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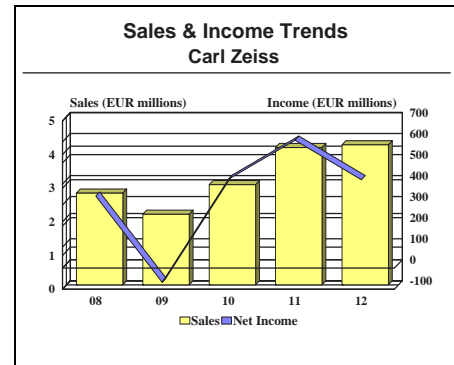
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Carl Zeiss

Outlook

- In July 2012, Cassidian acquired a 75.1 percent stake in Carl Zeiss Optronics GmbH
- All of the optical and optronic activities previously carried out by Carl Zeiss Optronics GmbH are to be continued under the name of Cassidian Optronics GmbH
- This report will be archived and its programs combined with the EADS report (Cassidian's parent company)



Headquarters

Carl-Zeiss-Stiftung
Postfach 1369/1380
D-73446 Oberkochen, Germany
Telephone: + 49 73 64 200
Web site: <http://www.zeiss.de>

Carl Zeiss founded an engineering shop in 1846. A year later, the shop began to produce high-quality microscopes. The Carl Zeiss works expanded its activities in the optical products industry when Carl Zeiss, Roderich Zeiss, and Otto Schott founded the Glastechnische Laboratorium (later to become the Schott Glaswerke), which is also under the aegis of the Carl-Zeiss-Stiftung (foundation). The Carl-Zeiss-Stiftung was itself founded by Ernst Abbe in 1889. Stiftung then became the sole owner of both the Carl Zeiss works and Schott Glaswerke.

Today, the Stiftung is composed of two operating units: Carl Zeiss, Oberkochen, and Schott Glaswerke, Mainz, whose chief activities remain the development of high-quality optical and glass products, as well as sophisticated electronic and electro-optical equipment for medical/scientific, industrial, aerospace, and defense applications.

In October 2012, Cassidian acquired a majority stake in Carl-Zeiss Optronics, a primarily defense-oriented operation.

The Carl-Zeiss portion employs about 24,190 people through its worldwide operations.

Structure and Personnel

Michael Kaschke
President and CEO
Hermann Gerlinger
President and CEO, Carl Zeiss SMT AG

Thomas Spitzenpfeil
Chief Financial Officer

Carl Zeiss

Product Areas

Carl Zeiss and its subsidiaries develop, manufacture, and market highly sophisticated precision instruments. The products include military fire control systems; navigation and control systems for ships, binoculars, and rifle scopes; optical and electronic systems components; precision medical instruments; industrial measuring devices; gear measuring machines; camera lenses; air- and land-based surveying equipment; telescopes; microscopes; eyeglass/sunglass lenses; contact lenses; specialized seeing aids; glass and ceramics (scientific, medical, industrial, and consumer); optical glass; glass for electro-optical applications; and chemicals. The company's defense-oriented unit, which was recently taken over by Cassidian in late 2012, was organized as follows:

1. Carl Zeiss Optronics
 - 1.1 Land
 - 1.2 Air/Sea

1.3 Sights/Wetzlar

Land produces stabilized and unstabilized periscopes for land vehicles. These systems are equipped with night-vision devices, laser rangefinders, and TV cameras, in addition to the optical direct sight. This unit also provides systems for networked border surveillance.

Air/Sea. This business unit markets targeting, navigation, and reconnaissance pods for military aircraft and military and civilian helicopters. The unit also develops and produces submarine periscopes and optronic mast systems.

Sights/Wetzlar manufactures binoculars, boresighting equipment, and day/night targeting optics for small arms. Zeiss sights and night vision attachments have been selected for the German "Soldier of the Future" program.

Facilities

Carl Zeiss, Oberkochen, Carl-Zeiss-Strasse 2-60, 73446 Oberkochen, Germany.

Schott Glaswerke, Hattenbergstrasse 10, 55122 Mainz, Germany.

Web site: <http://www.schott.de>

Cassidian (Carl Zeiss) Optronics GmbH, Carl-Zeiss-Strasse 22, 73446 Oberkochen, Germany. Telephone: + 49 7364 20 65 30. This unit produces optical and optronic products and subsystems, primarily for defense customers. *Majority stake acquired by Cassidian in October 2012.*

Web site: <http://www.zeiss.de/optronics>

Cassidian (Carl Zeiss) Optronics Wetzlar GmbH, Carl Zeiss Gruppe, Gloelstrasse 3-5, 35576 Wetzlar, Germany. Telephone: + 49 6441 404 380. This subsidiary of Carl Zeiss Optronics develops, manufactures, and distributes optical and optronic instruments and systems that are used for military reconnaissance and day and night observation. *Majority stake acquired by Cassidian in October 2012.*

Corporate Overview

The Carl-Zeiss-Stiftung primarily consists of two operating enterprises: Carl Zeiss, Oberkochen, and Schott Glaswerke, Mainz. In fact, it is a charitable foundation obligated to reinvest corporate profits in additional research and development, particularly of optical, electro-optical, electronic, and other precision technologies. The charter of the Stiftung is quite clear as to its goal: it must continue contributions to charities for the specific purpose of improving the well-being of the public. At the same time, the charter stipulates that the foundation must take full responsibility for "social obligations" of the employees so that every person in the organization shares in the successes or downfalls of

the business. This philosophy has fostered tranquil labor relations for decades, and has thereby made it easier for Zeiss and Schott to facilitate the goal of developing high-quality products.

This report focuses on the efforts of Carl Zeiss, especially its optronics unit, which was effectively acquired by Cassidian in October 2012.

New Products and Services

Mobile Surveillance Vehicle. In 2010, the first Mobile Surveillance Vehicle (MSV) built in South Africa was unveiled. Carl Zeiss Optronics (South Africa), in association with Afrisec (a supplier of

Carl Zeiss

integrated security systems), presented the MSV to various prospective customers during the summer of that year. The MSV is based on a converted 4x4 Mercedes Sprinter and provides 360° monitoring, both day and night. Carl Zeiss has so far produced some 250 MSVs, mainly for control of the European borders.

Puma Optics. In September 2009, Carl Zeiss began production of the commander's periscope and the weapons system optronics for the new German Army armored vehicle, the Puma. The first integration-ready optical and optronic systems were to be delivered during the second quarter of 2010. Carl Zeiss will equip more than 400 Pumas with these systems over the life of the program.

Mivotherm. In January 2009, Carl Zeiss unveiled a new system to protect aircraft from bird strikes. The Mivotherm system can be used near major aviation hubs around the world. Based on thermal imaging sensors from Carl Zeiss Optronics, the system can detect and measure bird movements from a tiny sparrow up to an entire flock. According to the company, the key aspect of the system is the prompt and precise prediction of when the birds will enter the landing corridor. Mivotherm is now being tested at German airports and was developed together with environmental specialists at Baader Konzept GmbH in Mannheim.

Plant Expansion/Organization Update

Carl Zeiss Vision Absorbed. During 2011, Carl Zeiss fully consolidated eyeglass manufacturer Vision Care into its structure. With this move, the number of employees at the company nearly doubled – from 12,970 in 2010 to 24,190 in 2011.

P.A.L.M. Merged into Microlaser Unit. In September 2007, P.A.L.M. Microlaser Technologies GmbH was merged with Carl Zeiss MicroImaging GmbH. P.A.L.M. Microlaser Technologies was acquired by Carl Zeiss as a subsidiary in December 2004.

Carl Zeiss SMT AG Subsidiary Formed. In October 2001, Carl Zeiss Semiconductor Manufacturing Technologies AG (Carl Zeiss SMT AG) was established as a wholly owned subsidiary of Carl Zeiss. The stock corporation is the former Semiconductor Technology

business group of Carl Zeiss. Together with its subsidiaries, this business group centers its activities on the Zeiss business in the semiconductor industry. Carl Zeiss SMT AG itself has three subsidiaries: Carl Zeiss Laser Optics GmbH, Carl Zeiss Microelectronic Systems GmbH, and LEO Elektronenmikroskopie GmbH. The international group of companies employs a total workforce of 1,600 at its locations in Germany, the United Kingdom, the United States, France, and Israel.

Mergers/Acquisitions/Divestitures

Cassidian Takes Over Carl Zeiss Optronics. In July 2012, Cassidian acquired a 75.1 percent stake in Carl Zeiss Optronics GmbH. Carl Zeiss will retain the remaining 24.9 per cent. All of the optical and optronic activities previously carried out by Carl Zeiss Optronics GmbH are to be continued under the name of Cassidian Optronics GmbH. This includes also the South African subsidiary Carl Zeiss Optronics (Pty) Ltd, now trading under Cassidian Optronics (Pty) Ltd. The company will be integrated into Cassidian's Sensors & Electronic Warfare business line. Terms of the deal, which was successfully concluded in October 2012, were not announced.

The Carl Zeiss optronics division develops and manufactures optronic, optic, and precision-engineered products for military and civil applications at its German sites in Oberkochen and Wetzlar and in Irene, South Africa, and has around 780 employees. Among its main focuses are border surveillance systems, optical and opto-electronic devices, and components for vehicles such as sensors and optics, as well as submarine periscopes.

Carl Zeiss Acquires Stake in Denel Optronics. In March 2007, Carl Zeiss Optronics acquired a 70 percent majority interest in Denel Optronics. The new company operates under the name Carl Zeiss Optronics Pty Ltd.

Teaming/Competition/Joint Ventures

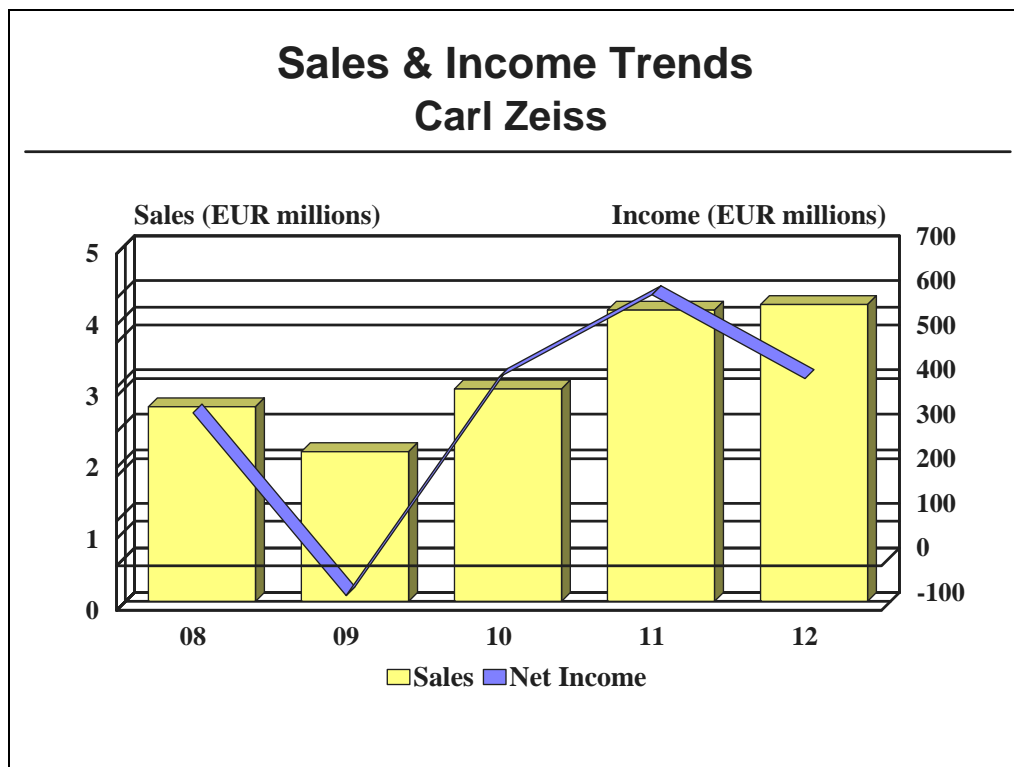
Kyocera. Kyocera Yashica of Japan and Carl Zeiss are cooperating in the field of photographic optics. Likewise, Asahi of Japan and Carl Zeiss are involved in development-related ophthalmic optics.

Carl Zeiss

Financial Results/Corporate Statistics

The fiscal year for Carl Zeiss runs from October 1 to September 30. Sales for the 2011-2012 fiscal year amounted to EUR4.16 billion, up 2 percent from the EUR4.08 billion of the previous year. The jump in sales and income for 2011 was due to the consolidation of the Vision Care group into Carl Zeiss. The U.S. dollar figure is translated as of September 30, 2012, at the rate of EUR1 = USD1.28554. Figures below are for Carl Zeiss only; they do not include Schott.

Y/E September 30	2008	2009	2010	2011	2012	2012
(EUR millions)						USD
Net Sales	2,731	2,101	2,981	4,084	4,163	5,352
EBIT (earnings before interest and taxes)	343	-67	423	608	420	54



Strategic Outlook

Carl Zeiss' strategy for the past few years has been to focus on areas of sustained, profitable growth. The leading high-growth areas of the company are being advanced through targeted investments in research and development. Further, acquisitions of complementary operations are also being pursued to maintain growth and expansion.

In 2012, the company executed another aspect of this strategy: divestiture. Late in the year, Cassidian completed its takeover of Carl-Zeiss Optronics and now holds a 75.1 percent stake in the company, with Carl-Zeiss now a minority shareholder.

In describing the reasoning behind the deal, Michael Kaschke, president and CEO of Carl Zeiss AG, said,

"Our greatest concern is to provide optronics with a successful, long-term future. In a market which has to cope with the drastically sinking defense budgets of NATO states and profound upheavals in regions such as Asia and North Africa, first-class market access and the strength of a globally leading company are among the most important factors for success. Cassidian possesses both of these assets. In its capacity as the Cassidian center of competence for sensors, combined with the technological excellence of Carl Zeiss, the company has all the ingredients for a successful future. We are confident that optronics has better perspectives at Cassidian than at Carl Zeiss."

Carl Zeiss

For Cassidian, the acquisition of this part of Carl Zeiss AG is a strategic addition to its existing product portfolio. Cassidian Optronics will exploit Cassidian's global sales channels and its know-how in order to provide its existing business activities with a long-term

perspective. Both partners expect that the combination of market access and the integration into Cassidian's systems and platform business will open up new business opportunities.

Prime Award Summary

Information unavailable.

Program Activity

Business Interests. The Carl Zeiss group develops, manufactures, and markets highly sophisticated precision instruments, including the following:

- Binoculars
- Sighting and fire control systems
- Precision medical instruments
- Industrial measuring devices
- Camera lenses
- Air- and land-based surveying equipment
- Telescopes
- Microscopes
- Eyeglass/sunglass lenses and frames
- Contact lenses and specialized seeing aids
- Optical glass
- Chemical glass for electro-optical applications
- Scientific, medical, industrial, and consumer glass and ceramics

The field of optical and electronic system components is a strong endeavor for Carl Zeiss. The company is well versed in the integration of electronic and optical technologies. Its high-performance lenses are utilized for the precision production of miniature integrated circuitry. Tolerances in the submicron range have been achieved by the company's instruments. Carl Zeiss is also a leader in the field of laser technology, and manufactures components and modular flexible beam delivery systems.

Because of these capabilities, Carl Zeiss reports that it is able to offer significant capability in the realm of military electro-optical technologies. Some of its activities for military applications include the following:

Leopard I and Leopard 2 MBT Fire Control Systems

Carl Zeiss provides an integrated fire control system for the Leopard 1 tanks. The company also offers the PZB 200 low-light-level electro-optic viewing system, which can be optionally fitted to the Leopard 2.

Likewise, Carl Zeiss plays a significant role in the fire-control and targeting suite of the Leopard 2 main battle tank.

Carl Zeiss produces the thermal-imaging sight using common modules and components of its own. Texas Instruments and AEG, Heilbronn, produce common modules for the thermal imaging sight. Krupp Atlas Elektronik of Bremen is responsible for the series production integration of the new gunner's sight, the EMES 18.

The fire control system also incorporates an independent commander's periscope stabilized system (the PERI-R17) produced by Carl Zeiss.

Naval Periscopes

Carl Zeiss has been providing periscopes for submarines for almost 40 years. Deliveries of Zeiss periscope systems for Bundesmarine submarines began in the mid-1950s. Carl Zeiss periscopes such as the SERO 200 and SERO 400 currently equip the Type 209 submarines in Bundesmarine service. In addition, the company equipped Norway's Ula class submarines, as well as boats in the service of South Korea and Taiwan. The company also produces the OSM 100 Optronics mast system.

Schützenpanzer Marder Vision Systems

Carl Zeiss provides PERI-Z11 periscopic observation systems for use aboard the Schützenpanzer Marder, a tracked, armored vehicle currently in widespread use with the Federal German Army. The Marder 2, an armored infantry fighting vehicle for the transport of light infantry squads, is currently being developed and is to be produced by Krauss-Maffei AG, Munich, Germany. Carl Zeiss systems will similarly be applied to the Marder 2.

Tactical Sights and Other Vision Aids

Carl Zeiss produces binoculars for a variety of uses. Zeiss binoculars have been used for military applications for decades. In addition, Zeiss provides rangefinding equipment and optical sights for a variety of tactical applications. The company also produces electro-optical equipment and passive night-vision sights for integration with rifles and submachine guns.

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