

Boule Diagnostics  
Annual Report 2013





## History

**1990** The company Karo Bio Diagnostics AB is founded. At the same time, Karo Bio Diagnostics acquires Phadebact, a product line for diagnosing infectious diseases, from Pharmacia Diagnostics AB. Karo Bio Diagnostics also acquires the distribution company Bio Bol AB.

**1997** Boule acquires Swelab Instrument AB. Swelab was founded in the 1950s.

**1998** Boule acquires Medonic AB, founded in the 1980s, and BioTrend AB. Boule obtains ISO certification.

**2002** Collaboration with the US company Clinical Diagnostic Solutions Inc. (CDS) commences. CDS develops, produces and markets reagents and controls for clinical diagnosis in the field of hematology.

**1996** Boule Diagnostics AB is formed as the Parent Company of the Group.

**1994** The subsidiary Boule Nordic AB is formed. The company's main focus is the distribution of life-science products.

**1992** Karo Bio Diagnostics AB is acquired by the current principal owner of Boule Diagnostics AB ("Boule").

**2001** Boule completes a private placement to finance the development of the new core business – hematology diagnostic systems for both the human and veterinary markets.

**1999** Boule Medical AB is formed through the merger of Swelab and Medonic, both focusing on hematology instruments/blood cell counting.

**2004** Boule's hematology system, Medonic CA 620, receives 510(k) clearance in the US. Boule acquires its partner CDS.

**2003** Boule establishes reagent production for blood cell counting in Sweden.

Each year, **1.2 billion** analyses are conducted using a blood cell counter, making this the most common diagnostic laboratory test performed during a medical consultation. A blood cell count provides information on a patient's general health status and guidance in diagnosing a long list of commonly occurring diseases.

**Boule Diagnostics AB** is a Swedish diagnostics company that develops, manufactures and markets complete blood count (CBC) systems to the health-care sector in more than 100 countries. The company's products are used in both human and veterinary medicine and are primarily intended for small and midsize hospitals, clinics and laboratories in out-patient care. Sales are conducted on a proprietary basis in certain strategically important markets, and via distributors in other parts of the world. The Boule Diagnostics share has been listed on NASDAQ OMX Stockholm since 2011.

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**2005** Boule Nordic AB merges with Labdesign AB to form Nordic Biolabs AB, with the aim of creating a profitable distributor of life-science products. Boule owns 50 percent of the new subsidiary. Boule divests the microbiology division located in Huddinge, which is reformed as Bactus AB. The wholly owned production company, Boule Medical (Beijing) Co. Ltd (BMB), is established in China to enhance the efficiency of Boule's production and strengthen the company's position in the Asian markets.

**2008** A business for direct sales is established in Poland.

**2009** A business for direct sales is established in Switzerland. The Medonic M-series systems receive 510(k) clearance from the US Food and Drug Administration (FDA).

**2013** A subsidiary in Mexico and sales offices in Dubai and India are established.

**2007** The company develops a complete range of consumables (reagents, controls and calibrators) for all instrument models. The US subsidiary, CDS, obtains ISO certification, entailing that all companies in the Group now hold ISO 13485 certification.

**2006** The company launches a new instrument generation based on a shared platform for Medonic and Swelab instruments. The new instrument platform receives a very positive market reception.

**2011** Exigo EOS is launched, with a focus on the veterinary market. Boule is listed on the NASDAQ OMX Stockholm.

**2010** The Quintus 5-part system is launched. All 3-part instrument models can be produced by the BMB subsidiary in China.

# Introducing Boule

Boule Diagnostics AB is active in the field of hematology, a branch of medicine concerned with the study of the blood, blood diseases and other diseases that can be diagnosed based on a complete blood count (CBC). Today, the CBC is one of the world's most common diagnostic tests performed at clinical laboratories and analyses are conducted in both human and veterinary diagnostics.

The company's core operations comprise proprietary development, manufacturing and marketing of CBC systems (instruments, reagents, calibrators and controls). The company's products are sold through distributors in more than 100 countries via subsidiaries in Sweden, the US, Mexico and China. The company focuses on the decentralized market segment, meaning near-patient testing at, for example, small and midsize hospitals, clinics and laboratories in out-patient care.

Boule is one of the few players in the world to develop, produce and market all strategically important components for automated CBC based on proprietary expertise and technology.

In addition to development, manufacturing and sales of consumables for the Group's proprietary systems, the company also develops reagents, calibrators and controls for other manufacturers' instruments for sales under the Group's own brand or as OEM products, meaning customers that label the products under their own brand.

## ●●● OVERALL GOAL

The consistent implementation of Boule's business concept and strategy will lead to healthy profitability and positive performance for the company's share.

## ●●● VISION

Boule will establish a global position as one of the three main companies in its market segment.

## ●●● BUSINESS CONCEPT

Boule develops, manufactures and markets high-quality and user-friendly automated blood cell counting systems for both the global human and veterinary markets.

The systems consist of instruments and consumables optimized to provide reliable test results for every patient sample.

Stable and accurate test results provide customer value, which forms the basis for long-term demand for proprietary manufactured consumables over the lifetime of the instruments.

## ●●● MARKET

Boule's target group comprises small and midsize clinical laboratories responsible for the world's most common laboratory test, the Complete Blood Count (CBC).

The products are marketed in more than one hundred countries via selected and trained distributors. In certain strategic markets, proprietary sales are conducted. To date, more than 20,000 instruments have been installed and several hundred million patient samples have been analyzed using Boule's systems.

## ●●● STRATEGY

Boule is planning to grow significantly. This will be achieved through innovative, competent and competitive products and systems, increasingly efficient development and production and streamlined global marketing activities.

Established market positions will be strengthened continuously, while the company establishes new operations in other key markets.

Boule will actively evaluate acquisitions and similar opportunities.

## ●●● FINANCIAL OBJECTIVES

Boule aims to achieve:

- annual average sales growth exceeding 10 percent over a five-year period,
- an annual EBITDA margin that exceeds 15 percent,
- an equity/assets ratio of 30–50 percent.

## The year in brief

	2013	2012	2011	2010	2009
Sales growth, five-year average, %	10	11	13	13	6
EBITDA margin, %	6.1	8.5	8.1	10.1	5.1
Equity/assets ratio, %	58	73	71	63	69
Net sales, SEK million	276.8	275.3	246.2	229.4	175.5
Gross margin, %	44	45	44	45	42
Operating profit/loss, SEK million	-82.4	20.4	17.2	20.3	5.0
Operating margin (EBIT), %	-29.8	7.4	7.0	8.8	2.9
Net profit/loss, SEK million	-70.1	11.0	10.1	18.9	4.2
Earnings per share, SEK	-14.90	2.33	2.48	5.45	1.21
Shareholders' equity, SEK million	127.5	199.7	192.9	130.6	115.3
Average number of employees	175	165	156	147	137

### ●●● FIGURES

- Net sales in 2013 amounted to SEK 276.8 million (275.3), up 0.5 percent. Changes in the USD and EUR exchange rates had a negative impact of SEK 5.5 million on net sales.
- The gross margin was 44 percent (45).
- Operating profit was SEK 13.1 million (20.4), excluding non-cash-flow-impacting impairment charges for the POC project totaling SEK 95.5 million. Including impairment losses, an operating loss of SEK 82.4 million (profit: 20.4) was reported.
- Net profit for the year before impairment charges totaled SEK 6.7 million (11.0). Net loss including impairment charges totaled SEK 70.1 million (profit: 11.0).
- Earnings per share amounted to a negative SEK 14.90 (pos: 2.33). Earnings per share including impairment charges amounted to SEK 1.42 (2.33).
- Cash flow from operating activities was SEK 15.7 million (10.9).

### ●●● EVENTS DURING THE YEAR

#### Subsidiary established in Latin America

Latin America is a large and rapidly growing market, where investments in healthcare systems are expected to continue rising and where CBC is a cornerstone of the diagnostic laboratory, as in many other emerging markets. Establishment of a subsidiary in Latin America will enable Boule to more effectively satisfy the existing considerable demand, while providing better direct support for the established distributors. The subsidiary, Boule Medical Mexico S.A. the C.V., has its registered office in Mexico.

#### Agreement with Karolinska University Laboratory

Boule signed an agreement with Karolinska University Laboratory, Clinical Chemistry (KUL), for collaboration on system validation and product development in hematology. KUL has extensive knowledge of hematological blood analysis and makes a very attractive partner for Boule. The agreement with KUL means that Boule will own all rights to the data generated by the project.

#### Agreement with CVS Group

Boule signed an agreement with CVS Group, one of the largest companies in veterinary medicine and diagnostics in the UK. The agreement spans a 7-year period and includes delivery of instruments and consumables at an estimated value of at least SEK 25 million. CVS Group owns a number of veterinary diagnostic labs as well as close to 260 veterinary clinics in the UK.

#### Sales office established in India

Like many other emerging markets, blood cell counters are a key component of diagnostic laboratories in India, one of the fastest growing markets for Boule's products. Consequently, Boule has established a sales office in Mumbai, India, that will enable the coordination of sales and marketing, and provide direct support to the established distributors.

### ●●● EVENTS AFTER THE END OF THE YEAR

#### Expanded Group Management

Boule's Group Management was increased with the addition of two persons: Hans Johansson and Michael Elliott. Hans Johansson, Head of Production, has been employed at Boule since 2001. Michael Elliott, Head of Chemistry Development, has been employed at the wholly owned US subsidiary, Clinical Diagnostic Solutions Inc., since 2000.

## Comments from President and CEO Ernst Westman

Boule will be one of the world's three largest companies in its market segment for automated complete blood count (CBC).

Our vision stands firm and in 2013, several steps were taken in this direction. During the year, we continued to form global partnerships with key partners and distributors. We have now intensified our focus on the US and are working hard to cultivate the Latin American market through a subsidiary in Mexico. We also opened sales offices in Dubai and India during the year, since we see long-term growth potential in the Middle East, Africa and India.

Our aim is to grow both organically, and by identifying and evaluating partnership opportunities – particularly acquisitions.

We have also decided to relocate the head office and instrument production after the summer of 2014 to new, customized premises next to our reagents plant, which will provide us with a solid platform for continued expansion.

In summing up 2013, we can state that Boule's core operations remain stable but I would like to begin my comments for this year with the discontinued POC project. Problems with the robustness of the POC project that was announced at the start of the year were expected to require further and substantial investment, while other projects had higher priority. Accordingly, we decided in the third quarter to discontinue all development activities in the POC project, which under IFRS rules led to an impairment charge on the entire project's carrying amount of SEK 95 million. We will be able to benefit from some of the POC-project investments in the ongoing work to develop our traditional instruments, which will thus reduce our future development expenses. Our liquidity was unaffected by the impairment – on the contrary, our cash flow improved during the year.

Our financial objectives remain unchanged – annual average sales growth exceeding 10 percent over a five-year period, and an annual EBITDA margin exceeding 15 percent by 2015.

Regarding Boule's core operations, the strong SEK and major structural changes among some of our most important distributors in the US, India and China during the year

had a negative impact on sales. Gratifyingly, this was offset by strong performance in other key markets, particularly Russia and Latin America, where sales growth in our proprietary instrument systems increased 90 percent and 77 percent, respectively. In total, this resulted in a slight increase in sales for the full-year 2013.

Instrument sales in the human market rose sharply at the end of the year, mainly due to increased demand in Eastern Europe, parts of Asia and North and Latin America. Of particular importance was the economic recovery in the US, where the consolidation of key sales channels is now showing signs of increased capacity for our major distributors. In my opinion, the new sales organization for the North American market will once again be able to increase sales in the US in 2014.

Instrument sales in the veterinary market declined somewhat following a strong first half-year in 2013. Our assessment is that this is temporary and that markets such as Europe and Asia will drive future sales.

Sales of consumables for proprietary instruments continued to rise according to plan, while sales of consumables to other instrument manufacturers – known as OEM prod-



ucts – declined slightly in 2013. However, our assessment is that we will continue to generate long-term, growth with healthy profitability, particularly in sales of consumables for proprietary systems and in the OEM operations.

In 2013, we also continued to form global partnerships with key partners and distributors. For example, we signed an agreement with CVS Group, one of the largest companies in veterinary medicine and diagnostics in the UK. The agreement spans a 7-year period and includes deliveries of instruments and consumables to an estimated value of at least SEK 25 million. CVS Group owns a number of veterinary diagnostic labs as well as close to 250 veterinary clinics in the UK and deliveries to the company began at the end of 2013.

We also signed an agreement with Karolinska University Laboratory, Clinical Chemistry (KUL), for collaboration on system validation and product development in hematology. KUL has extensive knowledge of hematological blood analysis and makes a very attractive partner for us. The agreement with KUL means that we will own all rights to the data generated by the partnership, which will be valuable for our future product development.

Finally, we have gathered our strengths in new premises close to our reagents plant. In addition to all of the advantages of close proximity to our production, we now have increased our customized development and production premises by 30 percent at the same cost as before, and thus have an even stronger platform for continued expansion.

As I have said before, Boule's success is due to the combination of competent and dedicated employees and partners and, of course, a competitive offering.

In summarizing 2013, I can state that we are continuing to develop in the right direction and I look forward to summarizing yet another eventful year in 2014.

**Ernst Westman**  
President and CEO, Boule Diagnostics AB

## A single drop of blood...

Blood is a body fluid in humans and animals that performs many important functions. Blood enables an organism to absorb, transport and deliver oxygen, carbon dioxide, nutrients, metabolism products, hormones and other neurotransmitters to and from body cells. Other vital functions include regulating the pH balance and sodium levels in body fluids, helping to maintain body temperature and, last but not least, supporting the body's immune system. The immune system is the body's defense against bacteria, virus, cells that are transformed into cancer cells, foreign cells or particles. These can cause infection or cancer if the body's defense mechanisms are not working properly. Blood circulates in the blood vascular system. It contains free-floating cells and is a "fluid-connective tissue." Blood and blood vessels work together to stop bleeding by forming a clot (hemostasis), which is a local coagulation of major or minor blood vessel injuries that does not block the flow of blood in the body.



### ••• THREE TYPES OF BLOOD CELLS

Blood is considered a fluid-connective tissue, since blood cells are free-flowing and suspended in a liquid. Nearly one tenth of our body weight consists of blood. A person weighing 70 kg has approximately five to six liters of blood. Blood consists of blood cells and plasma. Blood cells account for about half of the body's blood volume.

There are three types of blood cells and each has a special function: red blood cells, white blood cells and blood platelets. Blood cells are produced in the red bone marrow. The first cells formed in the bone marrow are hematopoietic cells, or stem cells, which gradually mature into other types of blood cells.

**Red blood cells**, erythrocytes, acquire their color from hemoglobin, the molecule that transports oxygen around the body. A blood count measurement usually pertains to the concentration of hemoglobin. When determining the cause of anemia, for example, the size and appearance of individual red blood cells is usually studied.

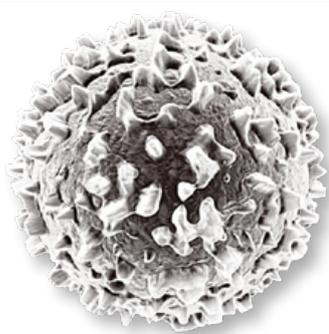
#### A blood test can reveal:

- Anemia
- Hemorrhage
- Pregnancy
- Metabolic disorders
- Leukemia



**1 blood test**  
**1 blood cell counter**  
**1 minute**

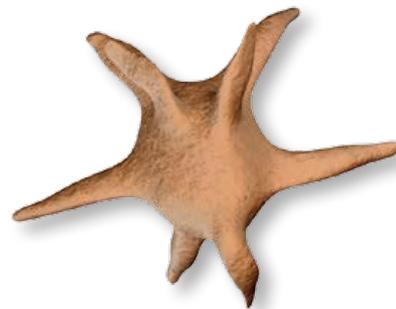
Blood is considered a fluid-connective tissue composed of blood cells and plasma. The normal cells are red blood cells (erythrocytes), white blood cells (leukocytes) and blood platelets (thrombocytes).



**White blood cells**, leukocytes, help the body fight infection. The white blood cells comprise various subtypes. Studying the division between these subtypes can, for example, indicate whether an infection is viral or bacterial.

**A blood test can reveal:**

- Bacterial infections
- Viral infections
- Parasitic infections
- Leukemia
- Allergies



**Blood platelets**, thrombocytes, help in blood clotting. When the blood clots (or coagulates), blood cells combine with certain proteins to form an insoluble substance. The fluid that does not clot is called serum.

**A blood test can reveal:**

- Clotting disorders
- Chemotherapy
- Hemophilia
- Infections

## Boule's business model

Boule's business and earnings model is to sell instruments and consumables for blood cell counting. Boule's proprietary systems comprise both instruments and consumables for these. The consumables are optimized for, and locked to, the proprietary instruments. Sales are global, primarily via distributors.

In addition to development, manufacturing and sales of consumables for the Group's proprietary systems, the company also develops reagents, calibrators and controls for other manufacturers' instruments for sales under the Group's own brand or as OEM products.



### Install blood cell counter

- Steadily growing user base
- Nonrecurring revenue
- Low profit margin
- >20,000 installed systems

#### ••• INSTRUMENTS

Boule has a broad portfolio of blood counting instruments for various users in the market for decentralized hematology diagnostics. The instrument portfolio is marketed globally under four separate brands: three focused on the human diagnostics market and one on the veterinary diagnostics market.

#### ••• CONSUMABLES

Boule's range of consumables consists of reagents, controls and calibrators – key components in a complete blood cell count system. The reagents for Boule's proprietary systems are locked to Boule's instruments with barcodes, thus guaranteeing that test results maintain the highest quality and that the instruments maintain operational reliability. Locked reagents entail that the company's instruments can only be used with Boule's proprietary reagents, which generates recurring revenue over the life of the instruments.

In addition to development, manufacturing and sales of consumables for the Group's proprietary systems, Boule also develops reagents, calibrators and controls for other manufacturers' instruments for sale under the Group's own brand or under those of other manufacturers, known as OEM products.

#### ••• TOTAL QUALITY CONCEPT

Boule offers a total system solution – the Total Quality Concept – for ensuring reliable results and high operational reliability in the user chain. From instruments and reagents to calibrators and controls, the aim is to offer high quality throughout the entire value chain and life of the instruments. Resources are also continuously invested in the training of distributors, for example, in such areas as service, maintenance and product know-how.

#### ••• PRODUCT MIX/MARGIN

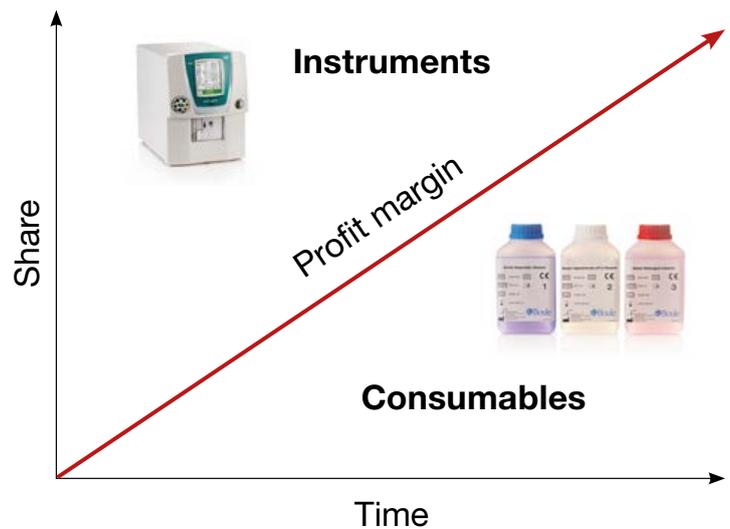
Sales of instruments form the basis for Boule's business model. A high portion of sold instruments, compared with sales of consumables, provides lower margins in the short term. However, a larger base of installed instruments will eventually generate higher sales of Boule's consumables and, accordingly, higher margins. Boule's supplementary sales of consumables under the company's own brand and OEMs also generate favorable margins.



### Sell consumables

- Locked to Boule's system
- Recurring revenue
- High profit margin
- >100 million implemented analyses/year

Increased share of consumables generates higher margins



### ●●● SALES STRATEGY

Boule's sales strategy is to engage independent regional distributors to sell the company's products and services. In the global network, Boule has slightly more than 200 distributors in some 100 markets that market and sell the company's products. In certain strategic markets, Boule conducts direct sales. In 2013, distributor sales accounted for 82 percent of total sales.



**CVS Group** is one of the leading veterinary service providers in the UK. The rapidly growing company with almost 260 veterinary clinics and four diagnostic laboratories is now the largest veterinary group in the UK market. Its rapid and successful growth is the result of the company's pursuit of excellence in all areas of business.

More than 190 of CVS's veterinary clinics have their own hematologic systems installed. These systems are the first step in the diagnosis of animals. Each system is used several times a day by several people, which is why user-friendliness and robustness are essential. After having tested several different brands, CVS chose Boule's Exigo system. The instrument's user-friendliness and

reading specificity – also compared with readings from central laboratories - outperformed competitors. Accordingly, a partnership between the companies was initiated at the end of 2013 under which Boule supplies instruments and reagents directly to CVS and, in return, receives usable clinical data and reference points from the many animals that pass through CVS's clinics.

"We currently have 70 Exigo systems installed at our veterinary clinics and have received exceptionally good feedback from our employees. We will continue to replace and upgrade our hematology systems with Exigo," says Martyn Carpenter, Director of Laboratories, CVS Group.

## Boule's instruments

Boule has a broad portfolio of blood counting instruments for various users in the market for decentralized hematology diagnostics. Three brands focus on the human diagnostics market and a fourth brand, Exigo, on the veterinary diagnostics market.



**Swelab Alfa**



**Exigo/Exigo EOS**



**Quintus**



**Medonic M-series**

## Boule's consumables

Boule's range of consumables consists of reagents, controls and calibrators – key components in a complete blood cell count system.



**Reagents**



**Blood controls and calibrators**



**Cleaning products**

## Product development and production

Product development is a central and prioritized part of Boule's business operations. A cross-functional approach is adopted throughout the organization, in which all expertise (marketing, service, production, quality assurance, regulatory affairs and development) contributes to the company's development work.

### ••• DEVELOPMENT

The development departments are located in Sweden and the US. A total of 21 employees are engaged in the development of hematology instruments, reagents, controls and calibrators. Instrument and system development is conducted at Boule in Stockholm, where about 15 employed developers are stationed, several with extensive experience in blood cell counting. The current product lines have been supplemented with new functionality, with the aim of further improving systems on the basis of feedback from distributors and end-customers. The company also works continuously to reduce its product manufacturing costs.

Clinical Diagnostic Solutions (CDS), Boule's subsidiary in Florida, is responsible for the development of reagents, calibrators and controls and has six employees engaged in research and development. The R&D team at CDS has an outstanding background in hematology, primarily due to the multi-year experience gained from the former market-dominating company Coulter.

### ••• PRODUCTION

Production is conducted in Sweden, the US and China. High-quality instruments are manufactured in Sweden and China. Most of the instruments are produced in Sweden. Reagents are produced in Sweden and the US. In 2012, some of the company's reagent production was relocated from the US to Boule's new production facility in Sweden, thus improving both logistics for customers and production economy for the company. Calibrators and controls are manufactured exclusively in the US.

Boule works continuously to optimize its production processes and stimulate cooperation between the production units and other departments in an effort to optimize the company's internal processes and product development. To facilitate the phase-in of new products into production, the production facilities in Sweden and the US are located adjacent to Boule's development units.



**NextCare** opened the doors to its first urgent care center in Arizona in 1993. With a staff of fewer than ten people, the company worked tirelessly to market the advantages of urgent care as a convenient and cost-efficient solution to overcrowded emergency rooms. Today, NextCare is one of the US's largest providers of urgent care with more than 100 clinics in Arizona, Colorado, New Mexico, North Carolina, Ohio, Oklahoma, Texas and Virginia - and the company is continuing to grow in the rapidly expanding blood cell count market.

NextCare's aim is to set the industry standard for patient care in urgent care. Part of this aim involves utilizing modern equipment and methods to help ensure efficiency, accuracy and rapid access to the information required by patients.

"Offering a point-of-care-test at our clinics enhances patient trust since we can provide a quick, efficient and accurate diagnosis. A key element of the point-of-care offering is CBC, which helps our care providers to determine whether a higher level of care is required, make an accurate diagnosis and decide whether additional tests are necessary," says Dr Michael Kaplan, National Medical Director, NextCare.

NextCare and Boule have been partners since 2009 and Boule's hematology instrument Medonic M is now the first choice for CBCs at most NextCare clinics.

## Boule's market

Boule's offering is targeted to customers in the global market for decentralized and point-of-care hematology diagnostics in both the human and veterinary segments.

### ●●● MARKET

In 2013, the global market for hematology diagnostics was valued at USD 3.0 billion and is expected to be worth USD 3.1 billion by 2014, representing an average annual growth rate of about 2 percent (Genetic Engineering News, Dec 2012).

The market can be divided into two main segments based on the customer category targeted by instrument manufacturers – the market for centralized hematology diagnostics, and the market for decentralized hematology diagnostics.

Instrument sales account for about 43 percent of total sales, while the remaining portion comprises sales of various consumables for the instruments.

Boule operates in the market for decentralized hematology diagnostics, in both human and veterinary diagnostics.

### ●●● DECENTRALIZED HEMATOLOGY DIAGNOSTICS

Decentralized hematology diagnostics entails that specific analyses are performed at laboratories close to the patient in order to shorten lead and treatment times. The analyses are performed at clinics, healthcare centers, consulting surgeries and veterinary hospitals.

The market for decentralized hematology diagnostics accounts for more than one fourth of the total market in this segment and mainly comprises small to midsize hospitals, clinics and laboratories. The instruments are characterized by user-friendliness and relatively low investment costs.

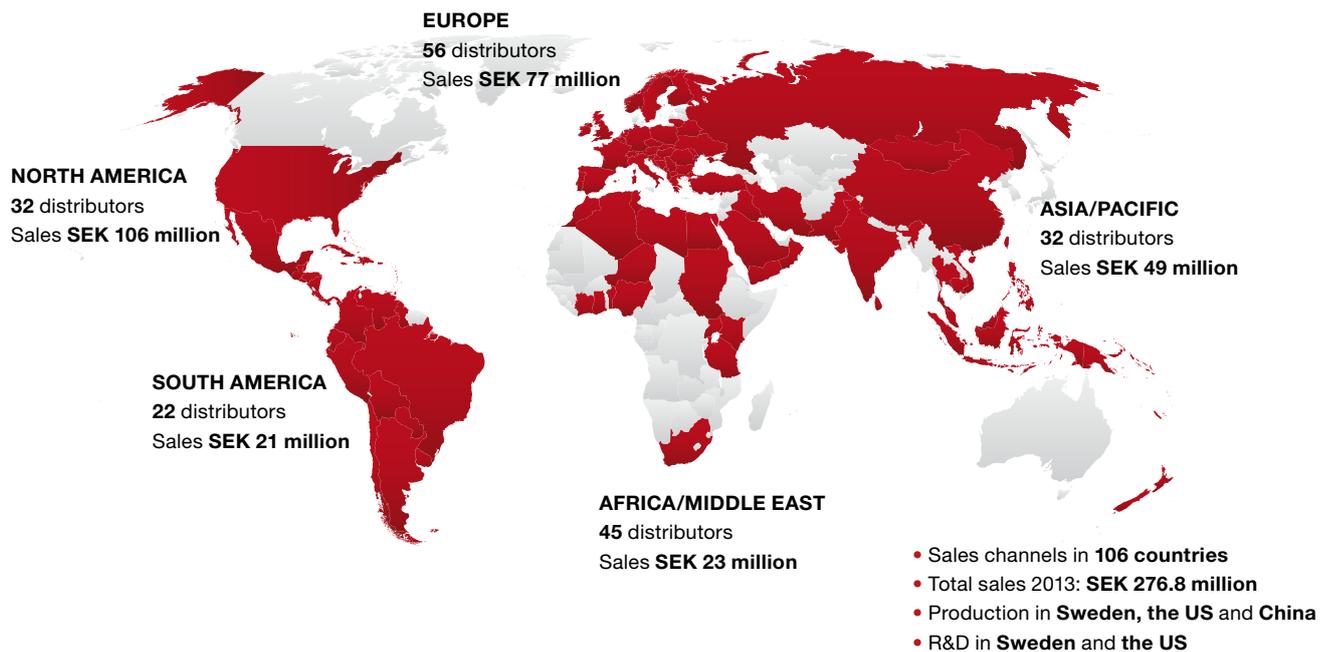
### ●●● DRIVERS OF DECENTRALIZED ANALYSIS

Decentralization, where specific analyses are carried out at the point of care – at clinics, healthcare centers and consulting surgeries, for example – leads to significantly improved service for both physicians and patients. By relocating the analysis from a central laboratory to a site closer to the physician's surgery, a single visit can generate immediate results and provide support for suitable follow-ups. The high costs associated with administering patient samples are also reduced.

### ●●● GROWTH FACTORS

The North American and European markets are characterized by a high degree of maturity, with growth mainly driven by a growing need for blood analyses, in the first instance, due to an aging population and the discovery of new diseases and infections that require analysis, treatment and monitoring. The US is the world's single most important market for hematology products. In 2013, this market was worth about USD 1.1 billion – 37 percent of the total global market.

Other significant factors for the US out-patient market are the rigorous quality standards regulated by such bodies as the Food & Drug Administration (FDA) and the US health insurance system, which determines reimbursement rates to hospitals and physicians for completed tests or treatment. The normal subsidy level for a CBC is about USD 11,



enabling the hospital or physician to make a profit on each individual test, provided that the cost of the test is lower than the subsidy rate. If the sample is sent to an external laboratory for analysis, the hospital or physician must pay for the test instead, and the patient will have to wait for the results, and often make a return visit.

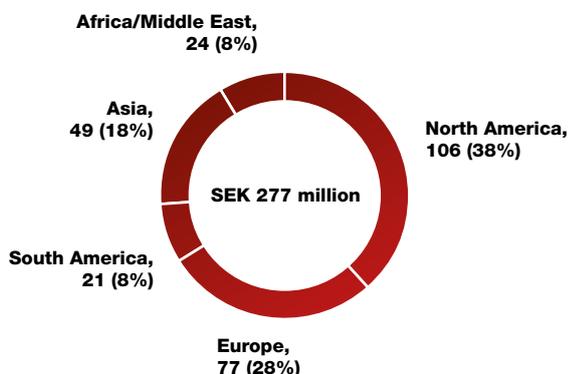
In more rapidly growing markets, such as Asia, Africa, the Middle East and South America, the drivers are largely related to generally improved healthcare and a gradual rise in the standard of living. In recent years, Boule has chosen to increase its focus on these markets since their growth rates are significantly higher than in the more mature markets.

Historically, the veterinary market for CBC has been underdeveloped and investment in automated, high-quality hematology systems adapted for animals has not received the same priority as in the human market. However, interest in the veterinary market for CBC has grown in recent years in pace with veterinary medicine's growing focus on pets.

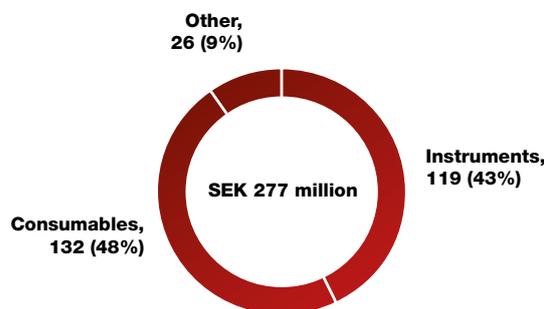
## How **Boule** reaches its customers

Boule has a distributor-based sales strategy that relies on marketing and sales of the company's products by independent regional distributors. However, in certain strategic markets, such as Sweden, Switzerland, and, to a limited extent the US, the company's products are sold on a proprietary basis. The company also has contracts with several major diagnostic companies, to which it out-sources OEM products following an initial development partnership.

### GEOGRAPHIC SALES



### SALES PER PRODUCT GROUP



#### ••• DISTRIBUTORS

The global network consists of nearly 200 distributors in more than 100 markets. In 2013, distributor sales accounted for 82 percent of total sales.

#### ••• OEM

The OEM business mainly comprises development and production of reagents and controls that are labeled with the customer's brand before reaching the end-customer. Boule currently sells OEM reagents to, for example, international human and veterinary diagnostic companies. In 2013, OEM sales accounted for 12 percent of total sales.

#### ••• MARKETING

Boule applies a decentralized approach to marketing, in close collaboration with its distributors, to adapt communication to the local circumstances of each geographic market.

Boule's marketing activities primarily take the form of personal meetings with distributors, training, trade fairs and seminars. Marketing activities that target end-customers are primarily conducted via distributors and vary from country to country.

#### ••• COMPETITIVE ADVANTAGES

Boule's strong market position is based on highly competitive, high-quality products. The company is one of few global players that can develop, produce and market all strategically significant components for automated CBC based on its own expertise and technology.

The current instrument generation is solely compatible with Boule's proprietary reagents, thus ensuring close contact with customers throughout the life of the instrument. Using only proprietary consumables also enhances the quality and accuracy of the tests, since they have been adapted and optimized for Boule's systems.



**Clínica AMAY** i opened in the Venezuelan capital of Caracas in the mid-1990s. Sharing the opinion that biggest is not always best and that personal contact was a key part of patient care, two physicians together with a few nurses opened the doors to their private clinic. Today this small private clinic has grown. Its offering now includes surgery, neonatal care, radiologic and laboratory operations all under one roof.

The clinic's laboratory has a staff of about ten, is manned 24 hours a day and also serves as the central laboratory for patients on Clínica AMAY's wards. About 50 patients come for testing every day. The most common diagnosis among patients who undergo routine CBCs are various types of anemia, but also dengue fever and other infections that are detected when the number of white blood cells increases. Over the years the clinic's operations have expanded and the number of patients has increased. The need to manage a higher volume of laboratory tests and a quest for greater accuracy and speed in test results made it necessary to invest in new instruments for blood cell counting. Several different types of CBCs were evaluated before Medonic M16S was chosen.

"I have only positive things to say about the instrument. It is reliable, easy to adapt to our processes, requires few reagents and is simple to maintain," says José Dopico, laboratory manager at Clínica AMAY.

The instrument has now been in use for more than two years and laboratory personnel, as well as both treating physicians and patients, appreciate the added value that quickly delivered and reliable test results provide in the daily care operations.

## The Boule share

The Boule Diagnostics share was quoted on NASDAQ OMX Stockholm on June 23, 2011. At January 17, 2014, the company had 662 shareholders.

### ••• MARKET CAPITALIZATION AND SHARE TURNOVER

The closing price at December 30, 2013 was SEK 44.10 (37.90), yielding a market capitalization for Boule Diagnostics of SEK 207.6 million (178.4). During the fiscal year, the average daily turnover was about 1,550 shares. In 2013, the total turnover of Boule shares was 387,448, at a value of SEK 16.1 million. The share price increased 12.5 percent during the 2013 fiscal year, while the OMXSPI Index rose 20.5 percent during the same period.

### ••• SHARE CAPITAL

At December 31, 2013, Boule Diagnostics' share capital was SEK 4,707,138, represented by 4,707,138 shares with a quotient value of SEK 1.00 per share. Boule Diagnostics has only one class of share and all shares afford equal rights to participation in the company's assets and profits. A trading lot is one (1) share.

### ••• SHAREHOLDER AGREEMENTS

The Board of Directors of Boule is not aware of any shareholder agreements or other agreements between the company's shareholders of which the purpose is to gain joint influence over the company. Nor is the Board aware of any agreements or the equivalent that could result in a change in control over the company.

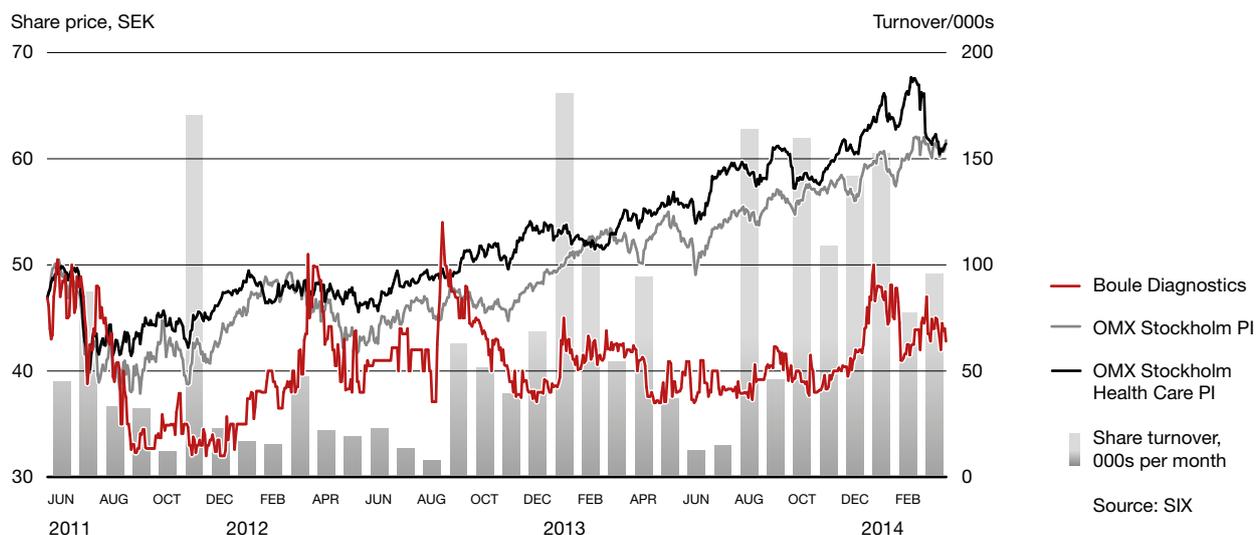
### ••• DIVIDEND AND DIVIDEND POLICY

The Board of Directors of Boule proposes that the Annual General Meeting resolves to pay a dividend of SEK 0.50 per share for the fiscal year 2013.

The Board aims to provide shareholders with a dividend that reflects a favorable dividend yield and dividend growth, and to apply a policy that adapts the dividend level to Boule's earnings level, financial position and other factors deemed relevant by the Board. Over the long term, the annual dividend is to correspond to between 25 and 50 percent of earnings for the period for the core operations, taking the company's equity/assets ratio and liquidity into account.

### LARGEST SHAREHOLDERS AT JAN. 17, 2014 AND SUBSEQUENT KNOWN CHANGES

Aktieägare	No. of shares	Portion of voting rights/share capital
Siem Capital AB	1,570,084	33.36%
Nortal Investments AB (Staffan Persson)	484,451	10.29%
Stiftelsen Industrifonden	406,651	8.64%
Linc AB	318,546	6.77%
Thomas Eklund	236,243	5.02%
Ernst Westman incl. family and companies	127,892	2.72%
Leif Ek	116,672	2.48%
Avanza	95,941	2.04%
Société Générale	75,000	1.59%
Other shareholders (653)	1,275,658	27.10%
<b>Total</b>	<b>4,707,138</b>	<b>100.00%</b>

**KEY DATA**

	2013	2012
Equity/assets ratio, %	58	73
Return on equity, %	-42.9	5.6
Return on total assets, %	-33.2	7.8
Number of shares at the end of the period	4,707,138	4,707,138
Earnings per share, SEK	-14.90	2.33
Equity per share, SEK	27.10	42.40

**SHAREHOLDER REGISTER AT JAN. 17, 2014**

Holding	No. of share-holders	No. of shares	Holding	Voting rights
1-500	317	78,755	1.67%	1.67%
501-1,000	81	69,926	1.49%	1.49%
1,001-5,000	198	264,068	5.61%	5.61%
5,001-10,000	28	217,811	4.63%	4.63%
10,001-15,000	7	84,588	1.80%	1.80%
15,001-20,000	6	98,481	2.09%	2.09%
20,001-	25	3,893,509	82.71%	82.71%
<b>Total</b>	<b>662</b>	<b>4,707,138</b>	<b>100.00%</b>	<b>100.00%</b>

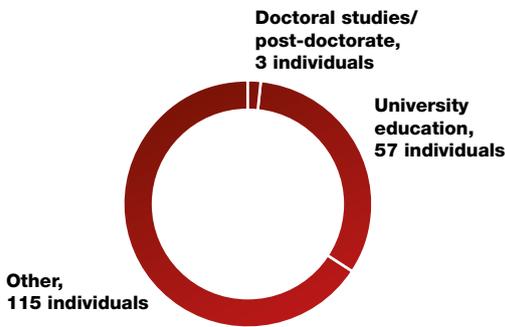
**SHARE CAPITAL TREND**

Year	Month	Transaction	Increase in share capital, SEK	Total share capital, SEK	No. of new shares	Total number of shares	Quotient value, SEK
1996	October	Company formed	100,000	100,000	100,000	100,000	1.00
1996	December	Private placement	129,600	229,600	129,600	229,600	1.00
1997	January	Private placement	287,950	517,550	287,950	517,550	1.00
1997	January	Private placement	728,500	1,246,050	728,500	1,246,050	1.00
1997	October	Private placement	290,000	1,536,050	290,000	1,536,050	1.00
1998	February	Private placement	22,786	1,558,836	22,786	1,558,836	1.00
1998	April	Private placement	103,922	1,662,758	103,922	1,662,758	1.00
1998	June	Private placement	10,000	1,672,758	10,000	1,672,758	1.00
1998	August	Private placement	5,634	1,678,392	5,634	1,678,392	1.00
2001	September	Private placement	460,350	2,138,742	460,350	2,138,742	1.00
2004	October	Private placement	380,347	2,519,089	380,347	2,519,089	1.00
2007	June	Rights issue	944,658	3,463,747	944,658	3,463,747	1.00
2011	June	Private placement	1,243,391	4,707,138	1,243,391	4,707,138	1.00

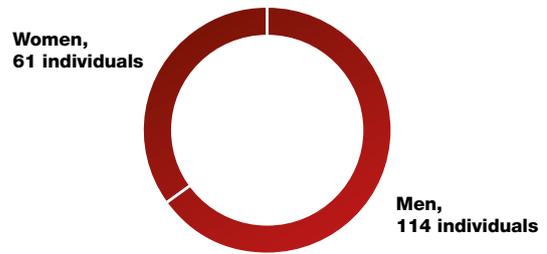
# Employees and organization

Boule has a competent, loyal and multicultural workforce that contributes with initiatives and energy to achieve the company’s set targets. Boule works to ensure a sound work environment, in which employees respect each other’s knowledge, experience and special expertise. The entrepreneurial spirit that has always been a part of the organization helps to create new opportunities through innovation and cross-functional collaboration.

## EDUCATION LEVEL



## GENDER DISTRIBUTION

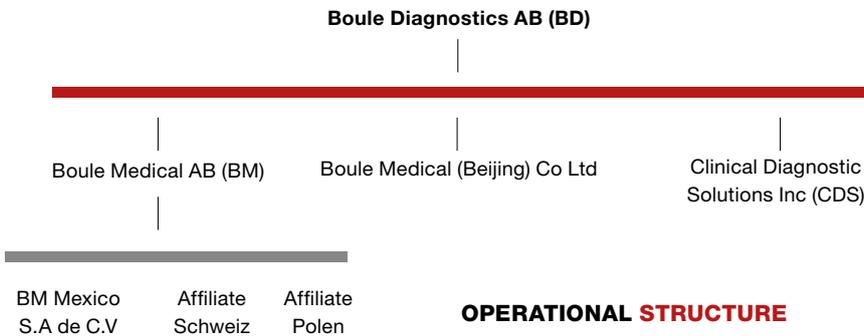


In 2013, Boule had an average of 175 (165) employees, of whom 5 (6) were employed in the Parent Company. The Swedish subsidiary had 72 (65) employees, the US operations 74 (71), the Chinese operations 19 (19), the Swiss operations 3 (3), the Polish operations 1 (1) and the Mexican

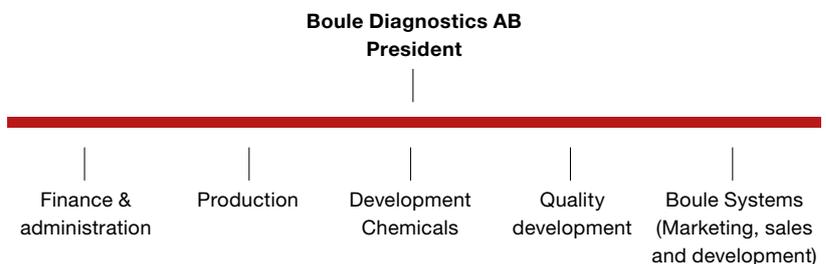
operations 1 (0). A total of 21 (25) employees were engaged in the Group’s research and development activities.

During the year, the company carried out employee surveys to assess strengths and weaknesses in the organization.

## LEGAL STRUCTURE



## OPERATIONAL STRUCTURE





# Consolidated statement of comprehensive income

••• JANUARY 1 – DECEMBER 31

KSEK	2013	2012
Net sales	276,804	275,301
Cost of goods sold	-155,340	-151,795
<b>Gross profit</b>	<b>121,464</b>	<b>123,506</b>
Other operating revenues	802	115
Selling and marketing expenses	-59,021	-54,431
Administrative expenses	-25,132	-25,148
Research and development expenses <sup>1</sup>	-119,592	-22,165
Other operating expenses	-913	-1,527
<b>Operating profit/loss</b>	<b>-82,392</b>	<b>20,350</b>
Financial income	37	174
Financial expenses	-1,868	-319
<b>Net financial items</b>	<b>-1,831</b>	<b>-145</b>
<b>Profit/loss before tax</b>	<b>-84,223</b>	<b>20,205</b>
Current tax	-724	-1,488
Deferred tax	14,822	-7,758
<b>Net profit/loss for the year</b>	<b>-70,125</b>	<b>10,959</b>

<sup>1</sup> Including SEK 95,455,000 for impairment of the POC project in the Jan–Dec 2013 period.

••• OTHER COMPREHENSIVE INCOME

KSEK	2013	2012
<b>Items that may be allocated to net profit/loss for the period</b>		
Translation differences for the year from translation of foreign operations	276	-4,123
<b>Other comprehensive income/loss for the year</b>	<b>276</b>	<b>-4,123</b>
<b>Comprehensive income/loss for the year</b>	<b>-69,849</b>	<b>6,836</b>
<b>Earnings per share before and after dilution (SEK)</b>	<b>-14.90</b>	<b>2.33</b>

# Consolidated statement of financial position

KSEK	Dec. 31, 2013	Dec. 31, 2012
<b>ASSETS</b>		
<b>Fixed assets</b>		
<i>Intangible assets</i>		
Capitalized development expenses	12,126	73,879
Goodwill	61,535	61,584
<i>Total intangible assets</i>	<i>73,661</i>	<i>135,463</i>
<i>Tangible fixed assets</i>		
Plant and machinery	2,100	1,927
Equipment, tools, fixtures and fittings	11,637	12,168
Leasehold improvements	2,039	1,221
<i>Total tangible fixed assets</i>	<i>15,776</i>	<i>15,316</i>
<i>Financial fixed assets</i>		
Long-term non-interest-bearing receivables	205	–
<i>Deferred tax assets</i>	<i>10,025</i>	<i>951</i>
<b>Total fixed assets</b>	<b>99,667</b>	<b>151,730</b>
<b>Current assets</b>		
<i>Inventories</i>		
Raw materials and supplies	26,848	34,230,
Intermediate goods	2,723	3,687
Finished goods and goods for resale	18,283	7,719
<i>Total inventories</i>	<i>47,854</i>	<i>45,636</i>
<i>Current receivables</i>		
Tax assets	2,060	1,643
Accounts receivable	50,134	50,974
Other receivables	6,391	7,237
Prepaid expenses and accrued income	3,561	2,140
<i>Total current receivables</i>	<i>62,146</i>	<i>61,994</i>
Cash and cash equivalents	11,051	15,871
<b>Total current assets</b>	<b>121,051</b>	<b>123,501</b>
<b>TOTAL ASSETS</b>	<b>220,718</b>	<b>275,231</b>

# Consolidated statement of financial position

KSEK	Dec. 31, 2013	Dec. 31, 2012
<b>EQUITY AND LIABILITIES</b>		
<b>Equity</b>		
Share capital	4,707	4,707
Other paid-in capital	190,584	191,198
Translation reserve	-9,842	-10,118
Retained earnings including net profit for the year	-57,957	13,908
<b>Total equity</b>	<b>127,492</b>	<b>199,695</b>
<b>Liabilities</b>		
<i>Long-term liabilities</i>		
Long-term interest-bearing liabilities	8,455	717
Deferred tax liabilities	5,627	11,375
<i>Total long-term liabilities</i>	<i>14,082</i>	<i>12,092</i>
<i>Current liabilities</i>		
Current interest-bearing liabilities	37,944	20,195
Accounts payable	14,682	15,486
Tax liabilities	54	107
Other liabilities	4,477	3,991
Accrued expenses and deferred income	21,487	23,165
Provisions	500	500
<i>Total current liabilities</i>	<i>79,144</i>	<i>63,444</i>
<b>Total liabilities</b>	<b>93,226</b>	<b>75,536</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>220,718</b>	<b>275,231</b>

## Consolidated statement of changes in shareholders' equity

KSEK	Share capital	Other paid-in capital	Translation reserve	Retained earnings incl. net profit for the year	Total equity
<b>Equity, opening balance, Jan. 1, 2012</b>	<b>4,707</b>	<b>191,198</b>	<b>-5,995</b>	<b>2,949</b>	<b>192,859</b>
<i>Comprehensive income/loss for the year</i>					
Net profit for the year	-	-	-	10,959	10,959
Other comprehensive income for the year	-	-	-4,123	-	-4,123
<i>Comprehensive income/loss for the year</i>	<i>0</i>	<i>0</i>	<i>-4,123</i>	<i>10,959,,</i>	<i>6,836</i>
<b>Equity, closing balance, Dec. 31, 2012</b>	<b>4,707</b>	<b>191,198</b>	<b>-10,118</b>	<b>13,908</b>	<b>199,695</b>
<b>Equity, opening balance, Jan. 1, 2013</b>	<b>4,707</b>	<b>191,198,,</b>	<b>-10,118</b>	<b>13,908</b>	<b>199,695</b>
<i>Comprehensive income/loss for the year</i>					
Net loss for the year	-	-	-	-70,125	-70,125
Other comprehensive income for the year	-	-	276	-	276
<i>Comprehensive income/loss for the year</i>	<i>0</i>	<i>0</i>	<i>276</i>	<i>-70,125</i>	<i>-69,849</i>
<i>Transactions with shareholders</i>					
Dividends		-614		-1,740	-2,354
<b>Equity, closing balance, Dec. 31, 2013</b>	<b>4,707</b>	<b>190,584</b>	<b>-9,842</b>	<b>-57,957</b>	<b>127,492</b>

# Consolidated cash flow statement

••• JANUARY 1 – DECEMBER 31

KSEK	2013	2012
<b>Operating activities</b>		
Operating profit/loss	-82,392	20,350
Adjustments for non-cash items	104,463	5,053
Interest received	37	174
Interest paid	-1,596	-495,
Income tax paid	-350	-2,734
<b>Cash flow from operating activities before changes in working capital</b>	<b>20,162</b>	<b>22,348</b>
<b>Cash flow from changes in working capital</b>		
Increase (-)/Decrease (+) in inventories	-1,862	-3,213
Increase (-)/Decrease (+) in operating receivables	-280	-9,069
Increase (+)/Decrease (-) in operating liabilities	-2,345	882
<b>Cash flow from operating activities</b>	<b>15,675</b>	<b>10,948</b>
<b>Investing activities</b>		
Acquisitions of tangible fixed assets	-9,715	-7,526
Investments in other financial fixed assets	-205	-
Disposal of tangible fixed assets	102	800
Divestment of shares in associated companies	-	1,000
Retained development expenses	-23,293	-31,287
<b>Cash flow from investing activities</b>	<b>-33,111</b>	<b>-37,013</b>
<b>Financing activities</b>		
Borrowings	5,000	-
Amortization of loans	-5,532	-
Increase (+)/Decrease (-) in current financial liabilities	15,773	-11,361
Dividends	-2,354	-
<b>Cash flow from financing activities</b>	<b>12,887</b>	<b>-11,361</b>
<b>Cash flow for the year</b>	<b>-4,549</b>	<b>-37,426</b>
Cash and cash equivalents at the beginning of the year	15,871	53,701
Exchange-rate differences in cash and cash equivalents	-271	-404
<b>Cash and cash equivalents at the end of the period</b>	<b>11,051</b>	<b>15,871</b>



## Five-year overview

	2013	2012	2011	2010	2009
<b>INCOME STATEMENT, KSEK</b>					
Net sales	276,804	275,301	246,155	229,421	175,476
Cost of goods sold	-155,340	-151,795	-138,116	-127,207	-102,511
<b>Gross profit</b>	<b>121,464</b>	<b>123,506</b>	<b>108,039</b>	<b>102,214</b>	<b>72,965</b>
Other operating revenues	802	115	1,082	60	3,073
Selling and marketing expenses	-59,021	-54,431	-44,457	-39,692	-33,945
Administrative expenses	-25,132	-25,148	-24,554	-20,456	-11,566
Research and development expenses <sup>1</sup>	-119,592	-22,165	-22,507	-19,641	-21,815
Other operating expenses	-913	-1,527	-436	-2,152	-3,688
<b>Operating profit/loss</b>	<b>-82,392</b>	<b>20,350</b>	<b>17,167</b>	<b>20,333</b>	<b>5,024</b>
Net financial items	-1,831	-145	-1,317	-2,030	-1,507
Share of profit of associated companies	-	-	529	372	574
Capital gain from disposal of shares in associated companies	-	-	1,113	-	-
<b>Profit/loss before tax</b>	<b>-84,223</b>	<b>20,205</b>	<b>17,492</b>	<b>18,675</b>	<b>4,091</b>
Tax	14,098	-9,246	-7,405	216	89
<b>Net profit/loss for the year</b>	<b>-70,125</b>	<b>10,959</b>	<b>10,087</b>	<b>18,891</b>	<b>4,180</b>
<b>BALANCE SHEET, KSEK</b>					
<b>Fixed assets</b>					
Intangible assets	73,661	135,463	106,936	84,470	75,518
Tangible assets	15,776	15,316	12,225	8,973	8,036
Financial fixed assets	205	-	-	4,108	3,737
Deferred tax assets	10,025	951	1,139	1,009	839
<b>Total fixed assets</b>	<b>99,667</b>	<b>151,730</b>	<b>120,300</b>	<b>98,560</b>	<b>88,130</b>
<b>Current assets</b>					
Inventories	47,854	45,636	43,379	38,284	37,355
Current receivables	62,146	61,994	54,467	46,072	28,100
Cash and cash equivalents	11,051	15,871	53,701	17,689	12,056
<b>Total current assets</b>	<b>121,051</b>	<b>123,501</b>	<b>151,547</b>	<b>102,045</b>	<b>77,511</b>
<b>Total assets</b>	<b>220,718</b>	<b>275,231</b>	<b>271,847</b>	<b>200,605</b>	<b>165,641</b>
<b>EQUITY AND LIABILITIES, KSEK</b>					
Equity	127,492	199,695	192,858	130,565	115,333
Long-term interest-bearing liabilities	8,455	717	618	6,901	1,652
Deferred tax liabilities	5,627	11,375	3,806	280	329
Current interest-bearing liabilities	37,944	20,195	30,780	20,180	19,843
Current non interest-bearing liabilities	41,200	43,249	43,785	42,679	28,484
<b>Total equity and liabilities</b>	<b>220,718</b>	<b>275,231</b>	<b>271,847</b>	<b>200,605</b>	<b>165,641</b>
<b>CASH FLOW, KSEK</b>					
Cash flow from operating activities before change in working capital	20,162	22,348	18,432	22,017	9,389
Change in working capital	-4,487	-11,400	-12,988	-5,858	9,145
Cash flow from investing activities	-33,111	-37,013	-24,412	-15,595	-11,957
Cash flow from financing activities	12,887	-11,361	54,765	5,623	-4,042
<b>Cash flow for the year</b>	<b>-4,549</b>	<b>-37,426</b>	<b>35,797</b>	<b>6,187</b>	<b>2,535</b>

<sup>1</sup> Including SEK 95,455,000 for impairment of the POC project in the Jan–Dec 2013 period.

	2013	2012	2011	2010	2009
<b>Key data</b>					
Net sales growth, %	0.5	11.8	7.3	30.7	4.0
Gross margin, %	44	45	44	45	42
EBITDA, SEK million	16.9	23.5	20.0	23.1	9.0
EBITDA margin, %	6.1	8.5	8.1	10.1	5.1
EBIT, SEK million	-82.4	20.4	17.2	20.3	5.0
EBIT margin (operating margin), %	-29.8	7.4	7.0	8.8	2.9
Return on total assets, %	-33.2	7.8	7.5	11.1	3.0
Return on equity, %	-42.9	5.6	6.2	15.4	3.6
Return on capital employed, %	-42.1	9.3	9.0	13.2	3.5
<b>Capital structure</b>					
Equity, SEK million	127.5	199.7	192.9	130.6	115.3
Capital employed, SEK million	173.9	220.6	224.3	157.6	136.8
Working capital, SEK million	94.4	97.0	124.6	73.5	60.9
Liabilities to credit institutions, SEK million	46.4	20.9	31.4	27.1	21.5
Interest coverage ratio, multiple	-51.8	41.9	12.2	21.2	3.7
Net debt	46.1	20.9	31.4	27.1	21.5
Net debt/equity ratio, %	36.2	10.5	16.3	20.7	18.6
Equity/assets ratio, %	58	73	71	63	69
<b>Data per share</b>					
Average number of shares	4,707,138	4,707,138	4,063,300	3,463,747	3,463,747
Number of shares at the end of the period	4,707,138	4,707,138	4,707,138	3,463,747	3,463,747
Earnings per share, SEK	-14.90	2.33	2.48	5.45	1.21
Equity per share, SEK	27.1	42.4	41.0	37.7	33.3
Cash flow from operating activities per share, SEK	3.33	2.33	1.16	3.43	3.94
Dividend per share, SEK	0.50	0.50	-	-	-
<b>Employees</b>					
Average number of employees	175	165	156	147	137

## DEFINITIONS

**Gross profit** is net sales less costs for goods sold

**Gross margin** is gross profit divided by net sales

**EBITDA** (Earnings before interest, taxes, depreciation and amortization) is profit before net financial items, taxes and depreciation/amortization of tangible and intangible assets

**EBITDA margin** is EBITDA divided by net sales

**EBIT** (Earnings before interest and taxes) is profit before net financial items and taxes

**EBIT margin** is EBIT divided by net sales

**Capital employed** is total assets less deferred tax liabilities and non-interest-bearing liabilities

**Working capital** is inventories, accounts receivable and cash less accounts payable

**Net investments** are investments in tangible and intangible assets adjusted for disposals

**Interest coverage ratio** is operating profit plus financial income divided by financial expenses

**Net debt** is interest-bearing assets less interest-bearing liabilities

**Net debt/equity ratio** is net debt divided by equity

**Equity/assets ratio** is equity divided by total assets

**Return on equity** is profit for the year after tax divided by average equity

**Return on capital employed** is profit after net financial items plus financial expenses divided by the average capital employed

**Return on total capital** is operating profit plus financial income divided by average total capital.

## Board of Directors



**LARS-OLOF GUSTAVSSON, BORN 1943**

Member of the Board and Chairman of the Board since 2010.

**Other assignments:** Chairman of the Boards of Fouriertransform AB, Four Seasons Venture Capital AB and Futurum Edge AB and Board member of Mikroponent AB, Siem Capital AB, Stiftelsen Industrifonden and TA Associates AB. Member of the Royal Swedish Academy of Engineering Sciences (IVA).

**Present occupation:** See above.

**Education:** MBA from the University of Gothenburg School of Business, Economics and Law.

**Shareholding in Boule:** 42,900.

Lars-Olof Gustavsson is independent in relation to the company and the company's senior executives. Lars-Olof Gustavsson is not independent in relation to the company's major shareholders.



**BRITTA DALUNDE, BORN 1958**

Member of the Board since 2010.

**Other assignments:** Chairman of the Boards of Chorus AB and StraightTalk AB and Board member of Knightec AB.

**Present occupation:** Independent Board member and business consultant.

**Education:** MBA in International Relations from Uppsala University. Postgraduate Diploma in Business Administration from Edinburgh Business School at Herriot Watt University.

**Shareholding in Boule:** 4,000.

Britta Dalunde is independent in relation to major shareholders, the company and the company's senior executives.



**EVA-LOTTA KRAFT, BORN 1951**

Member of the Board since 2010.

**Other assignments:** Board member of Nibe Industrier AB, Opus Group AB and Xano Industri AB.

**Present occupation:** Independent Board member.

**Education:** Master of Science in Chemistry from the Royal Institute of Technology (KTH) and an MBA from Uppsala University.

**Shareholding in Boule:** 500.

Eva-Lotta Kraft is independent in relation to major shareholders, the company and the company's senior executives.



**ÅKE NYGREN, BORN 1951**

Member of the Board since 2010.

**Other assignments:** Chairman of the Boards of Anagram AB, Margana AG and Netdoktor.se AB.

**Present occupation:** President of Anagram Consultants AG.

**Education:** Master of Science in Electronics and Data and PhD in image processing as well as economics studies from Lund University (LTH).

**Shareholding in Boule:** 1,500.

Åke Nygren is independent in relation to major shareholders, the company and the company's senior executives.



**GÖSTA OSCARSSON, BORN 1944**

Member of the Board since 1996.

**Other assignments:** Board member of Siem Capital AB and several of its associated companies, Board member of Four Seasons AB and Four Seasons Venture Capital AB and subsidiaries, and Fridhems Kursgård AB.

**Present occupation:** CEO of Four Seasons Venture Capital AB.

**Education:** MBA from the University of Gothenburg School of Business, Economics and Law.

**Shareholding in Boule:** 42,900.

Gösta Oscarsson is independent in relation to the company and the company's senior executives. Gösta Oscarsson is not independent in relation to the company's major shareholders.

# Management



## **ERNST WESTMAN**

Ernst Westman has been the President/CEO of Boule Diagnostics AB since 1996 and employed at Boule since 1994.

**Other assignments:** No other assignments.

**Education:** Master of Science in Chemistry from Chalmers University of Technology in Gothenburg.

**Shareholding in Boule:** 127,992 shares (privately and through company).



## **CLAES BLANCHE**

Claes Blanche is the President of the subsidiary Boule Medical AB and has been employed at Boule since January 2012.

**Other assignments:** No other assignments.

**Education:** Master of Science in Biochemistry from the Royal Institute of Technology (KTH).

**Shareholding in Boule:** 400 shares.

**Warrants in Boule:** 10,000 warrants.



## **THOMAS OLSSON**

Thomas Olsson Senior Vice President of Quality & Regulatory and has been employed at Boule since 1992.

**Other assignments:** No other assignments.

**Education:** PhD in Biochemistry from Stockholm University.

**Shareholding in Boule:** 56,312 shares.



#### **FREDRIK ALPSTEN**

Fredrik Alpsten is the Senior Vice President and CFO and has been employed at Boule since 2011.

**Other assignments:** Chairman of the Board of Personlig Almanacka Nordic AB.

**Education:** MBA from the Stockholm School of Economics.

**Shareholding in Boule:** 200 shares.

**Warrants in Boule:** 10,000 warrants.



#### **HANS JOHANSSON**

Hans Johansson is Senior Vice President of Production and has been employed at Boule since 2001.

**Other assignments:** No other assignments.

**Education:** Hans Johansson holds a Master of Science in Technical Physics and Electrical Engineering, and a Licentiate of Science in Material Physics, both from the Institute of Technology of Linköping University.

**Shareholding in Boule:** 9,467 shares.



#### **MICHAEL ELLIOTT**

Michael Elliott is Senior Vice President R&D-OEM at CDS, and has been employed in the subsidiary CDS since 2000.

**Other assignments:** No other assignments.

**Education:** Michael Elliott has a Master of Science from Queens University in Belfast and an Executive MBA from Florida Atlantic University.

**Shareholding in Boule:** 15,258 shares.

**Warrants in Boule:** 10,000 warrants.

This English summary of the annual report is a translation of the Swedish original. In the event of discrepancy between the English translation and the Swedish original, the original Swedish version shall prevail.

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**Head office**

**Boule Diagnostics AB**

Street address: Västberga Allé 32  
Box 42056  
SE-126 13 Stockholm, Sweden  
Tel: +46 8 744 77 00  
Fax: +46 8 744 77 20

**Boule Medical AB**

Box 42056  
SE-126 13 Stockholm, Sweden  
Tel: +46 8 744 77 00  
Fax: +46 8 744 77 20

**Clinical Diagnostic  
Solutions Inc.**

1800 NW 65th Avenue  
Plantation, FL  
33313, USA  
Tel: +1 954 791 1773  
Fax: +1 954 791 7118

**Boule Medical  
(Beijing) Co. Ltd.**

Development Zone,  
Shunyi District  
101 300 Beijing, China  
Tel: +86 10 8945 1945  
Fax: +86 10 8945 1987