other Veeco designated locations, upon mutual agreement.
- 13.2 Shipment shall be made F.O.B. IBM Plant of Manufacture and/or IBM Distribution Point.

SECTION 14.0 ACCEPTANCE CRITERIA

14.1 The PRODUCT units furnished hereunder shall be subject to final review and acceptance ("TEST") by Veeco at MTC's Boca Raton, Florida facility. IBM shall provide Veeco written notification of the readiness of PRODUCT units for TEST purposes. Veeco shall undertake its TEST of such PRODUCT units within five (5) days of its receipt of the written notification from IBM. The TEST of the PRODUCT units by Veeco shall be made in accordance with a mutually agreed to written test procedure which shall be made part hereof.

In the event Veeco discovers any deficiencies as a result of its TEST of a PRODUCT unit, it shall notify IBM of such deficiencies within five (5) days of the TEST. IBM will use commercially reasonable efforts to correct all such deficiencies, within ten (10) days of Veeco's written notification.

14.2 In the event Veeco takes no action or if no written notification to the contrary is received by IBM within thirty (30) days from written notification of the readiness of PRODUCT units for Veeco TEST purposes, such PRODUCT units shall be deemed accepted and payment

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shall be due and payable for each PRODUCT unit in accordance with Section 10.0, herein.

SECTION 15.0 WARRANTY

- 15.1 IBM warrants the PRODUCT units under this ATTACHMENT to be free from defects in materials and workmanship for the warranty period as provided below. Should the PRODUCT units not perform as warranted, IBM agrees to provide the following warranty service:
- a) IBM agrees to provide replacement parts for warranty repairs at no charge for a period of one (1) year from the date of delivery to an END-USER, provided that the PRODUCT unit is not in use while in Veeco's possession.
- b) IBM agrees to provide labor at no charge for a period of ninety
- (90) days from the date of delivery to an END-USER, provided that the PRODUCT unit is not to use while in Veeco's possession.

The parties agree that in the event the PRODUCT unit is in use while in Veeco's possession, the warranty period shall begin from the delivery date of such PRODUCT units to Veeco.

Veeco agrees to provide written notification to IBM within ten (10) days of shipment to an END-USER location.

- 15.2 During the warranty period, IBM shall provide the following levels of support at a mutually agreed to time and place:
- a) IBM will provide phone service support related to PRODUCT problem determination and resolution at no charge to Veeco, during IBM normal business hours EST at (800) 831-5009. Such support shall be provided to Veeco's service personnel after Veeco has spent a minimum of two (2) hours of diagnosis and repair at an END USER location, and has failed to correct the problem.

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b) IBM may provide a service representative, if requested by Veeco, at the END USER location if the PRODUCT unit is deemed irreparable through phone assistance.

15.3 Any PRODUCT unit that is deemed irreparable at the END USER(S) location may be returned, transportation billed to IBM, to the location IBM designates. Veeco shall pay any amounts due for insurance and taxes as a result of a returned PRODUCT unit. Risk of loss or damage shall pass to IBM upon delivery by Veeco to IBM's designated carrier. IBM shall, at its option, repair or replace in a timely manner, any PRODUCT unit returned to IBM. If IBM repairs or replaces the PRODUCT unit, IBM will ship the PRODUCT unit back to Veeco, transportation prepaid by IBM. Risk of loss or damage shall pass to Veeco upon delivery by IBM to Veeco's designated carrier. Any replacement PRODUCT unit found to be defective by IBM will carry the balance of the remaining warranty. Title to the replaced PRODUCT unit(s) shall revert back to IBM.

Should any PRODUCT unit deemed irreparable by Veeco be found by IBM to be without defect as determined by IBM PRODUCT specifications, IBM will bill Veeco for IBM's inspection time using IBM's then applicable hourly rates. Veeco agrees to pay IBM for such billed services upon written notification by IBM that the PRODUCT unit deemed unrepairable by Veeco was not in fact defective.

EXCEPT FOR THE WARRANTIES IN THIS SECTION 15.0, IBM DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

SECTION 16.0 FIELD SUPPORT

16.1 IBM will provide service training, which shall consist of PRODUCT assembly, debug, test, system construction and the like, to Veeco technicians for no charge at the MTC in Boca Raton, Florida for a period of up to three (3) months. This training shall begin at a time mutually agreed to by the parties. Veeco will be

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responsible for its employee's travel and living expenses. Thereafter, IBM may provide Veeco with additional training for a mutually agreed upon price.

- 16.2 Veeco agrees to service the PRODUCT units worldwide and to provide operation and service training to PRODUCT END USER(S) and service support, all at its applicable service rates.
- 16.3 Veeco agrees to provide service to internal IBM PRODUCT END USER(S), at Veeco's applicable service rates.

SECTION 17.0 SALES AND MARKETING

- 17.1 Veeco agrees to market and sell the PRODUCT units to the Microelectronic and Data Storage industries, as defined in Section 18.1, on a worldwide basis.
- 17.2 Veeco agrees to assign account management teams and regional sales and service engineers in support of the PRODUCT.
- 17.3 IBM agrees to provide marketing training consisting of PRODUCT operation, and applications to Veeco sales personnel at a mutually agreed to time at the MTC for a period of up to two (2) weeks.
- 17.4 IBM agrees to provide Veeco with the support of a PRODUCT technologist for an END USERS at a mutually agreed to time and place following the Product Completion Date, at IBM's applicable service rates.
- 17.5 IBM reserves the right to accompany Veeco on field sales trips and trade shows, at IBM's sole cost and expense.
- 17.6 During the term of this ATTACHMENT Veeco and IBM shall use commercially reasonable efforts to meet and discuss (at least twice a year) at a mutually agreeable time and place the potential of cooperative development and manufacturing as it relates to the PRODUCT.

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SECTION 18.0 EXCLUSIVITY AND EXCLUSIVITY PERIODS

18.1 IBM grants to Veeco the exclusive right to market and support the PRODUCT units manufactured by IBM on a worldwide basis only to the Microelectronics and Data Storage Industries. For purposes of this ATTACHMENT, the "Microelectronics Industry" shall include any part of a company laboratory, university or institution that is engaged in research, development, production or repair, (and the manufacture of equipment to produce or repair,) of semiconductors, semiconductor materials, semiconductor manufacturing equipment, semiconductor packaging, semiconductor packaging materials, multichip modules, multichip module materials, electronic displays, electronic display materials, electronic display manufacturing equipment, passive electronic components and passive electronic component materials, mass memory products, materials and equipment, and flat panel products, materials and equipment. The Microelectronics Industry shall not include IBM or any of its SUBSIDIARIES.

For purposes of this ATTACHMENT, the "Data Storage Industry" shall include any part of a company, laboratory, university or institution that is engaged in research, development, production or repair of devices, and the manufacture of equipment to produce products and/or materials, and the components and materials of devices, used to store electronic data, including, but not limited to: disk drives, tape drives, solid-state memory, ferro-electric memory, CD storage devices, magneto-optical storage devices, optical storage devices and the equipment used to manufacture such devices. The Data Storage Industry shall not include IBM or any of its SUBSIDIARIES.

To maintain such exclusive rights, Veeco must pay IBM in each calendar year an amount that equals or exceeds the amounts due for the sale of the Minimum Annual Number of Units (quantity per year times applicable price pursuant to Section 5.0), unless the parties mutually agree in writing to change the formula. In the event IBM is unable to deliver PRODUCT units in the quantities contained in Veeco purchase orders which

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have been accepted by IBM, the Minimum Annual Number of Units requirement for such calendar year will be the lesser of the quantities indicated below or the quantity actually received by Veeco in such calendar year.

Year	Minimum	Annual	Number	of	Units*
1997		[XX]			
1998		[xx]			

^{*}This quantity shall not include any sales to IBM or its Subsidiaries.

The Minimum Annual Number of Units for 1998 shall not include those PRODUCT units from the previous year which the parties agree will be purchased by Veeco in accordance with Section 9.3 of this ATTACHMENT. The Minimum Annual Number of Units for 1999 and subsequent years shall be established and mutually agreed to by the parties prior to the start of a new calendar year, unless the parties agree in writing to an extension. In the event the parties have not agreed in writing to an extension or have not agreed to a new Minimum Annual Number of Units, the Minimum Annual Number of Units for the next year shall automatically be increased by twenty percent (20%) over the previous year's Minimum Annual Number of Units. The parties agree that three

- (3) years after the commencement of the Minimum Annual Number of Units level, the automatic increase from the previous year shall cease, and the Minimum Annual Number of Units for each subsequent year shall be the average of the Minimum Annual Number of Units of the (3) three preceding years.
- 18.2 In the event that Veeco has not purchased fifty percent (50%) of the Minimum Annual Number of Units as of the end of the first (6) months of a given calendar year, Veeco and IBM agree to meet within fifteen
- (15) days to determine the cause of failure to achieve the fifty percent (50%) of the Minimum Annual Number of Units during such six (6) month period. It is understood that if the cause of sales falling below the minimum can be related to deficiencies in sales and marketing

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efforts and/or deficient PRODUCT performance or delinquent PRODUCT features Veeco and IBM will establish an action plan within fifteen (15) days identifying specific sales, marketing and/or engineering actions to improve sales. Veeco and IBM shall then meet monthly to monitor progress against the action items of this plan and assess their effectiveness at enabling Veeco to meet the Minimum Annual Number of Units for the subject year. If at the end of six (6) months Veeco has not met the Minimum Annual Number of Units for the subject year and if IBM determines in its sole discretion that such failure is due to a Veeco sales and/or marketing problem, then the Veeco exclusive marketing and servicing right shall revert to a non-exclusive right.

18.3 In the event that Veeco has purchased at least fifty percent (50%) of the Minimum Annual Number of Units as of the end of the first (6) months of a given calendar year, and fails to meet the Minimum Annual Number of Units during a given calendar year, Veeco and IBM agree to meet within fifteen (15) days to determine the cause of failure to achieve the Minimum Annual Number of Units during such given calendar year. It is understood that if the cause of sales falling below the minimum can be related to deficiencies in sales and marketing efforts, Veeco may pay IBM the difference to meet the Minimum Annual Number of Units for such given calendar year to maintain such exclusive rights or Veeco's exclusive marketing and servicing right shall revert to a non-exclusive right.

It is understood that if the cause of sales falling below the minimum is primarily caused by deficiencies in PRODUCT performance or delinquent PRODUCT features, Veeco's exclusive rights shall continue and the actual Minimum Annual Number of Units for such given calendar year shall be deemed satisfied.

18.4 If Veeco loses its exclusive right to market and service the PRODUCT units as provided in this Section 18.0, Veeco may continue to market and service the PRODUCT units only on a non-exclusive basis until the termination of this ATTACHMENT.

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- 18.5 Notwithstanding any other provision of this ATTACHMENT, IBM shall have the full freedom and flexibility to market, distribute, sell or service the PRODUCT directly or indirectly to any customers for use outside of the Microelectronics and the Data Storage Industries, as defined in Section 18.1.
- 18.6 During the period Veeco retains the exclusive right to market the PRODUCT as provided in this ATTACHMENT, IBM will not authorize third parties to service the PRODUCT units purchased by Veeco customers unless Veeco is unable or unwilling to adequately fulfill such customers requirements.
- 18.7 Veeco agrees that during the period Veeco has the exclusive right to market the PRODUCT units, Veeco and its and their Subsidiaries will devote best efforts to the sale of the PRODUCT units and agree not to sell, lease or distribute any other scanning probe microscopy technology products to any third party.
- 18.8 Veeco's exclusive or non-exclusive right to market the CD AFM option as identified and described in Exhibit 1 extends only as embodied in the units of PRODUCT. Any future implementation of CD AFM technology, in whole or in part, if any, shall be negotiated and mutually agreed to under a separate agreement, such terms and conditions to be negotiated and mutually agreed to by the parties.

SECTION 19.0 INTELLECTUAL PROPERTY

19.1 MATERIALS are those created during the term of this ATTACHMENT, or otherwise (such as those that preexist), in which we or third parties have all right, title and interest (including ownership of copyright).

IBM grants Veeco a nonexclusive, worldwide, paid-up license to execute, reproduce, display, perform, distribute (internally) copies of, and prepare derivative works based on such MATERIALS.

19.2 IBM agrees to provide to Veeco IBM SOURCE CODE under the following license conditions:

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IBM hereby grants to Veeco a worldwide, nonexclusive, non-transferable, copyright license to execute, reproduce, display, perform and prepare DERIVATIVE WORKS of, the IBM SOURCE CODE described in Section 19.4 herein for internal use, only to make modifications and enhancements on Veeco's own products, other than scanning probe microscopy products. Veeco will not authorize others to do any of the foregoing except as provided in Section 19.3 below. Veeco will not distribute any or all portions of the IBM SOURCE CODE or its DERIVATIVE WORKS of the IBM SOURCE CODE to any third party.

19.3 The IBM SOURCE CODE provided by IBM to Veeco under this Section will be subject to the confidentiality provisions of the Agreement for Exchange of Confidential Information ("AECI") No. B93417, and any amendments or superseding versions thereof.

In the event of any inconsistency or conflict between the terms of the AECI or this ATTACHMENT, the terms of this ATTACHMENT shall prevail.

Veeco agrees that the IBM SOURCE CODE contains confidential and proprietary information of IBM developed by IBM at substantial cost and expense and shall be treated as IBM confidential information. Veeco shall protect the IBM SOURCE CODE for IBM. Veeco shall employ reasonable precautions, at least as protective as the precautions it uses to protect its own confidential information, to protect the IBM SOURCE CODE from unauthorized copying, use, or disclosure and use the IBM SOURCE CODE solely for the purpose for which it was disclosed or otherwise for the benefit of IBM. Veeco shall allow access to the IBM SOURCE CODE only to employees and contractors (under written agreement) of Veeco who are performing services for Veeco related to the purposes of this ATTACHMENT, who have a need to know information contained in the IBM SOURCE CODE, and upon whom Veeco has imposed a legal duty to protect the IBM SOURCE CODE from unauthorized copying, use, or disclosure.

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Veeco agrees to use its best efforts to prevent, prosecute, and enjoin any actual or threatened unauthorized copying, use, or disclosure of the IBM SOURCE CODE.

Veeco may disclose the IBM SOURCE CODE to the extent required by law. However Veeco will give IBM prompt notice to allow IBM a reasonable opportunity to obtain a protective order.

19.4 IBM will disclose and deliver one copy of the IBM SOURCE CODE to Veeco within thirty (30) days of Veeco's written request. The IBM SOURCE CODE shall contain only the code that enables the graphical user interface to operate and run at the personal computer level. The IBM SOURCE CODE does not include the CD serve SOURCE CODE nor any third party SOURCE CODE.

19.5 The IBM SOURCE CODE is provided "AS IS" without any warranty or indemnification.

19.6 IBM will not provide any technical support, maintenance modifications or enhancements to Veeco for the IBM SOURCE CODE.

19.7 INVENTIONS made by Veeco's personnel are Veeco's property. Veeco may grant IBM a license under all patents issuing on and patent applications filed on these INVENTIONS under a separate agreement with terms and conditions provided by Veeco.

19.8 INVENTIONS made by MTC's personnel are IBM's property. IBM may grant Veeco a license under all patents issuing on and patent applications filed on these INVENTIONS under a separate agreement with terms and conditions provided by IBM.

Both parties will jointly own all JOINT INVENTIONS and resulting patents. Either party may license others under JOINT INVENTIONS and patent applications filed on or patents issuing from them, without accounting to or consent from the other.

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When both parties equally share the costs associated with seeking patent protection, IBM will prepare the patent application, unless agreed to otherwise. IBM will advise Veeco of the status of the application and will consider Veeco's proposed comments and suggestions about it.

If either party decides not to share equally in the expenses of

seeking patent protection in a JOINT INVENTION, the other party may do so at its own expense. The paying party will control the obtaining of, and maintenance of, such patents. The paying party may request the assistance of the non-paying party in obtaining patent protection. The non-paying party will provide reasonable assistance and have required documents signed at the expense of the paying party. The non-paying party retains ownership in JOINT INVENTIONS and resulting patents.

19.9 In the event of termination of this ATTACHMENT 2 in accordance with Section 17.0 of the AGREEMENT, Veeco grants to IBM, its Subsidiaries, and its and their successors, assigns, and customers, direct and indirect (including, but not limited to, dealers, distributors and agents), a worldwide, irrevocable, nonexclusive, nontransferable, and paid-up license under any patent or patent applications owned or licensable by Veeco (to the extent any portion of such patent or patent applications is incorporated and made part of the PRODUCT as defined under this ATTACHMENT and has occurred during the term of this ATTACHMENT) to make, have made, use, have used, lease, sell and/or otherwise transfer the PRODUCT, including DERIVATIVE WORKS thereof, either alone or in combination with equipment or software or both.

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SECTION 20.0 LICENCE OPTIONS

20.1 In the event that IBM: a) withdraws PRODUCT units from manufacturing; or b) limits the quantity of available PRODUCTS permanently; or c) fails to maintain ongoing engineering support of the PRODUCT, while Veeco continues to maintain its exclusive marketing rights, IBM shall offer Veeco: i) a non-exclusive right and licence to those patents and copyrights (including the IBM SOURCE CODE as defined in Section 19.4) owned by IBM which are used to manufacture the PRODUCT units; ii) an exclusive right to manufacture the PRODUCT (to the extent IBM can convey such rights) for customers in the Microelectronics and Data Storage Industries; and iii) an exclusive technology transfer, to manufacture the PRODUCT, including prints, build procedures, documentation and consulting services, in whole or in part, for customers in the Microelectronics and Data Storage Industries. The rights and licenses in (i), (ii) and (iii) above shall be provided by IBM under a separate agreement containing IBM's then applicable terms and conditions. Veeco shall provide IBM with written acceptance of such offer within sixty (60) days of IBM's offer. Should Veeco not accept IBM's offer in writing within the above described sixty (60) days, such offer shall be deemed rejected.

20.2 IBM shall use commercially reasonable efforts to provide Veeco written notice within one hundred eighty (180) days of the occurrence of any one of the events described in the first paragraph of 20.1 above.

SECTION 21.0 PATENTS AND COPYRIGHTS

21.1 IBM will, at IBM's expense, defend Veeco against any claim that PRODUCT unit(s) supplied hereunder infringe a patent or copyright in any country that IBM conducts business and IBM will pay resulting costs, damages and attorney's fees finally awarded

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by a court or which are paid in settlement of such claim.

- 21.2 To qualify for such defense and payment, Veeco must:
- a) give IBM prompt written notice of any such claim, provided that failure to give such notice shall not relieve IBM of any obligation hereunder except to the extent its obligation to i) defend such claim and/or ii) pay any resulting costs, damages and attorney's fees, are actually prejudiced thereby; and
- b) allow IBM to control the defense, and fully cooperate with IBM in the defense and all related settlement negotiations.
- 21.3 IBM's obligation under this Section is conditioned on Veeco's agreement that if PRODUCT unit(s), or the operation thereof, become, or in IBM's opinion are likely to become, the subject of such a claim, Veeco will permit IBM, at its option and expense, either to procure the right for Veeco to continue marketing and using PRODUCT unit(s) or to replace or modify them so that they become non-infringing; and, if neither of the foregoing alternatives is available on terms which are reasonable in IBM's judgement, upon IBM's written request, Veeco will return such PRODUCT unit(s) to IBM. IBM agrees to grant Veeco a refund equal to the price paid to IBM by Veeco for the returned unused PRODUCT unit(s).
- 21.4 IBM shall have no obligation with respect to any claim based upon Veeco's modification of PRODUCT unit(s) or the combination, operation or use of PRODUCT unit(s) with equipment, data or programs not furnished by IBM.
- 21.5 This Section states IBM's entire obligation to Veeco regarding infringement or the like.

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SECTION 22.0 GENERAL PROVISIONS

- 22.1 Veeco understands that during the term of this ATTACHMENT, the focal point for all communications between IBM and Veeco regarding the SXM 200M (Manual) shall be the MTC for IBM. The MTC shall schedule any necessary meetings and coordinate all exchanges of any materials related to the SXM 200M (Manual) between Veeco and IBM.
- 22.2 The MTC shall use commercially reasonable efforts to provide Veeco with advance copies of any MTC public announcement material limited to press releases, trade articles, trade show or conference papers, advertisements or mailings which are released by the MTC and related to the PRODUCT. Veeco shall notify the MTC of any announcement material which Veeco finds to be misleading or inaccurate. MTC will immediately cease distributing any such materials and take those steps necessary to correct such announcement material. IBM shall use commercially reasonable efforts to review such documents with Veeco prior to MTC's release of the materials.
- 22.3 During the term of this ATTACHMENT and if applicable, IBM shall offer Veeco marketing rights to other scanning probe microscopy technology products developed by the MTC under a separate agreement containing IBM's then applicable terms and conditions. Veeco shall provide IBM with written acceptance of such offer within sixty (60) days of IBM's offer. Should Veeco not accept IBM's offer in writing within the above described sixty (60) days, such offer shall be deemed rejected.
- 22.4 In the event IBM in the exercise of its sole discretion invites third parties to submit bids for the manufacturing of PRODUCTS in whole or in part, during the term of and in performance of this ATTACHMENT, IBM shall use commercially reasonable efforts to invite Veeco to submit a bid

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for such activity. IBM reserves the right to reject any and all bids if it so deems necessary.

22.5 The parties agree to use commercially reasonable efforts to follow the process for ENGINEERING CHANGES pursuant to Exhibit 5 of ATTACHMENT 1 to the AGREEMENT.

IN WITNESS WHEREOF, THE PARTIES HERETO HAVE CAUSED THIS ATTACHMENT TO BE

EXECUTED BY THEIR RESPECTIVE AUTHORIZED REPRESENTATIVES:

INTERNATIONAL BUSINESS

VEECO INSTRUMENTS, INC.

MACHINES CORPORATION

By:

*D*₁ ·

Name (Type or Print)

Title:

Name (Type or Print)

Title:

Date:

Date:

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EXHIBIT 1

PRODUCT DESCRIPTION AND SPECIFICATIONS

1.0 DESCRIPTION

IBM SXM 200M (Manual) Atomic Force Microscopes ("PRODUCT") are intended for use in laboratory and manufacturing environments. The PRODUCT is designed for single specimen use without wafer handlers and associated robotics for multiple sample handling. The PRODUCT is based in IBM's Nobel Prize winning technologies of Scanning Tunneling Microscopy and the subsequent development of Atomic Force Microscopy. The PRODUCT includes a base configuration of contact or non-contact, mode (also known as repulsive and attractive modes), and handles samples of up to 200mm in size and up to 10mm in thickness. System configurations may include optional enhancements such as MFM, CD AFM, and HD.

1.1 PRODUCT CONFIGURATION

ITEM STANDARD OPTION

Mode of operation	Non-Contact	MFM CD AFM HD
Scan correction	<pre>closed loop (linearity .2%)</pre>	closed loop (.2%)
Scan ranges	45 microns	75 microns 105 microns
Sample stage	motorized	motorized
Sample size	200 mm 10 mm thickness th	200 mm 10 mm nickness
Light optics	top view power-zoom & focus	top view power zoom & focus
Tip approach	automatic	automatic
Output	video	printers
PC Pentium	100 Min	Pentium 100 Min

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Tip exchange Two tip holders as required

included

Scan speeds Approximately as as required

fast as currently available for the relevant technologies.

IBM and Veeco agree that a device with functional requirements and an OEM sales price substantially similar to those provided below will not be considered a unit of Product under this Exhibit:

Sensing: Laser Deflection System

Modes: ID/CD/HD/MFM

Liquid Cell Lateral Force

STM

Envelope: Up to 100mm (but in no event greater than 100mm)

Sample Height: 20mm Stage: Open Loop Scanner: Open Loop

Lierarity: 5%

Optics: Top View, Fixed Mag

OEM Sales

Price: Approximately [XXXXXXX]

1.2 CD AFM

CD-AFM extends the standard attractive mode AFM technique to allow true profiling of vertical and slightly undercut feature sidewalls. It uses a special flared tip coupled with a measurement of slope and a special tracking technique to gather data on local surface position and slope. The CD-AFM system uses the local surface position and slope information in a novel servo and scanning system to move the tip along the surface in path coordinates as data is gathered.

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In general, the capabilities of CD-AFM complement the Standard Noncontact AFM technique. Complementary features include:

- * Profiling of vertical and near vertical side-walls of micron-sized features, even in the presence of small undercuts.
- * Precise measurements of side-wall angles.
- * Measurement of the width of small lines or trenches, with a precision nearing the nanometer.
- * Precise pitch measurements.
- * Visualization of hidden structures such as etch undercuts.
- * Unlike SEM, no sample preparation or vacuum load is necessary.
- * Nondestructive measurement: no breakage of wafers, no electron beam induced damage.
- * Capability to inspect both conductors and insulators with equal precision; including photoresist.
- * Accurate method of measuring slopes on feature side walls.

1.3 GRAPHICAL USER INTERFACE

IBM shall develop the graphical user interface for the PRODUCT which includes all entry and user interaction panels, as well as the rendering and treatment of imaging data and analysis software, all of which is IBM CODE.

1.4 IMPLEMENTATION SCHEDULE AND MILESTONES

The following major milestones relate to the engineering and manufacturing activities described above.

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MILESTONE # 1	MILESTONE DESCRIPTION ATTACHMENT executed	MONTH 1
2	Demonstration of sample stage mechanics	1
3	Demonstration of scanner/laser deflection sensor	2
4	Demonstration of user interface	3
5	IBM delivery of [XXXXX XXX] prototype units of PRODUCT	5
6	Prototype unit demonstration scanmode: MFM	6
7	PRODUCT acceptance	7

DEFINITION OF THE MILESTONES:

In-Line Optics

The demonstration will consist of functionally showing the optics in their final production state. The performance as outlined in the specification document will be demonstrated.

Sample Stage Mechanics

The demonstration will show the stage mechanics assembled and operational. The stage will be moved to predetermined positions, and repeatability of the locations will be observed according to the specification document.

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Scanner/Laser Deflection Sensor

The scanner integrated with the new laser deflection system will be shown. The assembly may not be in its final working state; however, the mechanics will be completely assembled.

User Interface

The user interface (screens and image display) will be demonstrated. The screens will show a first level of integration (assumes that the GUI will undergo continuous improvement). The instrument may not be able to operate in its complete and final state.

Prototype Unit Demonstration. Scan Modes: NC, HD, CD

At the completion of this milestone, the BTSXM will be capable of operating in each of the modes mentioned above. The scanner and laser deflection system will be operational. The optics will be integrated and operational. The BTSXM will essentially operate as it would in a customer beta site in the three scan modes indicated.

Prototype Unit Demonstration. Scan Modes: MFM

The instrument will be demonstrated as a Magnetic Force Microscope, in addition to the other scan modes as stated in milestone 6.

Production Available

The BTSXM will be available in early production quantity.

2.0 PRODUCT SPECIFICATIONS

1. PRODUCT DESCRIPTION

The PRODUCT is a multi-mode Scanning Probe Microscope designed for measurements of micron and submicron features to near Angstrom resolution. The system is designed to provide precision for vertical measurements at the nanometer level and roughness examination at resolutions below 1.5 Angstroms. The PRODUCT is an instrument particularly well suited for process development

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laboratories in the microelectronics and storage industries. The PRODUCT is also very competitively designed for applications requiring a very high degree of scanning resolution.

The system is intended to provide very precise measurements using four modes of scanning techniques: Non-Contact (NC) attractive mode AFM, 2 dimensional scanning (CD), High Definition (HD) intermittent contact mode and Magnetic Force Microscopy. The PRODUCT is designed to perform a broad range of measurements on a multitude of materials under a variety of scanning conditions.

The PRODUCT includes a x-y sample positioning stage, laser deflection sensor, scanning apparatus, optical microscope with CCD camera for view sample/tip positioning, drive electronics and computer hardware and software necessary to collect and analyze sample information. It is capable of measuring multiple sites on samples having diameters of up to 200mm. Measurements are made in ambient conditions without sample preparation or sectioning, in manual or automatic mode.

- 2. SCAN MODES AVAILABLE
- 2.1 STANDARD SCAN MODE:
- 2.1.1. Non-contact Attractive Mode with low amplitude vibrating probe
- 2.2 OPTIONAL SCAN MODES:
- 2.2.1. Critical Dimension sidewall profiling mode, with bimodal vibrating probe and dimensional servo system
- 2.2.2. High Definition, intermittent contact implementation with high amplitude vibrating probe
- 2.2.3. Magnetic Force Microscopy

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- 3. EQUIPMENT CONFIGURATION
- 3.1 COMPUTER HARDWARE
- 3.1.1. IBM Model PC750 with 100Mhz Pentium Processor (minimum)
- 3.1.2. Gbyte hard drive
- 3.1.3. 32 MByte of RAM
- 3.1.4. 1.44 MByte 3.5" high density diskette drive
- 3.1.5. 17 inch SVGA monitor. Optional configuration available with 21 inch monitor.
- 3.1.6. Software interface through keyboard and trackball (or mouse).
- 3.2 SOFTWARE CONTROL SYSTEM:
- 3.2.1. The operating system provides an easy to learn and use interface with intuitive pull-down menus and pop-up windows, integrated live video and graphic imaging. Icons are provided for the most common functions of the instrument.
- 3.2.2. The user interface is integrated graphically with a trackball, using a simple "point and shoot" method. The scan controls are interactive and real time, without the need to stop the scan to modify most system parameters, such as scan size, redefinition of scan center, scan speed, number of lines and points acquired. Scan speed is adaptive, based on automatic observation of topography gradients in AFM modes. Tip approach and lock are fully automatic.

The software is implemented in a multitasking Windows NT operating system environment. Two levels of user password protection are implemented. Each user has the ability to

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define, store and recall preferred parameter pre-sets. Such customized scanning environments are stored as icons that can be annotated for future use.

3.2.3. An graphical data Visualizer is integrated and able to display images in 24bit, real time display. Image colors can be changed interactively from a floating palette. Scan data is displayed in a variety of modes, such as line/wire mesh view, 2D bitmap view, 3D height map view, 3D shaded and Topographic views. Images can be rotated and illuminated thru the use of a virtual light source. Subsets can be viewed thru 3D zoom and pan functions in any of the view modes.

3.3 SAMPLE STAGE:

- 3.3.1. The sample stage consists of a hybrid mechanical and air bearing motion system, designed to be vertically and laterally rigid. The path between probe and sample is optimized for thermal and mechanical stability thru extensive use of Super-Invar NiFe.
- 3.3.2. The stage sample holder is vacuum assisted and manually loaded thru a front access door. Load/Unload selections are launched from a menu box. Icons are defined for the most common sample to tip interactive functions.

3.4 SAMPLE VIEWING

3.4.1. An optical microscope and CCD camera are located in line with the scan axis providing concurrent viewing of the probe and the sample. The resulting magnification yields a field of view range of 0.37mm x 0.5mm to 2.6mm x 3.5mm, thru a 7:1 zoom arrangement. The microscope employs optics with motorized focus and zoom. The resolution allows viewing of 1um features.

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3.4.2. A multimedia adapter is used to digitize video images and display them directly to a single 17" monitor, concurrently used as the computer interface monitor. The live image window allows images of the sample and tip to be overlaid on the computer interface monitor, eliminating the need for a second screen. A software reticule can be displayed over the video image of the sample surface to aid in accurate sample placement.

3.5 SCANNER

3.5.1. The scanner is a linear mechanical flexure with orthogonal piezo stacks in XYZ. The scanner is manufactured of SuperInvar NiFe. The design imparts motion to the probe, with fully programmable 3 axis movement and positioning capability anywhere within its range. Each of the motion axes is controlled in a closed-loop method employing highly linear capacitive sensors.

4. PERFORMANCE SPECIFICATIONS:

4.1 SAMPLE HANDLING

4.1.1. Standard positioning stage: Motorized, closed loop with linear encoders

4.1.2. Sample Size: 200mm x 200mm

4.1.3. Sample Thickness: Up to 10mm standard

4.1.4. Maximum sample weight: 1000 grams

4.1.5. Stage Positioning Resolution: .25um resolution

4.1.6. Stage Positioning Accuracy: +10um

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- 4.1.7. Stage Positioning Repeatability: 2um
- 4.1.8. On board calibration mount for optional tip calibration artifacts

4.2 SCANNER

Scan Field, X and Y [xx]um x [xx]um

Optional scan ranges: [xx]um x [xx]um

[xxx]um X [xxx]um

4.2.1. Scan Range, Z: [xx]um standard

4.2.2. Linearity: [xx]% standard for X Y and Z

4.2.3. Flatness, XY: < than [xx] Angstroms for up to [xx]um range < than [xxx] Angstroms for [xxx]um range

4.2.4. Orthogonality: [xxx] Degrees

4.3 SCAN RESOLUTION

4.3.1. Smallest Discernible Feature

Lateral: $[x \ xx]$ Angstroms in NC mode

[x xx] Angstroms laterally in HD Mode

Vertical: [x x] Angstrom (in HD Mode)

[x x] Angstroms in NC

4.3.2. Vertical Noise: $[x \ x]$ Angstrom RMS (measured in HD

mode)

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4.3.3. Bitwise Electronic Horizontal [x] Resolution Angstroms Vertical < than [xxxx] Angstrom 4.3.4. Static Precision:

Vertical dimensions: [x] nm or [xxxxx]% three sigma, whichever greater. Static precision is defined by three standard deviations of a computed measurement for at least twenty scan images, each including a minimum of four scan lines, without moving the sample.

4.3.5. Dynamic Precision:

Vertical dimensions: [x] nm or [xxxxx]% three sigma, whichever greater. Dynamic Precision is defined by three standard deviations of a computed measurement for at least twenty scan images, each including a minimum of four scan lines, for which the tip was approached to the surface prior to each scan.

5. ANALYTICAL FUNCTIONS

Several image analysis routines are provided as listed below:

Automatic measurements can be performed on an entire dataset, or any user selected portion thereof.

ANALYSIS ROUTINES: Cross section image slicing tool with cursor measurements, point to point measurements of distance, height and angle in a dialog box (in all view modes), image subset, 2D and 3D zoom, tilt correction, several levels of smoothing and sharpening matrix filters, 8 levels of Laplace filters, mean value and median filters, 1D and 2D Fast Fourier Transforms, roughness, line width, trench width, pitch computation, tilt correction, planar flatness correction, and depth analysis.

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6. DATA HANDLING AND STORAGE

6.1.1. The PRODUCT stores data directly on the fixed drive of the computer. A printer port is provided for hard copy output of these results which can be printed on both paper and transparency media. Soft copy output of such results to 3.5 inch high density disks or other storage media such as magneto optical drives and tape back up are optionally available. Commonly used LAN connections are available as an option for data access and storage.

7. PROBE TIPS

7.1.1. The PRODUCT will use integrated silicon cantilever GMTC micromechanical tops. GMTC tips are available in two types as described in the table below. The tip cantilever can be viewed optically without removing the head. Tip replacement is accomplished by replacing the tip holder containing a pre-mounted tip.

Tip Type	Part Number	Nominal Total Height	Spec'd Tip Height	Spec'd Bottom Diameter	Maximum Undercut
SC	9991	[x] um	>[xxx] um	< [xx] nm	[xxx] cone
SR	9991-2	[x] um	>[xxx] um	< [xx] nm	[xxx] cone
ST	9999-3	[x] um	>[xxx] um	< [xx] nm	[xxx] cone
CD 0.50	9992-50	[x] um	>[xxx] um	< [xxx] nm	[xxx] nm
CD 0.35	9992-35	[x] um	>[xxx] um	< [xxx] nm	[xx] nm
CD 0.25	9992-25	[x] um	>[xxx] um	< [xxx] nm	[xx] nm

8. VIBRATION ISOLATION

8.1.1. The PRODUCT incorporated a bridge to sample mechanism specifically designed to be rigid and to reduce mechanical vibrations. Standard vibration is passive, with

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kinematic damping pads located under the base of the instrument. $% \left(1\right) =\left(1\right) \left(1\right)$

An optional active vibration isolation platform is available. The optional table for the PRODUCT will feature a resonant frequency of less than 2Hz and ensure that noise levels do not exceed 1 Angstrom under normal operating conditions.

Normal conditions are defined as the following:

Frequency Range (Hz)	PRODUCT Specification
=======================================	=======================================
1 to 8	Displacement < 5.0 in
8 to 50	Velocity < 250 in/sec
50 to 200	Acceleration < 0.08 in/sec2

9. PHYSICAL SPECIFICATIONS

Approximately .6m wide by .6m deep by .3m tall

Power: 110V, 20 Amps or 220V 10 Amps, 50 or 60Hz

Safety interlocks for sample positioner and laser

CE compliant

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10. THE PRODUCT IS SHIPPED WITH THE FOLLOWING ITEMS:

QUANTITY	DESCRIPTION
2	Tip/Bimorph assemblies
2	1D tips mounted on the tip assemblies
1	Operation/Maintenance Manuals
1	Special tool kit for routine maintenance
1	Tip replacement kit
1	Final test procedure documentation
1	Spare lamps and fuses

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EXHIBIT 2

MANUALS AND DOCUMENTATION

1.0 IBM grants to Veeco a nonexclusive, non-transferable right and license to prepare and distribute to END-USERS the following Manuals, under the terms and conditions specified in this Exhibit to ATTACHMENT 2.

Manuals

1 Maintenance Procedure Manual

1 Operation Manual

1 Service Manual

- 2.0 For purposes of this Exhibit, "Veeco's Manual" means a derivative work prepared solely for the marketing and/or installation of the PRODUCT purchased under this ATTACHMENT. A 'derivative work' is a work based upon one or more preexisting works, such as a translation, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a 'derivative work'." Veeco's Manual shall not include any IBM trademark or trade name and shall not reference IBM as the source of the PRODUCT except as otherwise authorized by IBM in writing, and shall include a copyright notice identifying Veeco as the copyright holder.
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- 4.0 Veeco's license shall be effective upon the signing of ATTACHMENT 2 by both parties and, unless otherwise agreed by the parties in writing, shall continue until one (1) year after the last shipment of PRODUCT. In no event shall this

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license extend beyond three (3) years after termination of this ATTACHMENT 2.

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