04

APPLIEDMATERIALS

TOGETHER WE **BREAK THROUGH**

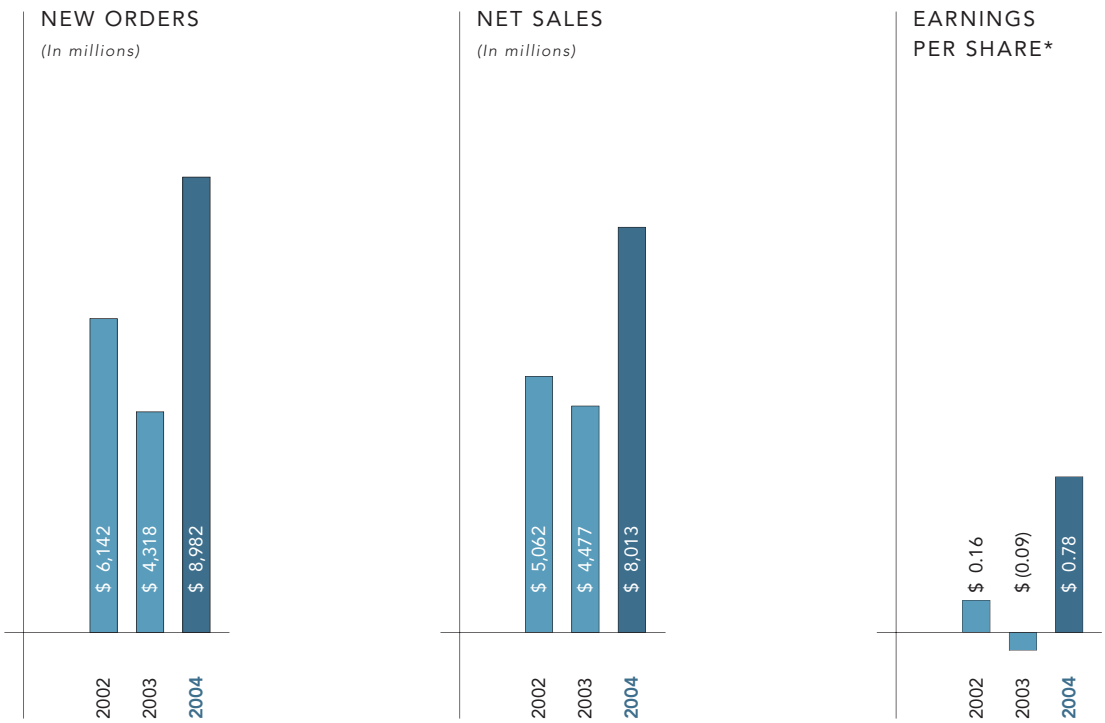
APPLIED MATERIALS®

2004 ANNUAL REPORT

FINANCIAL HIGHLIGHTS

Fiscal year	2002	2003	2004
(In thousands, except percentages and per share amounts)			
Net sales	$ 5,062,312	$ 4,477,291	**$ 8,013,053**
Net income/(loss)	$ 269,004	$ (149,147)	**$ 1,351,303**
Net income/(loss) per diluted share	$ 0.16	$ (0.09)	**$ 0.78**
Weighted average common shares and equivalents	1,701,557	1,659,557	**1,721,645**
Stockholders' equity	$ 8,019,649	$ 8,068,034	**$ 9,262,027**
Return on equity*	3.4%	(1.9)%	**15.6%**
Order backlog	$ 3,190,459	$ 2,495,115	**$ 3,368,382**

* *Based on net income.*



CORPORATE PROFILE

Applied Materials is the largest supplier of manufacturing systems and related services to the global semiconductor industry. The Company supplies wafer fabrication systems that perform atomic layer deposition (ALD), chemical vapor deposition (CVD), physical vapor deposition (PVD), epitaxial and polysilicon deposition, rapid thermal processing (RTP), plasma etching, electrochemical plating (ECP), ion implantation, metrology, inspection, chemical mechanical polishing (CMP) and wafer wet cleaning; maskmaking equipment; CVD and test systems used to produce flat panel displays (FPDs); and manufacturing execution system (MES) software for semiconductor factory automation. Applied's service products include equipment maintenance, materials supply and management, parts refurbishment, equipment remanufacturing, yield enhancement, and other solutions for increasing semiconductor manufacturing productivity.

TO OUR STOCKHOLDERS,

JAMES C. MORGAN
Chairman of the
Board of Directors

MICHAEL R. SPLINTER
President and
Chief Executive Officer

Applied Materials' performance for the 2004 fiscal year was outstanding. We made substantial gains in our agenda to grow our Company, broaden our served markets and deliver innovative new products and services.

Thanks to the great work of our employees, we developed breakthrough technologies that are changing the world by enabling new generations of more powerful and affordable semiconductor chips. We advanced our leadership position in both technology and market share, enhanced our product quality and delivered excellent financial results.

In fiscal 2004, Applied Materials' revenue accelerated to $8.01 billion, the second highest level in its history and 79 percent higher than our prior year's performance. Driven by strong semiconductor demand, new orders increased 108 percent, to $8.98 billion, as the industry continued a major retooling and invested in 300 millimeter (mm) wafer fabrication equipment while still adding 200mm production capacity. Net income for the year was $1.35 billion, or $0.78 per diluted share, operating margin was 22 percent of revenue, and net income (after tax) reached 17 percent of revenue. We enhanced our financial position by generating $1.63 billion of cash from operations and ended the year with $6.58 billion in cash and short-term investments. In addition, we expanded the stock repurchase program, buying back $650 million worth of our shares during the year. This is compared to an average annual share repurchase of approximately $200 million over the prior five years.

Building on our core strengths of a broad and deep base of technology, products and services, an advanced global distribution system, and a solid financial foundation, Applied Materials ended fiscal 2004 as a stronger competitor and a proven partner for our customers.

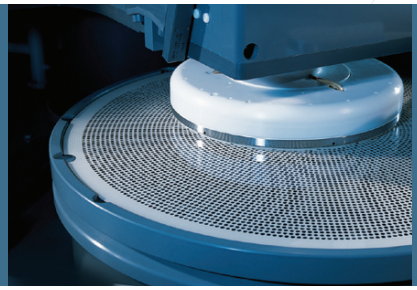
PRODUCT MOMENTUM

The semiconductor and semiconductor equipment industries continue to move at a rapid pace. The changing needs of our customers provide many opportunities for continuing our growth. Our engineers and technologists, the lifeblood of our Company, are solving the industry's most difficult technical problems. Our innovative solutions continue to drive Moore's Law, which predicts the doubling of chip capability on average every two years.

Increasing Market Share in Existing Products

While the wafer fab equipment market grew approximately 60 percent last year, our Company outpaced the industry growth rate, increasing market share in our broad product portfolio. Customers have already produced nearly a million wafers using our advanced Applied Producer Black Diamond low κ dielectric system. We achieved a key product milestone this year with the shipment of our 750th Applied Producer CVD (chemical vapor deposition) system. Also, since its introduction in 1990, we have delivered nearly 3,500 Applied Endura systems to customers worldwide, making it the industry's most successful semiconductor processing system. Our Company also made tremendous strides in etch, metrology, inspection and equipment for flat panel displays. We accomplished this growth while winning recognition from customers around the world for improved quality.


APPLIED PRODUCER CVD


APPLIED REFLEXION LK ECMP

APPLIED SEMVISION G2 FIB

Delivering Products for the Nanometer Era

This past year, the semiconductor industry moved into the realm of "nanotechnology," producing chips with features 1,000 times smaller than the diameter of a human hair. To meet these rigorous manufacturing requirements we launched ten breakthrough products, supplying an even broader set of technologies that will enable our customers' products to reach sub-65nm dimensions.

Moore's Law continues to set the direction for the semiconductor industry with transistors becoming an even more critical factor in extending chip dimensions to 65nm and below. Applied Materials has taken a leadership role in developing technologies that the industry requires to stay on track. Our recently introduced Applied Quantum X single-wafer ion implanter and Applied Vantage Radiance*Plus* systems pave the way for transistor scaling to the 65nm node. Our benchmark Applied Centura RP (reduced pressure) Epi systems, along with our new Applied Producer HARP (high aspect ratio process) systems, are being used for an exciting area in transistor performance optimization—strain engineering. Applied Materials' ability to deposit precisely engineered thin films both above and below the transistor gate area enables faster chip speed and reduces power consumption on the order of 30-70 percent. With our innovative equipment and process technologies, our Company is in the unique position of supplying the broadest range of solutions to boost semiconductor performance.

We also continued to deliver breakthrough technology for building the wiring portion of the integrated circuit. Our revolutionary Applied Reflexion LK Ecmp system introduced an innovative electro-chemical mechanical planarization capability to provide an extendible, cost-effective solution for copper/low κ manufacturing at the 65nm node and below. During the year, we launched a new generation of our acclaimed Applied Endura platform, the Applied Endura2, which sets the standard for 300mm high-volume manufacturing.

In metrology and inspection we launched two products aimed at 65nm and below device structures. The Applied SEMVision G2 FIB (focused ion beam) system brings a unique capability to boost production efficiency, yield and fab productivity, while the Applied VeritySEM metrology system improves customers' ability to control critical lithography dimensions and etch processes. For flat panel displays, we introduced breakthrough technology—a CVD system and an electron beam array tester—for manufacturing 7th generation substrates and helping our customers' rapid penetration into the large-screen flat panel TV market.

Entering New Markets

Strategic agreements with several companies and the acquisition of others have opened the door to new markets. The FlexStar system from Torrex, with its multi-wafer architecture, enhances our ability to compete in the expanding ALD (atomic layer deposition) market for advanced applications. These new ventures, and others to come, will allow us to further broaden our relationships with customers while continuing to grow and create long-term value for our stockholders.

Today, our customers seek partners to help them improve the effectiveness of their operating expenditures—a market potential of about $40 billion. The acquisition of Metron Technology positions us to meet the needs of this market by expanding our service product offerings to include fab-wide, multi-vendor capabilities for semiconductor fab operation support. Our goal is to provide increased value to customers with customized, quality solutions that combine efficiency and reliability with our equipment and process expertise, while broadening our total served market.

SOLUTIONS FOR A CHANGING INDUSTRY

The semiconductor industry continued to experience new challenges in 2004 as a number of trends converged, adding to the complexity of chipmaking. The move to larger-sized wafers is accelerating. These 300mm systems now generate around 12 percent of total semiconductor manufacturing capacity and there are approximately 40 additional 300mm factory projects underway or about to be launched. While wafers are getting bigger, dimensions on the chip continue to shrink into the realm of nanotechnology and the number of process steps required in chip manufacturing continues to rise. Leveraging these changes, smaller feature sizes deliver more capability at ever-lower costs per unit area.

Customers in Asia, the source of more than 70 percent of our revenue in fiscal 2004, are investing in new capabilities to gain the productivity advantages that 300mm systems deliver. China, which uses approximately 15 percent of the world's semiconductors but produces only 20 percent of its internal demand, is a strategic opportunity that is contributing to our growth. In fiscal 2004, we celebrated our 20th anniversary of operations in China and our business exceeded $800 million.

We were the first semiconductor equipment company to establish a presence there, and our long-standing relationships and understanding of that market have contributed to our strong position in this large and high-potential region.

INVENTING THE FUTURE WITH BREAKTHROUGH TECHNOLOGIES

As the industry begins moving to 65nm and below dimensions, these shrinking geometries and escalating performance requirements have greatly increased the number of materials used in making chips. New materials require a greater level of expertise to integrate the hundreds of manufacturing steps that are required to economically produce generations of more powerful semiconductors. Our state-of-the-art Maydan Technology Center, located in Silicon Valley, provides a unique set of capabilities to help bring our Company and customers together to advance future chipmaking technologies. We are speeding the way in which innovation in our labs is cost-effectively translated into new capabilities for customers. Research, development and engineering (RD&E) investment increased to $992 million in 2004 and it remains an unwavering commitment of our Company. Our relentless development of leading-edge technologies resulted in more than 400 U.S. patents being granted during fiscal 2004.

IMPROVING EFFICIENCY AND DELIVERING RESULTS

Careful planning, disciplined business processes and an improved operating model allowed us to increase revenue and at the same time enhance productivity. For fiscal 2004, revenue per employee jumped 108 percent to more than $661,000—a new level of efficiency. We continued to streamline order fulfillment, reducing cycle time from purchase order through manufacturing and installation by 22 percent. This is a key advantage for customers, enabling them to deliver products to market faster.

With a focus on consistently improving quality in our products, we launched an effort in 2002 to make a 2x improvement in our quality every 12 months. Our efforts paid off in 2004 with system reliability reaching a new milestone, despite the increasing complexity of our products. These continued improvements resulted in our receiving high customer satisfaction scores and numerous awards for product quality. We will continue our quality journey with a push to make another 2x improvement in the coming year.

Our solid operational achievements are accompanied by a corporate governance system that is a leader in our industry. We take our responsibility to stockholders seriously, as demonstrated by our long-standing ethics policies and Standards of Business Conduct. Consistent with Sarbanes-Oxley, the corporate reform act, we believe strong internal controls and effective business processes are essential and allow our stakeholders to have continued confidence in our Company's performance.

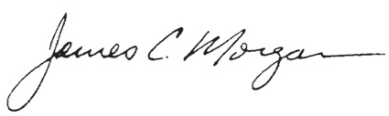
LOOKING AHEAD

New generations of chips, with added capabilities, will unlock potential markets that have yet to benefit fully from silicon technology. From biotech to new solutions for ecology, security and privacy, the potential applications of chips extend well beyond today's market-drivers of computing, communications and consumer products.

By enabling semiconductor manufacturing at lower cost, we expand the potential applications for chips and widen the market of consumers around the world who can benefit from improved access to information and the added capabilities of advanced electronic devices.

Fiscal 2005 is expected to start out slower, as the semiconductor market shows signs of softening. There will be numerous challenges to our business model. However, we remain confident that the applications for silicon technology have only begun to be tapped, and our opportunity for growth continues as we implement our strategies and broaden our business. We are proud of our performance in 2004—performance we could not have delivered without the dedication of our employees and the strong support of our customers, suppliers and stockholders. We share a commitment to growth and success. Together, we are providing the breakthrough technology and service excellence that will further advance the Nanometer Era.

MICHAEL R. SPLINTER
President and Chief Executive Officer



JAMES C. MORGAN
Chairman of the Board of Directors

STOCKHOLDERS' INFORMATION

LEGAL COUNSEL
Orrick, Herrington & Sutcliffe LLP
San Francisco, California

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM
KPMG LLP
Mountain View, California

NUMBER OF REGISTERED STOCKHOLDERS
6,734 (as of October 31, 2004)

STOCK LISTING
Applied Materials, Inc. is traded on
The NASDAQ Stock Market®
NASDAQ Symbol: AMAT

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CORPORATE WEBSITE
Additional information can be found on the Applied Materials corporate website at www.appliedmaterials.com.

This 2004 Annual Report contains forward-looking statements, including but not limited to statements regarding Applied Materials' growth opportunities, equipment and service product capabilities, competitive position, technological leadership, business strategies, strategic transactions and acquisitions, and internal controls and processes; customers' investments in manufacturing capacity and new technology; the outlook for the semiconductor and semiconductor equipment industries; and all other statements that are not historical facts. Forward-looking statements may be identified by words such as "may," "will," "should," "expect," "plan," "believe" and "continue," or the negative of these terms, and include the assumptions that underlie such statements. These statements are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements, including but not limited to: the sustainability of demand in the semiconductor and semiconductor equipment industries, which is subject to many factors, including global economic conditions, business spending, consumer confidence, demand for electronic products and semiconductors, and geopolitical uncertainties; customers' capacity requirements, including capacity utilizing the latest technology, which depend in part on customers' inventory levels relative to demand for their products; the timing, rate, amount and sustainability of capital spending for new technology, such as 300mm and sub-100 nanometer applications; the Company's ability to develop, deliver and/or support a broad range of products and services on a timely basis; the Company's successful and timely development of new markets, products, processes and services; the Company's ability to maintain effective cost controls and to timely align its cost structure with business conditions; the successful integration and performance of acquired businesses; the effectiveness of strategic transactions; changes in management; and other risks described in Applied Materials' filings with the SEC. All forward-looking statements are based on management's estimates, projections and assumptions as of the date hereof and Applied Materials assumes no obligation to update any forward-looking statements.

04 APPLIEDMATERIALS

MISSION

Applied Materials' mission is to be the leading supplier of semiconductor fabrication solutions worldwide—through innovation and enhancement of customer productivity with systems and service solutions.

GLOBAL LEADERSHIP

Values
Build a culture of achievement based on a set of core values—Close to the Customer, Mutual Trust and Respect, World-Class Performance—shared by employees around the world.

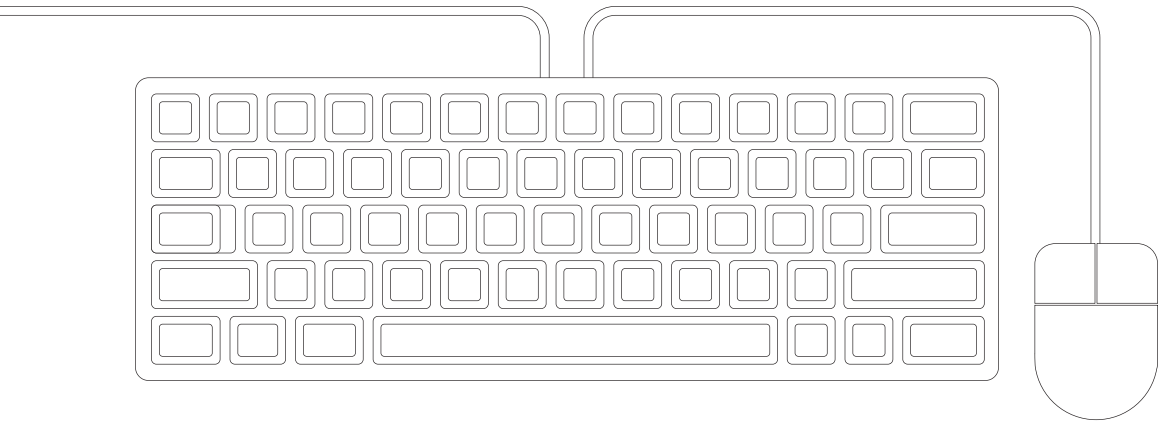
World-Class Workforce
Attract, retain and develop the best people in the world and provide a global knowledge base for collaboration and effective decision-making.

Vision of Innovation
Create a shared vision and commitment to innovation in all organizations and activities.

Market Leadership
Early leaders win. Focus on markets where it's possible to take the leadership share.

Global Presence
Control our destiny in global markets with strong local management and capabilities.

Management Excellence
Develop a capable management team that can translate vision into performance. Leverage scale and profitability to invest strategically.



Applied Materials is pleased to offer you the opportunity to electronically receive future Proxy Statements and Annual Reports over the internet.

We encourage you to take advantage of these convenient online services:

- Electronic delivery of the Proxy Statement, Annual Report and related materials
- Online proxy voting

Electing to receive these materials online saves in two important ways. It conserves natural resources and allows us to trim operational costs associated with printing and mailing.

To enroll in the online program, go to Applied Materials' website, ***www.appliedmaterials.com***. Click on "Get your proxy statement online" to request electronic enrollment. Follow the directions provided to complete your enrollment. This will remain in effect as long as your account remains active or until you cancel your enrollment.

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Chief Executive Officer
Xilinx, Inc.

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Tetsuo Iwasaki
Chairman
GPI, Inc.

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Michael R. Splinter
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President Emeritus

Franz Janker
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Chief Financial Officer

Manfred Kerschbaum
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Applied Global Services

Farhad Moghadam
Senior Vice President, General Manager
Thin Films Product Business Group
and Foundation Engineering

Mark Pinto
Chief Technology Officer and
Senior Vice President,
New Business and New Products Group

Ashok K. Sinha
Senior Vice President, General Manager
Etch Products Business Group

George Alajajian
Vice President, Operations Manager
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and Foundation Engineering

Gilad Almogy
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Thin Films Product Business Group

Seiji Sato
Vice President and Representative Director,
Applied Materials Japan

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Group Vice President, Legal Affairs
and Intellectual Property and
Corporate Secretary

Avi Tepman
Vice President, New Disruptive Products

Randhir Thakur
Group Vice President, General Manager
Front End Products Business Group

Yvonne Weatherford
Vice President, Corporate Controller

1 Audit Committee
2 Corporate Governance and Nominating Committee
3 Human Resources and Compensation Committee
4 Ethics Ombudsman
5 Lead Independent Director

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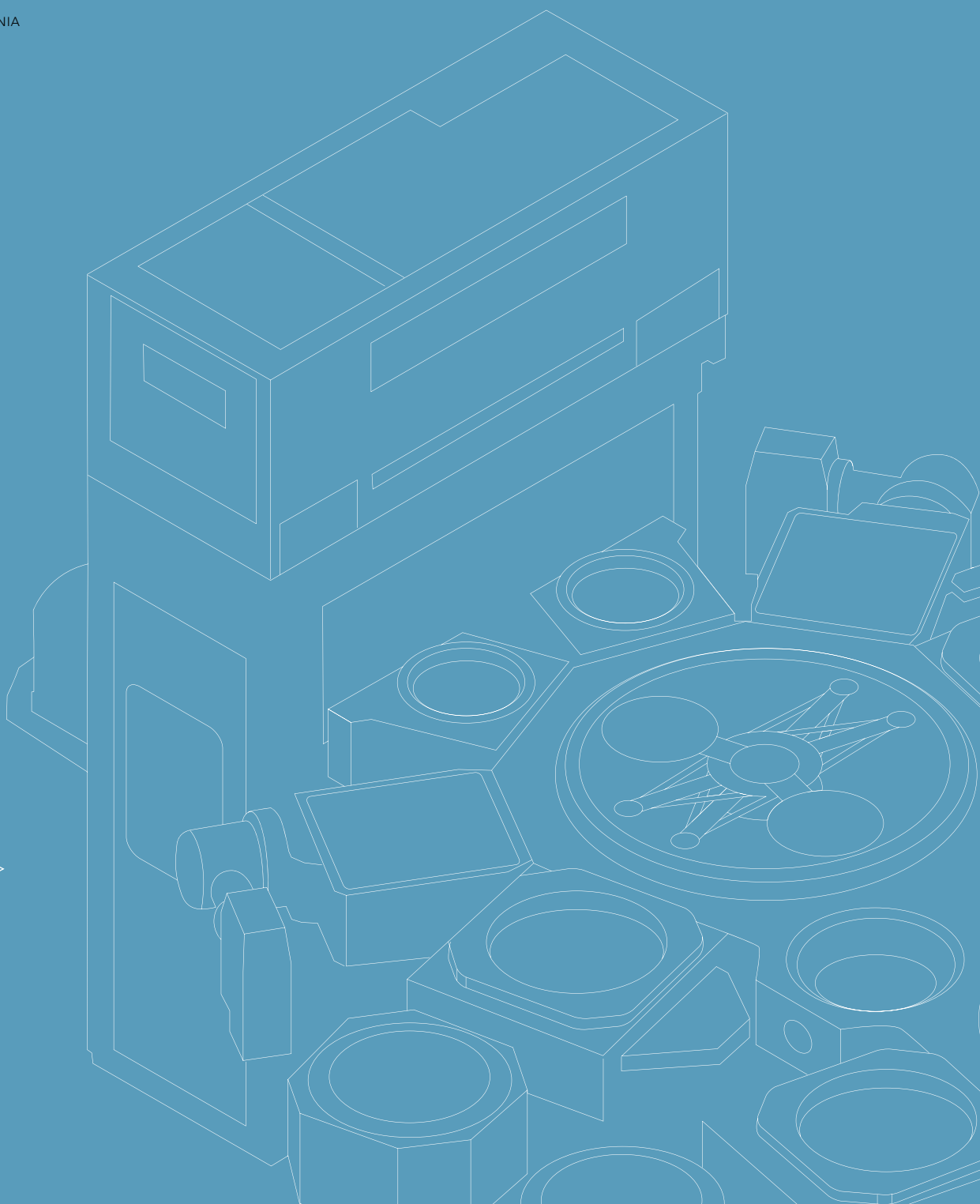

Applied Endura2 system ▷