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MTS SYSTEMS CORPORATION 2011 ANNUAL REPORT

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MTS helps researchers, engineers and manufacturers develop higher-quality products faster and at a lower cost, in industries ranging from automotive, aerospace and energy to mobile hydraulics, biomedical device development and civil engineering.

With financial stability, experienced leadership and an offering that is proving vital to the success of customers worldwide, MTS looks confidently ahead.

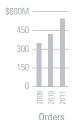
Our expertise in linear position sensing and physical simulation is fueling new innovations that improve product performance, creating meaningful differentiation and superior value in a difficult economy. As we continue to find new ways to help the world's innovators redefine what is possible, we stand well positioned to deliver for our customers, employees and shareholders, well into the future.

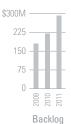


Financial Highlights 2010 2011 (Expressed in thousands, except per share and percent data) Revenue \$ 374,053 467,368 Net income \$ 18,576 ⁽¹ \$ 50,942 \$ 3.24 Earnings per share, diluted 1.14 Cash provided by operating activities 33,190 42,958 Return on sales 5.0% 10.9% Return on invested capital 8.7% 22.7% 0.85 Dividends declared per share Weighted average shares outstanding, diluted 16,347 15,739 Orders \$ 423,525 \$ 540,023 \$ 214,330 \$ 287,371 Backlog of orders at year-end

Geographic Revenue

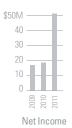
	2010	2011
Americas	33%	29%
Europe	30%	32%
Asia	37%	39%

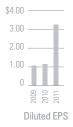






Revenue











 $^{^{(1)}}$ Includes legal settlement charge impact of \$3.9M in net income & \$0.24 earnings per share.

⁽²⁾ Cash, cash equivalents and short-term investments.

To Our Shareholders





Our history, problem-solving capacity and ability to improve customer competitiveness make us truly unique in the global marketplace. It's a fascinating time to be part of MTS.

MTS achieved record performance in several areas during 2011. We exceeded financial expectations in both our Sensors and Test businesses. We reached record levels of revenue, earnings per share and orders, resulting in near-record year-end backlog. We developed new applications for our technologies across several key markets. In addition to these operational accomplishments, we accelerated share repurchases and increased dividend payments.

In a global economy that has yet to recover, ours is an uncommon story. There are many factors that contributed to MTS' success, all of which stem from our 45-year legacy of industry leadership and stability. The expertise we bring to new markets has fostered innovation and created superior value for customers around the world.

MTS thrived throughout the year in spite of an executive transition and temporary suspension from U.S. government contracting, due to the strength of our fundamental principles and our strategies, as well as the focus and determination of our employees. Superior financial stability and consistent guidance from an experienced leadership team continued to provide our markets with leading expertise, innovation and value. Over the past several years, our leadership team has anticipated emerging trends in energy, the environment and globalization, and has made the strategic decisions necessary to position MTS where our customers would need us to be. As our 2011 financial performance demonstrates, our approach was sound and our customers confirmed the value of our solutions.



Wind Turbine Drive Train Test System

Spine Kinematics Test System

Automotive Suspension Kinematics and Compliance Test System

Our ability to apply core MTS capabilities in new ways played an equally significant role in the year's successes. Continuous innovation allowed us to increase product performance while reducing costs, expanding current markets and opening new opportunities. We developed applications that empower MTS customers to achieve meaningful differentiation in their markets through improved fuelefficiency, precision, productivity, safety and durability. For example, we continued to participate in the drive for smart mobile equipment through our Sensors business, further penetrating the high-volume mobile equipment market. In Test, we further extended MTS applications expertise to the wind energy industry, allowing us to achieve a "first-in advantage" and a commanding market share in wind testing solutions. Our position in tire testing also grew significantly during 2011, as MTS innovations helped tire manufacturers respond to new regulations and requirements while contributing to the development of more fuel-efficient vehicles.

As previously mentioned, credit for our record-setting year goes to our talented and committed employees around the world. They have worked hard to understand the challenges our customers face, and they delivered innovative new offerings that redefined what is possible for customers to achieve. MTS employees also continued to look at internal operations with an eye toward efficiency. This diligence resulted in a 4% reduction in sensors production costs for the year, and a 19% improvement in the productivity of custom test solution developments.

The energy and innovative spirit within MTS are unmistakable. As we learn from our experiences and celebrate our success in 2011, we are driven by a desire to find new ways to help our customers work smarter and outpace their competition. Our business is driven by relentless change in the global product development and industrial landscapes, and we find ourselves working hand-in-hand with customers as they innovate to establish new standards of performance. Our momentum is strong, and it will carry us forward as we meet our commitments to our customers, employees, business partners and shareholders.

Leadership Team

eft to right:

Steve Mahon, Senior Vice President General Counsel and Chief Compliance Officer

Sue Knight, Senior Vice President and Chief Financial Officer

> Joachim Hellwig, Senior Vice President Sensors

Bill Murray, Interim Chief Executive Officer and President

> Rich Bake Senior Vice Presider Tes

Kathie Staby, Vice President Human Resources and Strategy



Seismic Structural Tes

Building on the Momentum

To move ahead, MTS will do what we do best, only better. We will find new ways to apply our expertise to foster innovation and create value for customers worldwide, leveraging our position as a truly global company. While others scramble to gain a foothold in China, India, Brazil and other rapidly growing markets, we are already well established with sales, service and support infrastructure in these and other regions. As a result, our current revenue is split relatively evenly across the Americas, Asia and Europe.

We have a solid leadership team to take us forward. Although we made an important executive transition that we believe will help our culture to flourish, other strengths of our core leadership team remain intact: long-term executives with more than 180 years of collective professional experience to help us achieve our potential. Additionally, our MTS Board members possess similarly impressive business experience.

We are committed to going beyond what is merely expected for corporate governance. We are devoting the necessary resources to understand, clarify and live the values that define MTS and are vital to our success. To assist us on this path, we have also created the new position of General Counsel and Chief Compliance Officer. This role will ensure enterprise-wide adherence to our Code of Conduct and compliance to all relevant regulations, so that everyone within MTS upholds the highest levels of integrity across all our business activity worldwide.



New Sensor for Electric Drive Applications

High Temperature Material Test

Aerospace Structural Test – photo courtesy of Cessna Aircraft Company

Innovation in Action

We will transform our core capabilities into more essential solutions for more customers, in more markets. In Sensors, the establishment of a new MTS Sensors Research & Development Center in Germany will facilitate the development of new applications with greater frequency for enhancing industrial machine productivity and automating mobile hydraulic equipment. In Test, we will continue to apply industry-leading MTS expertise and technology leadership to help customers meet new standards and compete on a global scale. We will capitalize on demands created by trends in energy, the environment and globalization. We will also continue to apply our test and simulation expertise across multiple markets and regions, anticipating customer needs and developing applications to meet them.

In both our Sensors and Test businesses, our solutions have proven to be absolutely critical to our customers' competitive position. They improve performance, reduce costs and increase speed to market. Our history and ability to solve problems in many industries are unique qualifications. While we remain cautious about global economic conditions, we are coming off a record year and on an undeniable growth path. It is a fascinating time to be part of MTS, and we invite you to share in the excitement.

William V. Murray Interim President and Chief Executive Officer

Willia Vr

David J. Anderson Chairman of the Board

Sensors







" It is an exciting time for our Sensors business. We see a rising number of potential uses for our technology and expertise, where we support our customers by increasing utility of their equipment. We have made the investments necessary to deliver this superior value for more customers sooner."

> - Joachim Hellwig Senior Vice President, Sensors

Engine of Innovation

During 2011, we continued to develop many new applications for MTS sensors with our customers, resulting in improved product performance and valuable competitive advantage for more customers in more places.

One example is a solution we developed with marine engine manufacturer Volvo Penta. This customer needed a robust and accurate sensor solution for their game-changing steering systems that enable new capabilities in large boat handling. Our collaboration resulted in a solution that delivers excellent sensor performance, while also being highly reliable in a harsh environment. MTS sensors provide the position feedback that enables the system to control the motors independently, allowing the boats to be steered with extreme precision — even laterally. At a major industry tradeshow, one boat manufacturer demonstrated the power of the system by having inexperienced operators, including a 12-year-old boy, guide a large, expensive sport fishing boat into a narrow docking space.

The new MTS Sensors Research & Development Center in Ludenscheid, Germany, will help us solve more customer problems like this one with even greater frequency. As a pure research center, it will keep our applications engine running at full capacity to capitalize on our creativity and enhance our understanding of the potential uses for MTS sensors.

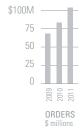
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About MTS Sensors

Highly precise and durable MTS position sensors help industrial and mobile hydraulics manufacturers automate their machine functions. Leveraging exclusive magnetostrictive technology, our sensors facilitate high levels of manufacturing speed, safety and efficiency.

As an organization, MTS Sensors delivers value through a combination of great technology products and people with the experience to help customers optimize their design decisions. In essence, we help machine builders around the world improve the productivity of their machines and reduce total cost of ownership for their customers.









Customers Served

Industrial: Steel production machinery manufacturers; plastics and rubber production machinery manufacturers; wood production machinery manufacturers; fluid power developers; gas and hydro-turbine manufacturers; fossil fuels production and exploration companies

Mobile Hydraulics: Manufacturers of construction, agricultural, mining and material handling machinery

Industries

- » Fluid power
- » Energy
- » Primary steel and metal manufacturing
- » Plastics and rubber machine manufacturing
- » Primary wood manufacturing
- » Medical products
- » Construction machinery
- » Agriculture machinery
- » Material handling machinery

MTS Advantages

- » Exclusive technologies in magnetostriction sensing
- » Unrivaled application expertise
- » Worldwide service and consultation

Geographic Revenue

	2010	2011
Americas	30%	26%
Europe	45%	50%
Asia	25%	24%

Test





"We are proactively engaging our thought-leader customers to develop the solutions they need most, advancing entire industries in the process."

> – Rich Baker Senior Vice President, Test



Expertise Applied

The MTS Test business committed itself to the advancement of several industries in 2011. Combining our thought-leadership in physical simulation and measurement with the expertise of our customers, we successfully addressed major challenges and innovated powerful new solutions together.

One example is our response to the automotive industry's quest for accident avoidance. Studies show that electronic stability control systems significantly reduce the likelihood of fatal crashes. Further improving braking distance and rollover avoidance will require gaining an unprecedented depth of understanding into tire performance.

MTS responded with a new tire test system that for the first time is capable of simulating anti-lock braking and other critical phenomena in a test lab environment. This new test system provides the realistic simulation and repeatable measurements necessary for predicting tire performance, promoting the development of safer vehicles.

Our unmatched test and simulation expertise equips us well to continue advancing markets and helping customers manage change for years to come.

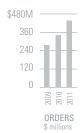
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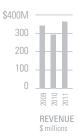


About MTS Test

Test and product development professionals rely on MTS to optimize their designs, increase testing productivity, and reduce time to market. Our solutions are globally recognized for enabling efficient test and measurement of diverse products, ranging from advanced composites and alloys, to automobiles, airplanes, bridges and buildings. MTS is behind many of the major innovations that move our world forward.

We are fortunate to call industry leaders and premier brands our customers. These researchers, developers and manufacturers look to MTS for our winning combination of technology, application knowledge and testing expertise to help them meet challenges in their industries, driven by mega-trends such as energy and globalization. Our collaboration with customers permits them to gain confidence in the performance of their products.









Customers Served

Structures: Researchers, designers and manufacturers of buildings, bridges and other public infrastructure; seismic, hurricane and tsunami researchers; wind, geothermal and nuclear energy technology developers; major commercial and military aircraft manufacturers; space exploration organizations

Materials: Advanced materials researchers; aircraft component manufacturers; orthopaedic surgeons; biomedical device developers; fossil fuels exploration companies; construction and mining companies; rock and concrete researchers

Ground Vehicles: Major passenger and commercial vehicle researchers, developers and manufacturers; recreational vehicle developers and manufacturers; rail developers and manufacturers

Industries

- » Aerospace
- » Automotive
- » Biomedical
- » Geomechanical, civil and seismic engineering
- » Materials sciences
- » Rail
- » Renewable energy

MTS Advantages

- » Application knowledge
- » Technology leadership
- » Comprehensive offerings
- » Worldwide service and consultation

Geographic Revenue

	2010	2011
Americas	33%	30%
Europe	26%	27%
Asia	41%	43%

Corporate Information

Board of Directors

David J. Anderson Chairman of the Board Retired President and CEO Executive Director and Co-Vice Chair Sauer-Danfoss Inc.

Jean-Lou Chameau President California Institute of Technology

Brendan C. Hegarty Retired Chief Executive Officer NanoMagnetics

Emily M. Liggett President and Chief Executive Officer NovaTorqu, Inc.

William V. Murray Interim Chief Executive Officer and President MTS Systems Corporation

Barb J. Samardzich Vice President, Product Development Ford of Europe Ford Motor Company

Gail P. Steinel
President and Owner
Executive Advisors

Notice of Annual Meeting

The annual meeting of shareholders will be held at 3:00 p.m. (Central Standard Time) on Wednesday, February 8, 2012, at the Company's headquarters in Eden Prairie, Minnesota. Shareholders who cannot attend the meeting are urged to exercise their right to vote by proxy via the mail, phone or internet.

Executive Management

William V. Murray Interim Chief Executive Officer and President

Arthur R. (Rich) Baker, PhD Senior Vice President Test

Joachim Hellwig Senior Vice President Sensors

Susan E. Knight Senior Vice President Chief Financial Officer

Steven G. Mahon Senior Vice President General Counsel and Chief Compliance Officer

Kathleen M. Staby Vice President Human Resources and Strategy

Corporate Officers

Louis Ainsworth Corporate Secretary

Andrew J. Cebulla Treasurer, Corporate Controller and Assistant Corporate Secretary

Investor Relations

Susan E. Knight Chief Financial Officer MTS Systems Corporation 14000 Technology Drive Eden Prairie, Minnesota 55344-2290

Telephone: 952-937-4005 Email: sue.knight@mts.com

Stock Transfer

Wells Fargo Shareowner Services Phone: 800.401.1957 www.shareowneronline.com

Dividend Reinvestment Plan

Shareholders may invest MTS dividends and purchase additional shares of MTS common stock. Shareholders may obtain further details by calling Wells Fargo Shareowner Services at 800-468-9716.

Trademarks

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Common Stock

MTS' common stock publicly trades on the NASDAQ Global Select MarketSM under the symbol MTSC.

Corporate Headquarters

MTS Systems Corporation 14000 Technology Drive Eden Prairie, Minnesota 55344-2290 Telephone: 952-937-4000 info@mts.com

North American Subsidiaries

MTS Testing Systems (Canada) Ltd.

European Subsidiaries

MTS Automotive Sensors GmbH
MTS Holdings France, SARL
MTS Sensor Technologie und
Verwaltungs - GmbH
MTS Sensor Technologie
GmbH and Co. KG
MTS Systems SAS
MTS Systems GmbH
MTS Systems Ltd.
MTS Systems Norden AB
MTS Systems srl
MTS System Switzerland GmbH

Asian Subsidiaries

MTS Japan Ltd. MTS Korea, Inc. MTS Sensors Technology K.K. MTS Systems (Hong Kong), Inc. MTS Systems (China) Co., Ltd.