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MKS Instruments, Inc.

Around the Process...

Around the World...

#### Safe Harbor Passage

This presentation may contain forward-looking statements that are made under the safe harbor provisions of the Securities Litigation Reform Act of 1995. Such statements are estimates which involve risks and uncertainties. Actual results may vary significantly from those stated in forward-looking statements. Further information regarding risks factors can be found in the Company's filings with the Securities and Exchange Commission.

Company Highlights

- - Largest supplier of gas process control instruments to semiconductor OEMs and Fabs
- - High-value, integrated product offerings for diverse markets
- - World-class global infrastructure
- - Strong financial results
- - 30 years of consecutive profitability

Strong Progress as a Newly Public Company

- -Grew 34% in 1999, compared to 19% for the semiconductor capital equipment industry
- -Increasing revenues and earnings for 8 quarters
- Significant new products launched - -
- - Completed four acquisitions:
  - Compact Instruments \_
  - \_

4

- Telvac Spectra International D.I.P. Inc. \_ \_
- -Announced acquisition of ASTeX
- -Enhanced already strong management team

# The MKS Growth Opportunity

[Diagram showing MKS growth opportunities through

- \_ Secular market growth
- \_
- Market share gains New product development & acquisition \_

and a total market of approximately ~\$5.5B]

[Graphical display of semiconductor capital equipment growth, as shown more fully in slide # 7]

[Diagram of process chamber, as shown more fully in slide # 11]

Accelerating Industry Momentum

### Semiconductor Capital Equipment Growth

[Graphical display of semiconductor capital equipment growth from 5b in 1991 to an estimated 40b in 2002]

CAGR = 33%

Source: Dataquest 07/00

Complexity Drives Growth

- Sub 0.18um device geometry

   Advanced Etch/CVD/PVD/Implant/Thermal

   New Materials for VLSI interconnects

   Copper, Barriers, Low-k/High-k Dielectrics
- Higher Productivity
   300mm, Enhanced Yield, Throughput, Uptime
- Increased Automation
   Process Monitoring, Digital Control

[Photo of semiconductor processor chip omitted]

### Supply Chain Evolution

[Diagram showing Non-Core Technology migrating from Fab to OEM to MKS]

- Technology Roadmap Driven- Preferred Supplier

Critical Process Technologies

[First part of diagram shows the following processes:

Automotive Electronics]

RTP Etch Epi Ion Implant SEM Diffusion Vacuum Processes Strip PVD CVD Clean "virtually every chip in the world is made with MKS' products"] [Second part of diagram shows applications, other than semiconductor, which are made using the same process, specifically Flat Panel Displays Micro-Machined Devices Magnetic/Optical Storage Media MRI Freeze Dried Pharmaceuticals LEDs Optical Filters & Fibers Sterilized Medical Instruments Solar Cells Lasers] [Third part of diagram shows the growing markets that use these products, specifically Telecommunications Internet Infrastructure Consumer Electronics Pharmaceutical & Medical PCs

Other Thin Film Process Markets

The explosion of communications and mobile devices is driving other rapidly growing thin film markets

- - FPD Monitor Shipments

[Graphical display of an estimated 40m units shipped in 2000 to an estimated 140m units shipped in 2005]

Source: Display Search 07/00

- - Hard Disk Drive Shipments

[Graphical display of 150m units shipped in 1998 to an estimated 400m units shipped in 2004]  $\,$ 

Source: Dataquest 07/00

- - Single Mode Fiber Productions

[Graphical display of 55m Fiber-km produced in 1999 to an estimated 244m Fiber-km in 2004]

Source: KMI 06/00

MKS Core Products Around the Process

[Diagram of process chamber including the following MKS products:

Mass-Flo(R) Gas Panel Instruments Gas Box Instruments specialty gases flowing through Mass-Flo(R)Gas Panel Instruments Materials Delivery System Process Monitor Baratron(R)Pressure Measurement Control Valve Shut-off Valve Adaptive Controller HPS(R)Vacuum Components/Subsystems]

[Diagram of process chamber described above, adding on each of the ASTeX products:

Ozone Generator Reactive Gas Generators Power Generators]

[Diagram of process chamber described above, adding on

Digital Control Network]

### Comprehensive Product Offerings

[Photos of product from the following product groups omitted]

- -Pressure Measurement and Control Products
- -Materials & Analysis Products Vacuum Products
- - D.I.P. Products
- -ASTeX Products
- Integrated Subsystems

13 Integrated Products Around the Process [Diagram of process chamber including the following process: Wafer Backside Cooling Subsystem Flow Control Baratron(R) Pressure Measurement Adaptive Controller Photo of product omitted] [Diagram of process chamber described above, changing to the following process: Digital Pressure Control Subsystem Control Valve Baratron(R) Pressure Measurement Adaptive Controller Digital Control Network Photo of product omitted] [Diagram of process chamber described above, changing to the following process: TEOS Effluent Management Subsystem Flow Control Baratron(R)Pressure Measurement Adaptive Controller Control Valve Shut-Off Valve HPS(TM)Vacuum Components/Subsystems Photo of product omitted] [Diagram of process chamber described above, changing to the following process: Integrated Plasma Source Subsystem Digital Control Network Materials Delivery System Reactive Gas Generators Photo of product omitted]

Customer & Market Diversity 4,000+ Active Customers Worldwide

Semiconductor Capital Equipment					Semiconductor Manufacturers				
[ ] [ ] [ ] [ ] [ ]	Applied Materials ASM Axcelis Gasonics Genus Hitachi	[ ] [ ] [ ] [ ] [ ]	Lam Research Novellus Semitool Silicon Valley Group Tokyo Electron ULVAC Varian	[ ] [ ] [ ] [ ] [ ] [ ]	AMD Fujitsu Hitachi Hyundai IBM Intel Micron	[ ] [ ] [ ] [ ] [ ]	Mitsubishi Motorola National Semi NEC Philips Samsung	[ ] [ ] [ ] [ ] [ ]	ST Microelectronics Siemens TI Toshiba TSMC UMC
				Spe	cialty				

	Data Storage and FPD			Gas Suppliers			Diverse Vacuum Processes		
[]	AKT	[]	NEC	[]	Air Liquide	[]	Abbott Labs	[]	GE
[]	Alcatel	[ ]	Plasma Therm	[]	Air Products	[]	Delco	[]	Johnson & Johnson
[]	Anelva	[ ]	Seagate	[]	BOC	[]	Ford	[]	OSRAM
[]	CVC	[]	Sharp	[]	Kinetics			[]	Westinghouse
[]	Komag	[ ]	Toshiba	[]	Nippon Sanso				
[]	Lucent	[ ]	Veeco	[ ]	Praxair				

Market Leader

[Graphical display showing percentage of competitor responses of awareness and preference]

[Pie chart showing total available market, served market and MKS and ASTeX shares of served market]

Served Market ~\$750M (1999) MKS ~25% Served Market ~\$1450M (1999) [Pie chart indicates MKS and ASTeX portion of market] Total Market Around the Process ~\$3.5bn (1999) ~\$5.5bn (2000) est.

~\$5.5bn (2000) est. [Pie chart indicates MKS and ASTeX portion of market]

Source: Semiconductor International / Cahners Publication, AVEM, SEMI, Company Estimates

## Unique Competitive Position

			·····	Vacuum		Sub-	2
	Pressure	F.TOM	Monitor	Comp	Gauge	systems 	Network
MKS		х	Х	Х		Х	Х
Aera		Х				X	
Edwards				Х	Х		
Helix					Х		Х
Inficon	X		Х	Х	Х		
MDC				Х			
Millipore	X	Х					
Nor-Cal				Х			
STEC		Х					
Unit		Х					
Varian				х	X		

OzoneLiquozonePowerPowerPowerGasIntegrationASTEXXXXXXXXAera				 RF	DC	 นฟั	Reactive	Sys.
Aera         Edwards         Helix         Inficon         MDC         Millipore         Nor-Cal         STEC         Unit         Varian         AE       X       X         Aera         Aaraojic       X       X         Daihen       X       X         Ebara       X       X		Ozone	Liquozone	Power	Power	Power	Gas 	Integration
Edwards	ASTeX	Х	Х	Х	Х	Х	Х	Х
Edwards       Helix       Inficon       MDC       Millipore       Nor-Cal       STEC       Onit       Varian       AE     X     X       Aalogic     X     X       Daihen     X     X       Ebara     X     X								
Helix       Inficon       MDC       Millipore       Nor-Cal       STEC       Unit       Varian       AE     X       Aalogic       X       Daihen       X	Edwards							
Inficon         MDC         Millipore         Nor-Cal         STEC         Unit         Varian         AE       X       X         Aalogic       X       X         Daihen       X       X         Ebara       X       X         X       X	Helix							
MDC         Millipore         Nor-Cal         STEC         Unit         Varian         AE       X       X         Analogic       X       X         Daihen       X       X         Ebara       X       X         X       X       X         ENI       X       X	Inficon							
Millipore       Nor-Cal       STEC       Unit       Varian       AE     X     X       Analogic     X     X       Daihen     X     X       Ebara     X     X       X     X								
Nor-Cal         STEC         Unit         Varian         AE       X       X         Analogic       X       X         Daihen       X       X         Ebara       X       X         X       X       X	Millipore							
Unit Varian AE X X X X Analogic X Daihen X X Ebara X X								
Varian   AE   AE   X   Analogic   Daihen   X	 STEC							
Varian   AE   AE   X   Analogic   Daihen   X	 Unit.							
AEXXXAnalogicXXDaihenXXEbaraXXXXXENIXX								
Analogic X   Daihen X   Ebara X   X X   X X								
Daihen X X Ebara X X ENI X X					A			
Ebara X X ENI X X								
ENI X X				X 		X 		
					Х			
Sumitomo X X	Sumitomo	Х	Х					

Source: Company estimates of market participants with share >5%.

Opportunities for Continued Consolidation

- - MKS is the largest supplier of instruments, components & subsystems in a fragmented industry
- - Drive by OEMs & end users to reduce supplier base
- - Completed four acquisitions in 2000:
  - Compact Instruments: Provides advanced technology for process gas analysis
  - Telvac: Provides vacuum product technology & European manufacturing base
  - Spectra International: Provides additional strength in process monitoring
  - D.I.P. Inc: Digital process control network products
- - Announced Acquisition of ASTeX

### Established Global Infrastructure

[Diagram of world showing locations of MKS facilities]

- 9 Manufacturing Facilities
- 22 Customer Support Centers
   Provides SG&A Leverage

Name	Title	MKS Years	Career Years
John Bertucci	Chairman, CEO	30	35
Peter Younger	President, COO	1	25
Ronald Weigner	Vice President, CFO	20	32
John Sullivan	Executive VP, Technology	25	40
William Stewart	Corporate VP/GM, Vacuum Products	13	30
Tom McNabb	Corporate VP/GM, Pressure Measurement/Control	<1	18
Robert Klimm	Corporate VP/GM, Materials Delivery/Analysis	<1	24
Leo Berlinghieri	Corporate VP, Customer Support Operations	19	24
Jerry Colella	Corporate VP, Business Operations	17	23
Donald Smith	Corporate VP, Chief Technical Officer	<1	13
Paul Blackborow	Corporate VP, Marketing	2	18
George Manning	Corporate VP, Human Resources	19	26
	Total	149	308

Financial Overview

### Financial Highlights

- - 30 years of consecutive profitability
- - Growing faster than the industry

In 1999:

- 19% growth in semiconductor equipment
  34% growth for MKS
- - Record profits in 1999
- - Global infrastructure in place with an employee base of ~1400
- - 8 quarters of increased revenue and profit

Annual Revenue & Operating Income

[Graphical display of Revenues of  $157 \rm m$  in 1995 to  $285 \rm m$  LTM and Operating Income of  $24.1 \rm m$  in 1995 to  $64.4 \rm m$  LTM]

\*Excluding amortization of intangibles

Increasing Quarterly Revenue & Net Income

[Graphical display of Revenue of 29m in Q3 '98 to 88m in Q3 '00 and Net Income of 0.1m in Q3'98 to 12.4m in Q3 '00]

#### Diversified Revenue Mix

[Pie chart showing Revenue by Industry as follows:

```
- -
          Spares & Upgrades - 14%

    Semiconductor Equipment - 54%
    Other Thin Film Processes - 10%
    Pharm., Diverse, Vacuum - 22%]
```

[Pie chart showing Revenue by Region as follows:

- Europe 10% US 69% Asia 21%] - -
- -

\*Calendar Year 1999

### Balance Sheet Highlights

(\$ Millions)	Sept. 30, 2000
Cash and Investments	\$ 59.7
Total Debt	\$ 29.8
Stockholders' Equity	\$183.9
Days Sales Outstanding	62
Inventory Turnover	4.3x

### Target Business Model

	1999	Q3 2000	Target Model
Sales	100%	100%	100%
Gross Margin	43%	46%	46-48%
R&D	7%	7%	7%
SG&A	21%	16%	14-15%
Operating Income	15%	23%	24-27%

\*Excluding amortization of intangibles

ASTeX Transaction Summary

- - Exchange of 11M shares of MKS for 14.6M shares of ASTeX
- -- Ownership - 70% of MKS Instruments - 30% ASTEX
- Exchange Ratio
   0.7669 MKSI shares per ASTX common share
- - Pooling of interests
- - Expected Closing: December 2000

	MKS	ASTeX	Combined
Revenue	\$285.2	\$150.6	\$435.8
EBIT	62.1	23.2	85.3
Pro Forma Net Income	40.3	14.7	55.0
Shareholder's Equity	183.9	162.7	346.6

- - Accretive without synergies

	MKS	ASTeX	Combined
Debt	\$ 29.8	\$ 9.3	\$ 39.1
Equity	183.9	162.7	346.6
Cash & Investments	59.7	87.9	147.6

Source: Financials as of June 30, 2000

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Slide # 31

This document and other documents have or will be filed with the United States Securities and Exchange Commission in connection with the business combination transactions referenced in this presentation. You are advised to read this and other documents filed by us with the SEC, including the registration statement on form S-4 and the joint proxy statement/prospectus (when available), because they contain or will contain important information. When this and other documents are filed with the SEC, they may be obtained free at the SEC's web site at www.sec.gov. You may also obtain for free each of these documents (when available) from MKS by directing your request to Ronald C. Weigner, Vice President and Chief Financial Officer of MKS at (978) 975-2350.