

Sensata Technologies Holding N.V.

Form 10-K

January 31, 2011

[Table of Contents](#)

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2010

OR

.. **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
Commission File Number 001-34652

SENSATA TECHNOLOGIES HOLDING N.V.

(Exact Name of Registrant as Specified in Its Charter)

Edgar Filing: Sensata Technologies Holding N.V. - Form 10-K

THE NETHERLANDS
(State or other jurisdiction of

98-0641254
(I.R.S. Employer

incorporation or organization)

Identification No.)

Kolthofsingel 8, 7602 EM Almelo

The Netherlands
(Address of Principal Executive Offices, including Zip Code)

31-546-879-555
(Registrant's Telephone Number, Including Area Code)

Corporation Service Company

2711 Centerville Rd.,

Wilmington, DE 19808
(Name and Address, Including Zip Code, of Agent for Service)

(866) 403-5272
(Telephone Number of Agent for Service)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Ordinary Shares nominal value 0.01 per share	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by a check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and small reporting company in Rule 12b-2 of the Exchange Act. (check one):

Large Accelerated Filer

Accelerated Filer

Non-Accelerated Filer

Smaller Reporting Company

(Do not check if a smaller reporting company)

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Edgar Filing: Sensata Technologies Holding N.V. - Form 10-K

The aggregate market value of the registrant's ordinary shares held by non-affiliates at June 30, 2010 was approximately \$581,400,000 based on the New York Stock Exchange closing price for such shares on that date.

As of January 15, 2011, 173,536,196 ordinary shares were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Part III of this Report incorporates information from certain portions of the registrant's Definitive Proxy Statement for its Annual Meeting of Shareholders to be held on March 9, 2011.

Table of Contents**TABLE OF CONTENTS**

<u>PART I</u>		4
Item 1.	<u>Business</u>	4
Item 1A.	<u>Risk Factors</u>	20
Item 1B.	<u>Unresolved Staff Comments</u>	33
Item 2.	<u>Properties</u>	34
Item 3.	<u>Legal Proceedings</u>	34
Item 4.	<u>Submission of Matters to a Vote of Security Holders (Removed and Reserved)</u>	35
<u>PART II</u>		36
Item 5.	<u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	36
Item 6.	<u>Selected Financial Data</u>	37
Item 7.	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	40
Item 7A.	<u>Quantitative and Qualitative Disclosures About Market Risk</u>	71
Item 8.	<u>Financial Statements and Supplementary Data</u>	76
Item 9.	<u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	152
Item 9A.	<u>Controls and Procedures</u>	152
Item 9B.	<u>Other Information</u>	155
<u>PART III</u>		155
Item 10.	<u>Directors, Executive Officers and Corporate Governance</u>	155
Item 11.	<u>Executive Compensation</u>	155
Item 12.	<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	155
Item 13.	<u>Certain Relationships and Related Transactions, and Director Independence</u>	155
Item 14.	<u>Principal Accounting Fees and Services</u>	155
<u>PART IV</u>		156
Item 15.	<u>Exhibits and Financial Statement Schedules</u>	156
	<u>Signatures</u>	161

Table of Contents

Cautionary Statements Concerning Forward-Looking Statements

In addition to historical facts, this Annual Report, on Form 10-K, including any documents incorporated by reference herein, includes forward-looking statements. These forward-looking statements include statements relating to our business. In some cases, forward-looking statements may be identified by terminology such as may, will, should, expects, anticipates, believes, projects, forecasts, negative of such terms or comparable terminology. Forward-looking statements contained herein (including future cash contractual obligations), or in other statements made by us, are made based on management's expectations and beliefs concerning future events impacting us and are subject to uncertainties and other important factors relating to our operations and business environment, all of which are difficult to predict and many of which are beyond our control, that could cause our actual results to differ materially from those matters expressed or implied by forward-looking statements. We believe that the following important factors, among others (including those described in Item 1A, Risk Factors), could affect our future performance and the liquidity and value of our securities and cause our actual results to differ materially from those expressed or implied by forward-looking statements made by us or on our behalf:

continued fundamental changes in the industries in which we operate have had and could continue to have adverse effects on our businesses;

we may incur material losses and costs as a result of product liability, warranty and recall claims that may be brought against us;

our substantial indebtedness could adversely affect our financial condition and our ability to operate our business, and we may not be able to generate sufficient cash flows to meet our debt service obligations;

Bain Capital Partners, LLC controls us, and their interests may conflict with your interests; and

the other risks set forth in Item 1A, Risk Factors included elsewhere in this Annual Report on Form 10-K.

All forward-looking statements speak only as of the date of this Annual Report on Form 10-K and are expressly qualified in their entirety by the cautionary statements contained in this Annual Report on Form 10-K. We undertake no obligation to update or revise forward-looking statements which may be made to reflect events or circumstances that arise after the date made or to reflect the occurrence of unanticipated events. We urge readers to review carefully the risk factors described in this Annual Report on Form 10-K and in the other documents that we file with the Securities and Exchange Commission (SEC). You can read these documents at www.sec.gov. Additional information about us is available at our principal Internet address, www.sensata.com.

Table of Contents

PART I

ITEM 1. BUSINESS

The Company

The reporting company is Sensata Technologies Holding N.V. (Sensata Technologies Holding) and its wholly-owned subsidiaries, including Sensata Technologies Intermediate Holding B.V. and Sensata Technologies B.V. (STBV), collectively referred to as the Company, Sensata, we, our, and us . Sensata Technologies Holding is a majority-owned subsidiary of Sensata Investment Company S.C.A. (SCA). The share capital of SCA is 100% owned by entities associated with Bain Capital Partners, LLC (Bain Capital), a leading global private investment firm, its co-investors (Bain Capital and its co-investors are collectively referred to as the Sponsors) and certain members of the Company s senior management.

On April 27, 2006 (inception), investment funds associated with the Sponsors completed the acquisition of the Sensors and Controls business (S&C or the Predecessor) of Texas Instruments Incorporated (TI or Texas Instruments) for aggregate consideration of \$3.0 billion in cash and transaction fees and expenses of \$31.4 million (2006 Acquisition). The 2006 Acquisition was financed by a cash investment from the Sponsors of approximately \$985.0 million and the issuance of approximately \$2.1 billion of indebtedness.

Sensata Technologies Holding is incorporated under the laws of the Netherlands, and was purchased as a shelf company by the Sponsors in February 2006 in order to facilitate the 2006 Acquisition. Sensata Technologies Holding currently conducts its business through subsidiary companies which operate business and product development centers in the United States (U.S.), the Netherlands and Japan; and manufacturing operations in China, South Korea, Malaysia, Mexico, the Dominican Republic and the U.S. Many of these companies are the successors to businesses that have been engaged in the sensing and control business since 1931. TI first acquired an ownership interest in S&C in 1959 through a merger between TI and the former Metals and Controls Corporation.

Overview

Sensata, a global industrial technology company, is a leader in the development, manufacture and sale of sensors and controls. We produce a wide range of customized, innovative sensors and controls for mission-critical applications such as thermal circuit breakers in aircraft, pressure sensors in automotive systems, and bimetal current and temperature control devices in electric motors. We believe that we are one of the largest suppliers of sensors and controls in the majority of the key applications in which we compete and that we have developed our strong market position due to our long-standing customer relationships, technical expertise, product performance and quality and competitive cost structure. We compete in growing global market segments driven by demand for products that are safe, energy-efficient and environmentally-friendly. In addition, our long-standing position in emerging markets, including our 15-year presence in China, further enhances our growth prospects. We deliver a strong value proposition to our customers by leveraging an innovative portfolio of core technologies and manufacturing at high volumes in low-cost locations such as China, Mexico, Malaysia and the Dominican Republic.

Our sensors are customized devices that translate a physical phenomenon such as force or position into electronic signals that microprocessors or computer-based control systems can act upon. Our controls are customized devices embedded within systems to protect them from excessive heat or current. Underlying these sensors and controls are core technology platforms thermal and magnetic-hydraulic circuit protection, micro electromechanical systems, ceramic capacitance and monosilicon strain gage that we leverage across multiple products and applications, enabling us to optimize our research, development and engineering investments and achieve economies of scale.

Our primary products include pressure sensors, force sensors, position sensors, motor protectors, and thermal and magnetic-hydraulic circuit breakers and switches. We develop customized and innovative solutions

Table of Contents

for specific customer requirements, or applications, across the appliance, automotive, heating, ventilation and air-conditioning (HVAC,) industrial, aerospace, defense, data/telecom, and other end-markets. We have long-standing relationships with a geographically diverse base of leading global original equipment manufacturers, (OEMs,) and other multi-national companies. Our largest end-customers for each of our segments within each of our principal operating regions of the Americas, Asia Pacific and Europe include, in alphabetical order: A.O. Smith, Askol, BMW, Bosch, Continental, Danfoss, Emerson, Ford, Giatek, GM, Honda, Hyundai-Kia, LG Group, Peugeot, Renault-Nissan, Samsung Electronics, Volkswagen and Whirlpool.

The increasing use of sensors in our targeted applications has enabled us to achieve growth rates for our sensors business in excess of underlying end market demand for many of those applications. For example, according to Strategy Analytics, Inc., the automotive sensor market is expected to grow at a 10.3% compounded annual rate from 2009 to 2014.

We develop products that address increasingly complex engineering requirements by investing substantially in research, development and application engineering. By locating our global engineering team in close proximity to key customers in regional business centers, we are exposed to many development opportunities at an early stage and work closely with our customers to deliver the required solutions. As a result of the long development lead times and embedded nature of our products, we collaborate closely with our customers throughout the design and development phase of their products. Systems development by our customers typically requires significant multi-year investment for certification and qualification, which are often government or customer mandated. We believe the capital commitment and time required for this process significantly increases the switching costs once a customer has designed and installed a particular sensor or control into a system.

We are a global business with a diverse revenue mix by geography, customer and end-market and we have significant operations around the world. Our subsidiaries located in the Americas, the Asia Pacific region and Europe generated 42%, 33% and 25%, respectively, of our net revenue for the year ended December 31, 2010. Our largest customer accounted for approximately 8% of our net revenue for the year ended December 31, 2010. Our net revenue for the year ended December 31, 2010 was derived from the following end-markets: 21% from European automotive, 18% from Asia and rest of world automotive, 16% from North American automotive, 14% from appliances and HVAC, 13% from industrial, 7% from heavy vehicle off-road and 11% from all other end-markets. Within many of our end-markets, we are a significant supplier to multiple OEMs, reducing our exposure to fluctuations in market share within individual end-markets.

Competitive Strengths

We believe we have a number of competitive strengths that differentiate us from our competitors. These include:

Leading positions in high-growth segments. We believe that we are one of the largest suppliers of sensors and controls in the majority of the key applications in which we compete. We attribute our strong market positions to our long-standing customer relationships, technical expertise, breadth of product portfolio, product performance and quality, and competitive cost structure. We have selectively chosen to compete in growing applications and geographies. We believe increased regulation of safety and emissions, a growing emphasis on energy efficiency and consumer demand for electronic products with advanced features are driving sensor growth rates exceeding underlying end market demand in many of our key markets, and will continue to offer us significant growth opportunities.

Innovative, highly engineered products for mission-critical applications. Most of our products are highly engineered, critical components in complex systems that are essential to the proper functioning of the product in which they are integrated. Our products are differentiated by their performance, reliability and level of customization, which are critical factors in customer selection. We leverage our core technology platforms across multiple applications, allowing us to cost-effectively develop products that are customized for each application in which they are incorporated. For example, we used our core pressure sensing technology portfolio to develop a

Table of Contents

pressure sensor specifically designed for a fire suppression system in a military application. Our global engineering team, many of whom are located close to customers, enables us to identify many opportunities at an early stage and to work closely with customers to efficiently deliver solutions they require.

Long-standing local presence in key emerging markets. We believe that our long-standing local presence in key emerging markets such as China, India and Brazil provides us with significant growth opportunities. Our net revenue from sales in emerging markets grew at a 18% compounded annual growth rate from 2006 to 2010. Our sales into these markets represented approximately 19% of our net revenue for fiscal year 2010. We have been present in China since 1995 and currently have two high-volume manufacturing facilities located in Baoying and Changzhou. As an early market entrant in China, we established a leading position serving multinationals with local manufacturing operations in China. We believe we have developed strong relationships with local customers and suppliers based on our local manufacturing and sales presence, track record of performance and brand portfolio. We believe the Klixon® brand, part of our controls business since 1927, distinguishes us in the motor controls sector where recognition of global corporate brands is limited. We believe the brand has been an important driver of success with larger Chinese companies who are seeking to build their international sales presence. We have built a local engineering and sales team in China to develop localized technology solutions and continue to build our presence with both multinational and local companies.

Collaborative, long-term relationships with diversified customer base. We have long-standing relationships with a diverse base of leading global OEMs and other multi-national companies across the appliance, automotive, HVAC, industrial, aerospace, defense and other end-markets. We have worked with our top 25 customers for an average of 22 years. Our established customer relationships span multiple levels of the organization from executives to engineers. As a result of the long development lead times and embedded nature of our products, we collaborate closely with our customers throughout the design and development phase of their products. We believe that our broad product portfolio and global reach reduce our dependence on any particular market or customer.

High switching costs. The technology-driven, highly customized and integrated nature of our products requires customers to invest heavily in certification and qualification over a one- to three-year period to ensure proper functioning of the system in which our products are embedded. We believe the capital commitment and time required for this process significantly increases the switching costs for customers once a particular sensor or control has been designed and installed in a system. In addition, our products are often relatively low-cost components integrated into mission-critical applications for high-value systems. As a result, many of our sensors and controls are rarely substituted during a product lifecycle, which in the case of the automotive end-market typically lasts five to seven years. New suppliers seeking to provide replacement components generally must demonstrate a long track record of reliability, performance and quality control, as well as the scale and resources to support the customer's product evolution.

Attractive cost structure with scale advantage and low-cost footprint. We believe that our global scale and cost-focused approach have provided us with an attractive cost position within our industry. We currently manufacture approximately 1.1 billion devices per year, with approximately 90% of our production in low-cost countries including China, Mexico, Malaysia and the Dominican Republic. Our strategy of leveraging core technology platforms and focusing on high-volume applications enables us to provide our customers with highly customized products at a relatively low-cost as compared to the costs of the systems in which our products are embedded. We have achieved our current cost position through a continuous process of migration to low-cost manufacturing locations, transformation of our supply chain to low-cost sourcing, product design improvements and ongoing productivity-enhancing initiatives. Over the past eleven years, we have aggressively shifted our manufacturing base from higher-labor cost countries such as the United States, Australia, Canada, Italy, Japan, Korea and the Netherlands to lower-cost countries including China, Mexico, Malaysia, and the Dominican Republic. We continue to increase our use of local suppliers based in these lower-cost locations. The employment of manufacturing best practices and process controls has yielded consistent productivity gains and improvements in operating margins for our business since 2003.

Table of Contents

Operating model with high cash generation and significant revenue visibility. We believe our strong customer value proposition and cost structure enable us to generate attractive operating margins and return on capital. Over the last five completed fiscal years, our aggregate capital expenditures represented approximately 3% of our aggregate net revenue. We have a low effective cash tax rate due to amortization of intangible assets resulting from our carve-out from Texas Instruments in the 2006 Acquisition and other tax benefits derived from our operating and capital structure, including tax holidays in China and Malaysia, operations in a Dominican Republic tax-free zone, favorable tax status in Mexico and the Dutch participation exemption, which permits the tax-free movement of funds between Dutch entities and foreign entities within the same corporate group. In addition, we believe that our business provides us with significant visibility into new business opportunities based on product development cycles that are typically more than one year, our ability to win design awards (i.e., new sockets for our sensors and controls) in advance of system roll-outs and commercialization, and our lengthy product life cycles. Additionally, customer order cycles typically provide us with visibility into a majority of our expected quarterly revenue at the start of each quarter.

Experienced management team. Our senior management team has significant collective experience both within our business and in working together managing our business. Our CEO, President and COO and other members of our senior management team have been employed by our company and the Predecessor for the majority of their careers. Our current management team oversaw the carve-out of our business from Texas Instruments and the expansion of our business through both organic growth and acquisitions.

Growth Strategy

We intend to enhance our position as a leading provider of customized, innovative sensors and controls on a global basis. The key elements of our growth strategy include:

Continue product innovation and expansion. We believe our solutions help satisfy the world's need for safety, energy efficiency and a clean environment, as well as address the demand associated with the proliferation of electronic applications in everyday life. We expect to continue to address our customers' increased demand for sensor and control solutions with our technology and engineering expertise. We leverage our various core technology platforms across many different products and applications to maximize the impact of our research, development and engineering investments and increase economies of scale. We intend to continue to collaborate closely with customers to improve our current line of products incorporated into our customers' products and to identify and develop new technologies and products that can be incorporated into our customers' products at an early stage of the development process. In addition, we intend to focus on new applications that will help us secure new business and drive long-term growth. New applications for sensors typically provide an opportunity to define a leading application technology in collaboration with our customers. Our strategy is to target new applications early in the development cycle by leveraging our strong customer relationships, engineering expertise and attractive cost position.

Expand our presence in significant emerging markets. We believe emerging markets such as China, India and Brazil represent substantial, rapidly growing opportunities. A growing middle class and rapid industrialization are creating significant demand for electric motors, consumer conveniences (such as appliances), automobiles and communication infrastructure. Our broad mix of sensor and control applications utilized in a variety of products and end-markets enables us to participate from the early stages of economic growth, typically characterized by rapid adoption of basic household durables, to later stages of economic growth, typically involving more rapid penetration of automobiles and other consumer conveniences into everyday life. We believe our substantial manufacturing presence and capacity in China provides us with a significant opportunity for future growth. We intend to continue investing in local engineering and sales talent across key emerging markets to build our presence with both multinational and local OEMs.

Broaden customer relationships. We seek to differentiate ourselves from our competitors through superior product reliability, performance and service. We believe that this focus has strengthened our relationships with

Table of Contents

our existing customers and provided us the experience and market exposure to attract new customers. We also believe our global presence and investments in application engineering and support create competitive advantages in serving multinational and local companies. The continued establishment of business centers near our customers' facilities and continued close collaboration with our customers' engineering staffs are key components of this strategy.

Extend low-cost advantage. We intend to continue to focus on managing our costs and increasing our productivity. These ongoing efforts have included migrating our manufacturing to low-cost regions, transforming the supply chain to low-cost sourcing and aggressively pursuing ongoing productivity improvements. We will continue to strive to significantly reduce materials and manufacturing costs for key products by focusing on our design-driven cost initiatives. We will also continue to locate our people and processes in the most strategic, cost-effective regions. As we develop new applications, we intend to continue to leverage our core technology platforms to give us economies of scale advantage in manufacturing and in our research, development and engineering investments.

Recruit, retain, and develop talent globally. We intend to continue to recruit, develop and retain a highly educated, technically sophisticated and globally dispersed workforce. Those in senior management roles have broad experience in managing global businesses. Our strategy leadership team has over 165 years of combined experience with our global businesses. Other senior managers bring global experience, subject matter expertise and an outside perspective which has contributed to our success. We will continue to utilize our extensive network for our global recruiting, including university, community and employee referral programs to introduce our brand and values to prospective employees. We will continue to utilize our formal Integrated Talent Management Program to emphasize learning and development activities focusing on each employee's particular skill set, including their technical and leadership capabilities. We will continue to engage in extensive market-based research to align our compensation and benefits programs with employee performance and to remain competitive with industry benchmarks.

Pursue strategic acquisitions to extend leadership and leverage global platform. We intend to continue to opportunistically pursue selective acquisitions and joint ventures to extend our leadership across global end-markets and applications, realize operational value from our global low-cost footprint, and deliver the right technology solutions for emerging markets. We believe we have a track record of success in acquiring and integrating businesses. Our acquisition of the First Technology Automotive and Special Products (First Technology Automotive) business in December 2006 added steering position, twilight sensors, fuel cut-off switches and glass bottle thermal protectors to our portfolio of products. Our acquisition of Airpax Holdings, Inc. (Airpax) in July 2007 further strengthened our customer positions in power protection and secured our position as a leading designer and manufacturer of sensing and power protection solutions for the industrial, HVAC, military and mobile power markets. On January 28, 2011, we acquired the Automotive on Board sensors business (Automotive on Board) of Honeywell International Inc., in order to complement the existing operations of our sensors segment, provide new capabilities in light vehicle speed and position sensing, and expand our presence in emerging markets, particularly in China. We intend to continue to seek acquisitions that will present attractive risk-adjusted returns and significant value-creation opportunities.

History

We can trace our origins back to businesses that have been engaged in the sensors and controls business since 1916. We operated as a part of Texas Instruments from 1959 until April 27, 2006, when STBV, an indirect wholly-owned subsidiary of Sensata Technologies Holding, completed the 2006 Acquisition, which was effected through a number of its subsidiaries that collectively purchased the assets and assumed the liabilities being transferred.

On December 19, 2006, we acquired First Technology Automotive from Honeywell International Inc. for \$88.5 million plus fees and expenses. First Technology Automotive designs, develops and manufactures automotive sensors (cabin comfort and safety and stability controls), electromechanical control devices (circuit

Table of Contents

breakers and thermal protectors), and crash switch devices. First Technology Automotive's products are sold to automotive OEMs, Tier I automotive suppliers, large vehicle and off-road OEMs, and industrial manufacturers. We believe that the First Technology Automotive acquisition enhanced existing customer relationships and our motor protector and circuit breaker product offerings.

On March 14, 2007, we acquired SMaL Camera Technologies, Inc. (SMaL Camera), the automotive imaging unit of Cypress Semiconductor Corporation, for approximately \$11.4 million plus fees and expenses. SMaL Camera provides cameras and camera subsystems to automotive advanced driver assistance systems. We believed that the acquisition of SMaL Camera accelerated the time to market in the Automotive Vision sensing business, and built camera and imager expertise and credibility.

On July 27, 2007, we acquired Airpax for approximately \$277.3 million, including fees and expenses. We believe the acquisition of Airpax provided us with leading customer positions in electrical protection for high-growth network power and critical, high-reliability mobile power applications, and further secured our position as a leading designer and manufacturer of sensing and power protection solutions for the industrial, HVAC, military and mobile power markets. The acquisition also added new products such as power inverters and expanded our customer end-markets to include growing network power applications where customers value high reliability and differentiated performance.

On April 30, 2009, we completed the sale of the automotive vision sensing business, which included the assets and operations of SMaL Camera. Our decision to sell this business was driven by the economic climate, slower than expected demand for these products and the expectation that our OEM customers will internally develop the software associated with this business.

Recent Developments

On January 28, 2011, we completed the acquisition of the Automotive on Board business for approximately \$140 million in cash, subject to a working capital adjustment and certain transfer taxes. We will refer to the acquired business as Magnetic Speed and Position (MSP), which will be integrated into our sensors segment. We acquired this business in order to complement the existing operations of our sensors segment, provide new capabilities in light vehicle speed and position sensing, and expand our presence in emerging markets, particularly in China.

Sensors Business

Overview

We are a leading supplier of automotive, commercial and industrial sensors, including pressure sensors, pressure switches and position and force sensors. Our sensors business accounted for approximately 63% of our net revenue for fiscal year 2010. Our sensors are used in a wide variety of applications, including automotive air-conditioning, braking, transmission and air bag applications as well as HVAC and heavy vehicle off-road applications. We derive most of our sensor revenue from the sale of medium and high-pressure sensors, and we believe that we are one of the largest suppliers of sensors in the majority of the key applications in which we compete. Our customers consist primarily of leading global automotive, industrial, and commercial OEMs and their Tier 1 suppliers. Our products are ultimately used by the majority of global automotive OEMs, providing us with a balanced customer portfolio of automotive OEMs which, we believe, helps to protect us against shifts in market share between different OEMs.

Sensors Industry

Sensors are customized devices that translate physical phenomenon into electronic signals for use by microprocessors or computer-based control systems. Based on a report prepared by Global Industry Analysts, we believe that the global sensor industry in 2008 generated sales in excess of \$51 billion. The market is characterized by a broad range of products and applications across a diverse set of end-markets. We believe large

Table of Contents

OEMs and other multi-national companies are increasingly demanding a global presence to supply sensors on their key global platforms.

Automotive Sensors

Revenue from the global automotive end-market, which includes applications in powertrain, air-conditioning and chassis control is driven, we believe, by three principal trends. First, global automotive vehicle unit sales have demonstrated moderate but consistent annual growth prior to 2008, and are expected to increase again as the recent recession continues to subside. Second, the number of sensors used per vehicle has expanded, driven by a combination of factors including government regulation of safety and emissions, market demand for greater fuel efficiency and consumer demand for new applications. For example, governments have mandated sensor intensive advanced braking systems in both Europe and the United States. Finally, revenue growth has been augmented by a continuing shift away from legacy electromechanical products towards higher-value electronic solid-state sensors.

As reported by J.D. Power and Associates, global light vehicle sales saw continuous quarterly expansion from 2002 to 2007. This expansion came to a halt during fiscal year 2008. Global economic conditions translated into lower demand and an overall decline in automotive production by approximately 13% globally in 2009. In the mature markets, the decline was higher; for example, U.S. light vehicle production declined 34% to 5.6 million units in 2009. Western Europe light vehicle production declined 19% to 11.8 million units in 2009. Japan's light vehicle production declined 31% to 7.6 million units in 2009.

Beginning in the second half of 2009 and into 2010, global light vehicle sales began to expand. According to IHS Automotive, global light vehicle production expanded approximately 23.5% from 2009 to 2010. Over the long-term, many third-party forecasters expect global auto demand to continue expanding based on population growth and increased usage of cars in emerging markets.

Based on a report prepared by Strategy Analytics, Inc., we believe sales of automotive sensors in North America, Europe, Japan, South Korea and China generated approximately \$9.0 billion of revenue in 2009 and are expected to grow at a compound annual rate of 10% from 2009 to 2014. The increase in the number of sensors per vehicle and the level of global vehicle sales are the primary drivers in the increase of global automotive sensors. We believe that the increasing installation of safety, emissions, efficiency, and comfort-related features in vehicles, such as airbags and electronic stability control, advanced driver assistance, advanced combustion and exhaust aftertreatment that depend on sensors for proper functioning will continue to drive increased sensor usage.

The automotive sensors market is characterized by high switching costs and barriers to entry, benefiting incumbent market leaders. Sensors are critical components that enable a wide variety of applications, many of which are essential to the proper functioning of the product in which they are incorporated. Sensor application-specific products require close engineering collaboration between the sensor supplier and the OEM or the Tier 1 supplier. As a result, OEMs and Tier 1 suppliers make significant investments in selecting, integrating and testing sensors as part of their product development. Switching to a different sensor results in considerable additional work, both in terms of sensor customization and extensive platform/product retesting. This results in high switching costs for automotive manufacturers once a sensor is designed-in, and we believe is one of the reasons that sensors are rarely changed during a platform lifecycle, which is typically five to seven years. Given the importance of reliability and the fact that the sensors have to be supported through the length of a product life, our experience has been that OEMs and Tier 1 suppliers tend to work with suppliers that have a long track record of quality and on-time delivery, and the scale and resources to meet their needs as the car platform evolves and grows. In addition, the automotive segment is one of the largest markets for sensors, giving participants with a presence in this end-market significant scale advantages over those participating only in smaller, more niche industrial and medical markets.

Table of Contents

Commercial and Industrial Sensors

Commercial and industrial sensors employ similar technology to automotive sensors, but often require greater customization in terms of packaging and calibration. Commercial and industrial applications in which sensors are widely used include HVAC, engines (for example, generators), heavy vehicle off-road and general industrial products (for example, fire suppression products). We believe that sensor usage in industrial and commercial applications is driven by many of the same factors as in the automotive market – regulation of safety and emissions, market demand for greater energy efficiency and consumer demand for new features. In the United States, for example, the Environmental Protection Agency (EPA) has mandated the use of environmentally-friendly refrigerant in all new HVAC equipment by 2010.

Based on a report prepared by VDC Research Group, we estimate that revenue for the global commercial and industrial pressure sensor markets generated \$1.5 billion in revenues in 2008 and is expected to grow at a compound annual rate of 5.9% from 2008 to 2013. In addition, we believe based on that report that growth in commercial and industrial sensors is driven by growth in the underlying end-markets, which generally track the level of GDP, and greater usage of sensors within individual applications.

Sensor Products

We offer the following sensor products:

Product Categories	Key Applications/Solutions	Key End-Markets
Pressure Sensors	Air-conditioning systems	Automotive
	Transmission	Heavy Vehicle Off-Road
	Engine oil	Marine
	Suspension	Industrials
	Fuel rail	
	Braking	
	Marine engine	
Pressure Switches	Air compressors	
	Air-conditioning systems	Automotive
	Power steering	HVAC
	Transmission	Industrial
Position Sensors	HVAC refrigerant	
	Transmission	Automotive
Force Sensors	Steering	
	Airbag (Occupant Weight Sensing)	Automotive

The table below sets forth the amount of net revenue we generated from each of these product categories in each of the last three fiscal years.

Product Category (Amounts in thousands)	For the year ended December 31,		
	2010	2009	2008

Edgar Filing: Sensata Technologies Holding N.V. - Form 10-K

Pressure Sensors	\$ 687,047	\$ 456,116	\$ 553,722
Pressure Switches	98,350	71,946	96,928
Position Sensors	32,954	26,062	39,273
Force Sensors	71,977	57,151	87,654
Other	79,300	73,817	89,809
Total	\$ 969,628	\$ 685,092	\$ 867,386

Table of Contents

Controls Business

Overview

We are a leading provider of bimetal electromechanical controls, thermal and magnetic-hydraulic circuit breakers, power inverters and interconnection products. Our controls business accounted for approximately 37% of our net revenue for fiscal year 2010. We manufacture and market a broad portfolio of application-specific products, including motor and compressor protectors, circuit breakers, semiconductor burn-in test sockets, electrical HVAC controls, power inverters and precision switches and thermostats. Our controls are sold into industrial, aerospace, military, commercial and residential end-markets. We derive most of our controls revenue from products that prevent damage from excess heat or current in a variety of applications within these end-markets, such as commercial and residential heating, air-conditioning and refrigeration and light industrial systems. We believe that we are one of the largest suppliers of controls in the majority of the key applications in which we compete.

Our controls business also benefits from strong agency relationships. For example, a number of electrical standards for motor control products, including portions of the Underwriters Laboratories Standards for Safety, have been written based on the performance and specifications of our controls products. We also have blanket approval from Underwriters Laboratories for many of our control products, so that customers can use Klixon® products in the United States interchangeably, but are required to receive certification from Underwriters Laboratories for their own products if they decide to incorporate competitive motor protection offerings.

We attribute a substantial portion of our growth in this business to an expanded presence in Asia, particularly China. We are well-positioned to capture additional revenue from our multinational customers as they relocate manufacturing operations to China. We have been working to leverage this market position, with our brand recognition, to develop new relationships with a number of high-growth local Chinese manufacturers. We continue to focus on managing our costs and increasing our productivity in these lower-cost manufacturing regions.

Controls Industry

Controls are customized devices which protect equipment and electrical architecture from excessive heat or current. Our product line encompasses four categories of controls – bimetal electromechanical controls, thermal and magnetic-hydraulic circuit breakers, power inverters and interconnection – each of which serves a highly diversified base of customers, end-markets, applications and geographies.

Bimetal Electromechanical Controls

Bimetal electromechanical controls include motor protectors, motor starters, thermostats and switches, each of which helps prevent damage from excessive heat or current. Our bimetal electromechanical controls business serves a diverse group of end-markets, including commercial and residential HVAC systems, lighting, refrigeration, industrial motors and household appliances, commercial and military aircraft. In the developed markets such as the United States, Europe and Japan, the demand for many of these products, and their respective applications, tends to track to the general economic environment, with historical growth moderately above increases in GDP. In the emerging markets, a growing middle class and rapid overall industrialization is creating significant growth for our control products in electric motors, consumer conveniences such as appliances and HVAC, and communication infrastructure. As an example, the China Countryside Initiative has established higher targets for penetration of household refrigerators and washing machines in rural households that we believe creates significant growth opportunities in China for our controls business.

Thermal and Magnetic-Hydraulic Circuit Breakers

Our circuit breaker portfolio includes customized magnetic-hydraulic circuit breakers and thermal circuit breakers, all of which help prevent damage from electrical or thermal overload. Our magnetic-hydraulic circuit

Table of Contents

breakers serve a broad spectrum of OEMs and other multi-national companies in the telecommunication, industrial, recreational vehicle, HVAC, refrigeration, marine, medical, information processing, electronic power supply, power generation, over-the-road trucking, construction, agricultural and alternative energy markets. We provide thermal circuit breakers to the commercial and military aircraft market. Although demand for these products tends to pace the general economic environment, demand in certain end-markets such as electrical protection for network power and critical, high-reliability mobile power applications is projected to exceed the growth of the general economic environment.

Power Inverters

Our power inverters products allow an electronic circuit to convert DC to AC. Power inverters are used mainly in applications where DC power, such as that stored in a battery, must be converted for use in an electrical device that runs on AC power (e.g., any electrical products that plug into a standard electrical outlet). Specific applications for power inverters include powering applications in utility/service trucks or recreational vehicles and providing power backup for critical applications such as traffic light signals and key business/computer systems. Demand for these products is driven by economic development, as well as growing interest in clean energy to replace generators, all of which increase demand for both portable and stationary power. As development slows, the demand for our products in these markets declines. The decline is mitigated by growing requirements to meet new energy efficient standards.

Interconnection

Our interconnection products consist of semiconductor burn-in test sockets used by semiconductor manufacturers to verify packaged semiconductor reliability. The semiconductor industry experienced a decline throughout 2009 primarily due to high levels of inventory and rapidly changing technologies. However, beginning in 2010, we experienced an increase in demand for our Interconnection products and we believe, based on information from IC Insights, that the semiconductor market will grow at a compound annual rate of approximately 6% from 2010 to 2015.

Table of Contents

Controls Products

We offer the following controls products:

Product Categories	Key Applications/Solutions	Key End-Markets
Bimetal Electromechanical Controls	Internal motor and compressor protectors	HVAC
	External motor and compressor protectors	Small/Large Appliances
	Motor starters	Lighting
	Thermostats	Industrial Motors
	Switches	Automotive Accessory Motors
Thermal and Magnetic-Hydraulic Circuit Breakers	Circuit protection	Commercial Aircraft
		Military
		Heavy Vehicle Off-Road
		Marine/Industrial
		Commercial Aircraft
		Data Communications
		Telecommunications
		Computer Servers
		Heavy Vehicle Off-Road
		Marine/Industrial
HVAC		
Power Inverters	DC/AC motors	Military
		Heavy Vehicle Off-Road
Interconnection	Semiconductor testing	Semiconductor Manufacturing

The table below sets forth the amount of revenue we generated from each of these product categories in each of the last three fiscal years.

Product Category (Amounts in thousands)	For the year ended December 31,		
	2010	2009	2008
Bimetal Electromechanical Controls	\$ 379,487	\$ 298,476	\$ 363,826
Thermal and Magnetic-Hydraulic Circuit Breakers	131,234	113,855	142,112
Power Inverters	19,985	14,341	20,641
Interconnection	39,485	23,180	28,398
Other	260		292

Total	\$ 570,451	\$ 449,852	\$ 555,269
-------	------------	------------	------------

Technology, Product Development and Intellectual Property

We employ various core technology platforms across many different product families and applications in an effort to maximize the impact of our research, development and engineering investments, to increase economies of scale and to leverage our technology-specific expertise across multiple product platforms. The technologies inherent in our sensors and controls products include bimetal discs, ceramic capacitance, monosilicon strain gage and micro electromechanical systems.

