

# and started in 20



Annual Report



# Overview of Roth & Rau AG

(according to IFRS)\*

Sales and Earnings		2005	2006	Change in %
Sales	kEUR	33,397	42,853	28.3
Foreign share	%	61.2	74.9	
Orders received	kEUR	37,113	129,073	248
Orders on hand**	kEUR	15,965	102,185	540
EBITDA	kEUR	5,614	5,538	-1.4
EBIT	kEUR	4,309	4,510	4.7
EBT	kEUR	4,096	4,760	16.2
Net profit for the year	kEUR	2,530	2,904	14.8
Earnings per share	Euro	2.07	1.44	-30.4
Employees**		90	137	52.2
Balance Sheet		2005	2006	Change in %
Balance Sheet Balance sheet total	kEUR	<b>2005</b> 19,571	<b>2006</b> 68,686	Change in % 251
	kEUR kEUR			
Balance sheet total		19,571	68,686	251
Balance sheet total Share capital	kEUR	19,571 1,500	68,686 2,300	
Balance sheet total Share capital Equity	kEUR kEUR	19,571 1,500 4,747	68,686 2,300 35,118	
Balance sheet total Share capital Equity Equity ratio	kEUR kEUR %	19,571 1,500 4,747 24.3	68,686 2,300 35,118 51.1	251 53.3 640 /
Balance sheet total Share capital Equity Equity ratio Investments	kEUR kEUR %	19,571 1,500 4,747 24.3 2,805	68,686 2,300 35,118 51.1 2,032	251 53.3 640 / -27.6
Balance sheet total Share capital Equity Equity ratio Investments Profitability	kEUR kEUR % kEUR	19,571 1,500 4,747 24.3 2,805 <b>2005</b>	68,686 2,300 35,118 51.1 2,032 2006	251 53.3 640 / -27.6

\* For the business year of 2006, Roth & Rau AG publishes audited Financial Statements according to IFRS for the first time. The Financial Statements for the year 2005 have retrospectively been audited according to IFRS to enable a better comparison. For this reason, the previous year's figures might differ from figures published in the past.

\*\* Balance sheet date 31 December 2006

# Beginning 1990 - Start 2006

# 2001

# 1999

Change of the company's legal form to Roth & Rau AG Commissioning of the first SiNA <sup>®</sup> production equipment Installation of the IonScan prototype 31 employees Sales\* 5,9 million Euro

1994

Installation of the SiNA® prototype at the Energy Research Centre of the Netherlands ECN 25 employees Sales\* 2,7 million Euro

## 1990

Hard coating service for tools and mechanical components Launch of the first own series of plasma process systems MicroSys for application in research & development 11 employees

Formation of the Roth & Rau Oberflächentechnik GmbH by Dr. Dietmar Roth, Dr. Bernd Rau and Dr. Silvia Roth with the goal to translate their know-how in plasma and surface technology into marketable products

# 2006

First orders for turnkey projects for solar cell production lines and for thin film solar module manufacturing equipment First sale of IonScan to the American semiconductor industry 137 employees Sales 42,8 million Euro

# 2004

## 2002

Growth of the photovoltaic industry gained momentum Launch of the new SiNA® generation 65 employees Sales 9,5 million Euro

Takeover of 60% of the shares of the Roth & Rau AG by the Rohwedder AG First major projects in the photovoltaic industry 40 employees Sales 6,1 million Euro



# Table of Contents

Let	ter to the Shareholders	4
Rep	port of the Supervisory Board	8
<b>"</b> It	was SiNA®"	12
Cor	porate Governance Report	18
The	9 Share	22
An	easy-going Approach, Creativity	
and	d a good Deal of Humour	26
Mar	nagement Report	30
	Business and Conditions	30
	Sales and Profits Development	33
	Order Situation	35
	Financial Situation	36
	Research & Development	38
	Investments	39

ROTH & RAU AG Annual Report 2006



Employees	39
Protection of the Environment	40
Supplemental Report	40
Notes on Takeover Obstacles	40
Risk Report	41
Forecast Report	44
Round or Square	48
Annual Financial Statements	52
Balance Sheet	52
Income Statement	54
Cash Flow Statement	55
Statement of Changes in Equity	56
Notes	58
Auditor's Opinion	88
Financial Calendar	89
Imprint	90

3



# Letter to the Shareholders

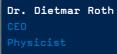
## **Dear Shareholders**,

I am delighted to present you the first Annual Report of Roth & Rau AG today. We look back at a successful and unique business year. Successful, because we have been able to significantly increase sales and earnings, received an all-time high of new orders and achieved strategically important milestones with some of our own new developments. Unique, because we successfully completed our Initial Public Offering.

The year 2006 was characterised by strong growth. In the segment of photovoltaics, we were able to significantly expand our market share for antireflection coating systems worldwide. Our core product, the plant series SiNA®, has been established very successfully in the market so that we were able to sell the 100th plant at the beginning of 2007. Thanks to a consequent adaptation of our plants to the needs of our customers and the latest trends in technology, we are in an especially good position to meet the increasing requirements made by ever increasing cell factories. In the segment of turnkey production lines for modern mass production of crystalline silicon solar cells, we have come one significant step closer to our target of becoming one of the leading providers of turnkey projects: our break-through was the order to deliver several turnkey lines for the reconstruction of the former Frankfurt chip factory in Frankfurt/Oder by Conergy AG. In the context of this unique major project, we will be able to prove the quality of our equipment and our competency in project management. This reference project will contribute highly to a further growth of Roth & Rau. In addition, we were able to further expand our activities in the field of thin layer solar technology. The cooperation with Oerlikon Solar (formerly Unaxis Solar) entered into in May, is of special strategic importance in this respect. The leading provider in the segment of thin film, vacuum and precision technology uses our know-how to manufacture efficient production platforms for the photovoltaic industry and thus enables us to enter the thin film solar market.

In the segment of plasma and ion beam technology, we succeeded in entering the American semiconductor market with our lonScan 800 plant. In August, the US American company TriQuint Semiconductor Inc. selected us to deliver a plant for precision treatment of surfaces, our so-called Ion Beam Trimming technology, currently a leading technology worldwide. Our customers achieve enormous cost saving potential by using this technology. IonScan enables a processing of wafers to be used for the manufacturing of chips for mobile phones in the nanometer range, which results in a significant increase of the numbers of chips made from one wafer.

At the end of the year, all these pleasing operative developments resulted in a successful economic outcome: sales increased by 28.3 % to EUR 42.9m, the net profit for the year rose by 14.8 % to EUR 2.9m. This success would not have been possible without the commitment of our staff. Therefore, I would like to take the opportunity to thank you on behalf of the entire management for your enormous efforts during the past year. Our shareholders who have invested in our company since our IPO, will also benefit from this result: at the end of the business year, the price per share was at EUR 40.40 and thus 12.2 % higher than the issue price of EUR 36.00. I would like to thank all our shareholders for their trust in Roth & Rau AG. We plan to meet your demands by an open and transparent communication and a management strategy oriented towards the increase of the shareholder value.



16.7

For the year 2007, we will continue to work intensively on our organic growth. We plan to achieve this objective mainly by the increase of our share in the value-added chain of the production of crystalline silicon solar cells. Therefore, the focus of research and development will be on this segment in the business year of 2007. In the thin film solar segment, we will work on the commercialisation of a very promising new technology, the so-called "epitactic wafer equivalent" in cooperation with Fraunhofer Institut für Solare Energiesysteme (ISE - Institute for Solar Energy Systems) over the next two and a half years. This technology combines a high cost saving potential with a low loss in efficiency compared to conventional solar cells. We still consider a suitable acquisition to be a further possible step in the context of our growth strategy. We will use the financial resources at our disposal since the IPO to meet our strategic targets.

We have set the tracks for further growth already in 2006. We have hired new staff and ordered the construction of the new photovoltaic site. Therefore, we are in a great position both as regards personnel and structure to successfully meet our objectives. I would be delighted if you continued to accompany us along this path.

Yours sincerely,

Dr. Dietmar Roth Chairman of the Management Board



# Report of the Supervisory Board

## **Dear Shareholders**,

Roth & Rau AG's successful initial public offering was the focus of attention in the financial year 2006. It was a pleasure for us to support the Management Board during that time. The development of business during the course of the year was highly satisfactory and is reflected by significant increases in turnover and earnings figures. Growth was considerably boosted by a high volume of new orders in photovoltaics, which significantly exceeded expectations. In addition, the company succeeded in securing strategically important orders in the field of plasma and ion beam technology. We support the Management Board in its plan to further expand production capacity to take into account the company's fast growth.

In the past financial year 2006 the Supervisory Board performed all duties incumbent on it under the law and the Articles of Incorporation. We regularly provided advice to the Management Board and monitored the management of business. We were always involved in all decisions of fundamental importance to the company and supported the Management Board by giving advice. The Management Board met its extensive reporting obligations without restriction, informing us in a comprehensive, prompt and direct manner about the latest developments in the course of business both in writing and orally. Thus, we were always up to date about business policy, company planning including financial planning, capital investment planning and human resource planning, the company's profitability and the course of business as a whole. In addition to the regular reports about the course of business, notably turnover and earnings, the Chairman of the Supervisory Board and the Chairman of the Management Board also exchanged information by telephone. All reports of the Management Board were analysed at Supervisory Board meetings, and they were openly and intensively discussed with the Management Board.

#### Change in membership of the Supervisory Board

In preparation for the initial public offering Joachim Rohwedder and Dr. Silvia Roth resigned their Supervisory Board positions in April. The new members elected by the General Meeting were Prof. Alexander Michaelis, Head of the Fraunhofer Institute for Ceramic Technologies and Systems, and Daniel Schoch, CFO of Carl Zeiss SMT AG until 30 September 2006, CFO of the BauBeCon Group since October 2006. At the constituent meeting held on 10 April 2006 Harald Löhle was elected Chairman of the Supervisory Board.

### Main areas of consultation

The Supervisory Board had six meetings last year, which were held on 3 March, 10 April, 27 April, 2 August, 16 October and 6 November 2006. All members attended more than half of the meetings. An important topic the meetings focused on at the beginning of the year was Roth & Rau AG's initial public offering. It was intensively discussed at the meetings held on 3 March, 10 April and 27 April. In the further course of the year we mostly dealt with the company's strong growth and its strategic orientation for the coming years. Possible acquisition strategies, the development of photovoltaics in the future, the planned site expansion and the development of human resources were analysed in detail. We regularly discussed the current development of Roth & Rau AG's turnover, profit and financial situation. In addition, we intensively dealt with the following topics: Annual Financial Statements, audit of Annual Financial Statements and budgeting for the financial year 2007. We voted in the affirmative on all questions which required our consent. We did not form any committees due to the Supervisory Board's size.



#### **Audit of Annual Financial Statements**

The Annual Financial Statements were prepared in accordance with International Financial Reporting Standards (IFRS). The company Bodensee Treuhand GmbH, Wirtschaftsprüfungsgesellschaft, Meersburg, was commissioned to audit the Annual Financial Statements and the Management Report of Roth & Rau AG. The auditor declared that the IFRS principles were fully observed and issued the unqualified auditor's opinion reprinted on page 88.

The Annual Financial Statements and the Management Report as well as the Auditor's Report were available to all members of the Supervisory Board in due time before the meeting to discuss the accounts was held on 13 March 2007. At the meeting the auditor provided information about the process and results of the audit and was available for questions and additional information. Having performed its own check of the Annual Financial Statements and the Management Report, the Supervisory Board agreed to the auditor's result without objection. The Annual Financial Statements of Roth & Rau AG prepared by the Management Board were approved by the Supervisory Board. Thus, the Annual Financial Statements for the year 2006 have been established in accordance with s. 172 German Stock Corporation Act (AktG). We consent to the Management Board's proposal on how to use the unallocated profit for the year.

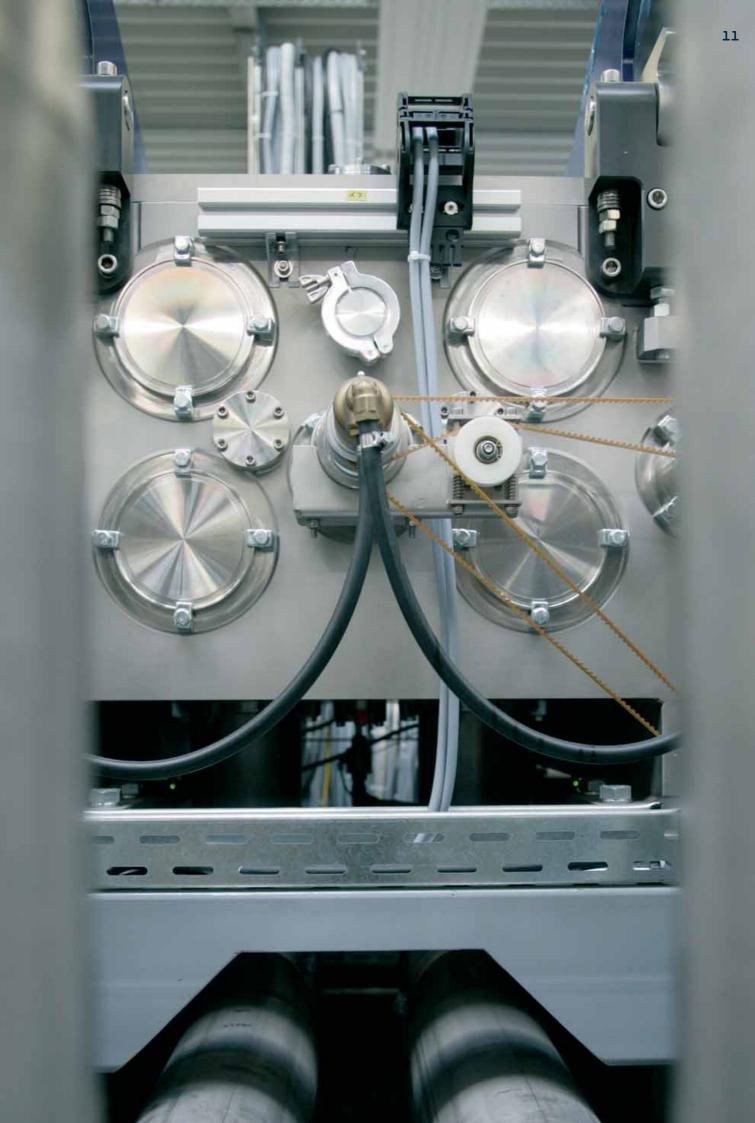
#### **Corporate governance**

The Supervisory Board attaches great importance to the advancement of corporate governance. In the course of the company's initial public offering, but also during subsequent months, many measures of good corporate governance were additionally laid down by the company. Refer to page 18 of this report for a detailed report on corporate governance. Together with the Management Board we are currently examining whether to make a voluntary declaration of compliance based on the German Corporate Governance Code for the first time in December 2007.

The Supervisory Board thanks the Management Board and all employees for their commitment and the successful work they have done last year. We also wish to thank our customers, business partners and shareholders for the confidence they have shown us.

Hohenstein-Ernstthal 13 March 2007 The Supervisory Board

Harald Löhle Chairman



# "It was the SiNA""

This was Dr. Roth's unhesitating reply when I asked her to name her first milestone in the company's history. The SiNA<sup>®</sup> was and is Roth & Rau AG's success model, and with it the company achieved its breakthrough in the solar industry.

It was this breakthrough which finally enabled Roth & Rau AG to go public in May 2006. The company was founded just after the Wall came down by three established physicists with both a passion for their profession and the right sense of future-oriented technologies. In Hohenstein-Ernstthal, Saxony, they succeeded in establishing the seemingly contradictory connection between the Old and the New Economy, creating a blend of a very sound plant construction company and a high-tech equipment manufacturer for the solar industry.

This seeming contradiction already absorbed me while I was preparing for my interview with Dr. Roth, co-founder of Roth & Rau AG. A company tour was scheduled. I had plenty of questions to ask. After all, non-expert visitors like me need detailed explanations in order to find their bearings in the world of wafers, antireflection coatings, plasma sources and efficiency ratios.

"The SiNA<sup>®</sup> is used to provide wafers with an antireflection coating which reduces the proportion of light reflected by the surface of a finished solar cell, thus increasing its efficiency ratio," Dr. Roth explains patiently. "The efficiency ratio is the key quality characteristic of a solar cell. The higher it is, the more electricity the cell is capable of producing and the more favourable it is for the end consumer."

Since 2001, when the first SiNA® was started up at Astropower (now General Electric) in the United States, 100 more machines have been sold. This is a tremendous quantity, given that, depending on plant size, every single plant takes about six months of work to complete, from the receipt of an order until the plant is started up at the customer's site.

During my visit at Roth & Rau's site, about 20 km from the gates of Chemnitz, I wanted to follow just this path which every plant takes before leaving the yard. Many steps are necessary in preparation before the first screw can be inserted into the first component of a SiNA<sup>®</sup> plant. Dr. Roth gave me the background story. First, the suppliers are informed and their delivery deadlines are scheduled because supplied components account for about 60 % of a SiNA® plant. They include, for example, the 1.5-ton vacuum pumps connected at the side of the plant to produce the negative pressure necessary for coating the wafers. The vacuum chambers, which are the basis of the entire construction, are also manufactured externally according to specific requirements. The centre-piece of the SiNA<sup>®</sup>, the plasma sources, which make the coating of the wafers work in the first place, and the power supply system for controlling the plant are manufactured by Roth & Rau itself.

Initially, of course, a SiNA $^{\circ}$  plant is created on paper. Drawings of what the plant is to look like and the



Dr. Silvia Roth Vice President Marketing / Investor Relations Physicist

1,6

121

0

TA

13





manner in which it is to be integrated into the customer's production are prepared in the Design Department. A SiNA<sup>®</sup> plant is by no means a standard product. Many details are tailored to the customer's needs, who can choose where the pumps are to be arranged and what the carriers, i.e. the transport plates on which the wafers move through the plants, are to look like exactly. The production of the plant doesn't start until the customer has given his/her final approval of this layout.

This is also our signal to start as we set off from the meeting room in Roth & Rau AG's administrative building, cross the yard and enter the 2,000 squaremetre production hall. The first impression: Clean. High-tech wherever you look. This is where equipment used in photovoltaics is made, which is THE industry of renewable energy. It's bright, warm and somewhat noisy in here. "This is because the SiNA® XL is being tested over there at the moment," Dr. Roth explains, pointing at a silver-coloured plant about 20 metres long and 2.5 metres high.

It takes four employees about two months of work to assemble a plant like this. Production can start as soon as the vacuum chambers are delivered. These rectangular stainless steel cases form the body of the plant. The plasma sources are core components installed in the body. They are reminiscent of fluorescent tubes, running through the vacuum chamber in transverse direction. Microwave generators are connected at both ends to supply power. There are four to six such plasma sources in each plant. Later, when the SiNA® is complete, the carriers with the wafers will pass underneath the plasma sources, where a plasma consisting of a mixture of silane and ammonia burns with a glaring purple light. The desired silicon nitride layer is applied to the wafers by a chemical reaction on their surface. This process requires a

certain temperature, so the wafers are heated up to 400 °C. "By applying this antireflection coating we increase the cell's efficiency ratio by up to 10 %, and as a side effect the cell is given its characteristic blue colour," Dr. Roth is pleased to comment the production process. Everything else happens around this core component, the vacuum chamber with the plasma source. To make the SiNA® plant complete, pumps, electrical racks, motors, transport components, the cooling system, the gas supply system and the automation system are installed as well.

The SiNA® XL in front of which we are now standing in the hall has already passed all those steps and is now undergoing factory acceptance testing, performed in the presence of both Roth & Rau's and the customer's engineers. About 10 people are walking around and on top of the SiNA® plant, typing into their notebooks and lively discussing their observations. This is the phase when the last individual fine-tuning takes place and training is provided to the customer's staff with regard to the functionality, the safety concept and maintenance of the SiNA®. In addition, employees of Roth & Rau's project management team put the plant to the acid test once again. In this bustle of activity we meet Lutz Eismann, Head of Production of SiNA® manufacturing and, in this capacity, in charge of coordinating the project from the phase of approaching suppliers for the first time up to the monitoring of time schedules: "We set great store by close contact with our customers. This is the only way we can provide tailor-made solutions. We also learn a lot and are able to develop our plants further based on their feedback."

The plant is shipped to the customer's site after the successful completion of the plant's acceptance test at Roth & Rau's location. For European customers this is done by lorry. However, much more intensive

planning is necessary for shipping if the SiNA® is to be used in China, for example. The Merchandise Management Department takes care of all issues relating to transport. At first, all peripheral components of the SiNA® must be dismantled. Pumps, electrical racks and the parts of the automation system are despatched separately. I was surprised to find that the plant itself is divided only once at the centre for transport. "This works out perfectly because all dimensions relevant for transport were already taken into consideration at the design stage, of course," explains Reinhard Glück, an employee of the Shipping Department, when he notices the disbelieving look on my face. A special-purpose crane is used to transport the SiNA® out of the production hall and load it on a lorry. Packaging is the next stop, then it goes on, by air or sea, to its final place of application. The difference between air and sea freight is not only three weeks in transport time, but also some EUR 20k in transport costs.

When the plant has arrived in good condition at its place of destination, the last stage begins: At least one service technician and one process engineer from Roth & Rau are present at the customer's site at all times during installation, start-up and final acceptance. The service technician deals with the installation of the plant and checks the technical functions ranging from the pumping system to the transport system. The process engineer is responsible for the continuing final acceptance and checks if the plant achieves the desired optimal coating results, that is, whether the wafers produced by it have a uniform blue shine. This is where the journey of the SiNA® ends. But not always do things go as smoothly as this: "In China it is not uncommon that people are not prepared for our delivery, for example that necessary water and power supply connections have not been installed, or even that only the shell of the production hall has been completed," Dr. Roth says with a smile which is a mere indication of the bizarre and unbelievable stories she has experienced with her SiNA® plants over the years.

Simone Gorny

# SiNA®

- Available in five sizes with an annual production capacity ranging from 5 MWp to 50 MWp, corresponding to a throughput of 360 to 2,250 wafers per hour
- A feed-through method is used for plant operation, with the silicon wafers processed on flat carriers
- Layer is deposited from a silane-ammonia plasma in a continuous PECVD process
- High flexibility in respect of wafer formats
- Low operating costs
- Versatile options for automation
- High system availability
- Price ranges from EUR 650k to EUR 2.3m

## MAIA

New generation of multi-functional plasma process equipment for crystal line silicon solar cell production

1. 6

10

17

# Corporate Governance Report

Responsible business management and control aimed at increasing enterprise value in a sustainable manner have always been of greatest importance both to the Management Board and the Supervisory Board of Roth & Rau AG. Thanks to our affiliation with the Rohwedder Group from 2002 until 2006 we started dealing with the topic of corporate governance and the recommendations and suggestions published by the Government Commission German Corporate Governance Code long before our initial public offering (IPO). Many important aspects were taken into consideration in the revised agreements with members of the Management Board as well as the rules of procedure for the Management Board and the Supervisory Board in the run-up to the IPO in May 2006.

Now that we are a listed stock company it is a matter of course for us more than ever to put the recommendations of the Code into practice and constantly optimise our corporate governance activities. Our objective is to confirm and strengthen the confidence shown in us by our shareholders, business partners and employees. This is why, for the first time, we publish this voluntary report about corporate governance at our company based on Item 3.10 of the Code. Today we already follow the Code's recommendations wherever we believe this to be reasonable based on company-specific circumstances. For example, we follow the recommendation, included in the Code's revision dated 12 June 2006, to prepare a remuneration report.

## **Shareholders and General Meeting**

We will convene our first Annual General Meeting as a listed company on 6 July 2007 and look forward to welcoming many of our new shareholders on that occasion. We will make sure that our shareholders can get information about the General Meeting in due time and retrieve all relevant documents from our web site. In addition, we will give those shareholders who are unable to attend the General Meeting the opportunity to have their voting rights exercised by an authorised person of their choice or by a company proxy bound by instructions. We will publish more information on this in due time as well.

## Cooperation between the Management Board and the Supervisory Board

The Management Board and the Supervisory Board of Roth & Rau AG cooperate closely to achieve their common objective of increasing enterprise value in a sustainable manner. The Management Board always informs the Supervisory Board comprehensively and directly about corporate planning, current business development and risks. The six Supervisory Board meetings held last year afforded the best opportunities to do so. Additionally, numerous conversations took place between the Supervisory Board Chairman and the Chairman of the Management Board, which always involved discussions of current developments. This cooperation was characterised by a trusting relationship allowing for an open discussion between the Management Board and the Supervisory Board.

#### **Management Board**

The Management Board currently consists of two members, Dr. Dietmar Roth and Dr. Bernd Rau, both of them founders of the company. Dr. Roth is the chairman of the Management Board. He is responsible for overall operational performance and for areas of strategy and planning, sales and marketing, finance and investor relations. Dr. Rau is in charge of production and customer service, research & development, quality management and technical equipment. Dr. Roth's appointment expires on 31 March 2011, Dr. Rau's on 30 June 2007.

No conflicts of interest occurred in the past financial year. Dr. Rau holds no supervisory board positions or similar positions outside Roth & Rau AG. Dr. Roth is a member of the administrative board of UCP Processing Ltd., a company based in Balzers (Principality of Liechtenstein). For information about the remuneration of the Management Board please refer to the separate remuneration report for the Management Board and the Supervisory Board on this page.

### **Supervisory Board**

In the run-up to the IPO, the members of Roth & Rau AG's Supervisory Board changed as follows: The shareholders elected two new members of the Supervisory Board at the General Meeting 2006. Prof. Alexander Michaelis, Head of the Fraunhofer Institute for Ceramic Technologies and Systems, and Daniel Schoch, CFO of BauBeCon Holding, accepted the positions of Joachim Rohwedder and Dr. Silvia Roth, who had resigned their Supervisory Board positions in April with a view to the IPO. At the constituent assembly held on 10 April 2006 Harald Löhle was elected Chairman of the Supervisory Board. Thus, the Supervisory Board currently consists of three members. It has not formed any committees. The Board does not believe that the formation of committees would help to increase work efficiency for a supervisory board of this size.

The Supervisory Board regularly reviews the efficiency of its activities by self-assessment. The results are directly incorporated into the continuous optimisation of its work.

In the past financial year there were no conflicts of interest that might arise, for example, due to any executive or non-executive positions held with customers, suppliers or creditors. In addition, the Supervisory Board believes that it has a sufficient number of independent members, ensuring that the Management Board was advised and monitored independently at all times.

The Supervisory Board gives a detailed report on each meeting and the main areas of activity in the past financial year on page 8. For information about the remuneration of the Supervisory Board please refer to the separate remuneration report for the Management Board and the Supervisory Board on page 20.

## Remuneration report Management Board

The overall structure of remuneration for the Management Board is determined and periodically reviewed by the Supervisory Board to ensure that it is appropriate and in line with what is usual in the market.

The total remuneration for the year consists of elements not related to performance as well as performancerelated elements. Elements of remuneration not related to performance include a fixed sum, which is paid out in equal amounts as a salary on a monthly basis, and additional benefits, largely company car use and compensation for travel costs. In addition, the members of the Management Board receive an amount for direct insurance, and one accident insurance policy is maintained for the benefit of each member. Furthermore, pension agreements exist for Dr. Dietmar Roth and Dr. Bernd Rau, concerning a life-long retirement pension from the retirement age of 65, an invalid pension, a widow's pension and orphan's pension, to be assessed based on the gross monthly salaries received most recently. An adition to pension provisions amounting to EUR 22k was made in the past financial year. The total amount of pension provisions was EUR 422k at 31 December 2006.

A management bonus based on the company's profit for the year is paid out as a performance-related element. The amount of the management bonus is determined when the Annual Financial Statements are prepared. There are no long-term incentive elements of remuneration such as stock option plans, nor have any special promises providing for the case of members leaving the Management Board been made.

The total remuneration of the members of the Management Board in the financial year 2006, including noncash benefits for direct insurance, company car use and accident insurance, was EUR 425k, the fixed sum portion of which amounted to EUR 302k. Provisions for the management bonus were EUR 123k.

### **Supervisory Board**

The remuneration of the Supervisory Board is governed by s. 12 of the Articles of Incorporation. It is determined by the General Meeting and takes into account the responsibility and scope of activities of the Supervisory Board members.

In addition to a fee of EUR 500 per meeting, each member of the Supervisory Board receives a fixed remuneration, paid out after the end of the financial year. Prof. Alexander Michaelis and Daniel Schoch receive a fixed sum of EUR 8k each. Harald Löhle receives 1.5 times the amount, i.e. EUR 12k, for his work as Chairman of the Supervisory Board. The total remuneration of Supervisory Board members does not include any performance-related elements.

### Transparency

Prompt and consistent communication with our shareholders and members of the financial community is a central element of our business management and especially our investor relations activities. Our website is a comprehensive information platform that is available both in German and in English to all investors, analysts, business journalists and the interested public. Here you can find our financial calendar with an overview of all scheduled publication dates. In addition, all publications such as quarterly reports and press releases are available for viewing and download. Other information relates to our share and share price performance.

In the corporate governance section of our web site we will also publish announcements regarding purchases or sales of shares in the company by members of the Management Board and the Supervisory Board. This is also done voluntarily based on s. 15 German Securities Trading Act (WpHG). However, there have been no such announcements since our IPO. The company's founders Dr. Dietmar Roth and Dr. Bernd Rau each continue to hold 9.13 % of the company's issued shares after the IPO. The total number of shares held by members of the Supervisory Board is less than 1 % of the company's issued shares.

# Risk management, reporting and audit of financial statements

In accordance with corporate governance recommendations the Management Board provides for an adequate risk management system and risk controlling. The risk management system implemented at Roth & Rau enables the Management Board and the Supervisory Board to identify risks at an early stage and to actively control them. Thus, the company manages to deal with risks with awareness and in a controlled manner, ensuring that there is a good balance between prospective rewards and risks. For more detailed information on this topic please refer to the risk report on page 41.

Accounts are prepared in accordance with International Financial Reporting Standards (IFRS). In addition to the annual report we published an interim report and, on a voluntary basis, detailed press releases on the first and the third quarters. Except for the press release on the first quarter, which we were unable to publish until the end of May due to our IPO, we adhered to the deadlines for publication provided in Item 7.1.2 of the Code, i.e. 45 days after the end of the reporting period for quarterly reports and 90 days for the annual report.

The General Meeting appointed the company Bodensee Treuhand GmbH, Wirtschaftsprüfungsgesellschaft, Meersburg, as auditor of the financial statements, and the company was commissioned by the Supervisory Board to audit the Annual Financial Statements 2006. Before commissioning the auditor the Supervisory Board ascertained the auditor's independence.



# The Share

Share Figures	2006	
Share capital	EUR 2,300,000	
Number of shares	2,300,000 bearer shares	
Issue price (11/5/2006)	EUR 36.00	
Highest price (12/5/2006)	EUR 42.95	
Lowest price (2/8/2006)	EUR 27.80	
Price at the end of the year (29/12/2006)	EUR 40.40	
Earnings per share	EUR 1.44	
Free float market capitalisation as of the balance sheet date of 31/12/2006	EUR 53.5m	

## Master data of the share

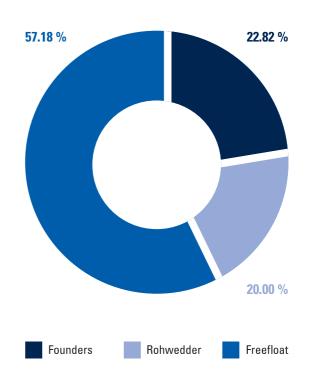
ISIN	DE000A0JCZ51
WKN (Securities Identification Number)	A0JCZ5
Stock exchange segment	Entry Standard
Stock exchange abbreviation	R8R
Stock exchange centres	Frankfurt,
	Berlin-Bremen,
	Stuttgart,
	Munich,
	Düsseldorf
Indexes	Entry All Share
	Entry Standard Index

Apart from the issue price, all prices refer to the XETRA closing price.

# Successful Initial Public Offering – founders will stay invested in the long run

One of the most important events in company history was our Initial Public Offering in May 2006. The Management not only succeeded in convincing institutional investors of the successful business model in the context of the IPO Road Show, but it has also been able to win numerous private investors for the Company. Result was a significant oversubscription, so that not all subscription offers could be fulfilled in the required amount. During the Road Show, the Management Board introduced the Company in eight days to approximately 57 investors in the most important European financial centres. A planned long-term commitment of institutional investors played an important role in allotment. In addition, many shareholders of Rohwedder AG used the opportunity to directly invest in Roth & Rau AG by way of a preferential subscription. Therefore, we have a stable shareholder structure.

22.82 % of the shares were owned by the founder members, Dr. Dietmar Roth, his wife Dr. Silvia Roth, and Dr. Bernd Rau, as of 31 December 2006. All three will keep their investments in the Company for a long period of time after the end of the lock-up period in May 2007. As of the balance sheet date, Rohwedder AG held 20 % of the shares, the remaining 57.18 % of the shares were free float.

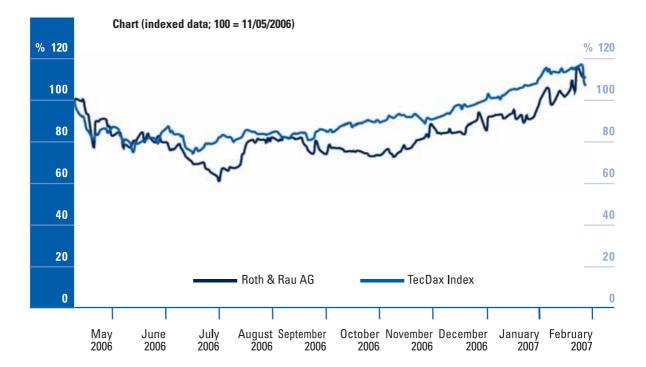


### **IPO** resources accelerate the Company's growth

A total of 1,325,000 shares were placed, 800,000 thereof came from the capital increase. The Greenshoe option has already been exercised completely on 16 May. After deduction of transaction costs, the Company received liquid funds of Euro 27.4 million. The proceeds from the IPO will be used especially to enhance the leading market position in antireflection coating systems. In addition, the production capacity at the Hohenstein-Ernstthal site will be expanded as well to ensure future growth. We will also work intensively on the international expansion and the strengthening of the segment of research and development. Another strategic option would be an external growth by way of acquisitions.

#### Share price development

Our IPO was very successful against the background of an overall very positive capital market and industry environment. On 11 May, Roth & Rau's share started with a price of EUR 43.50 which was significantly higher than the issue price of EUR 36.00. In the course of the general consolidation of the market and industry environment, the share price dropped and reached its annual low of EUR 27.80 on 2 August. With a slight timedelay, Roth & Rau's share was able to participate in the continuing upward trend of the market from the middle of July. The price rose again due to the strong increase of orders received and the convincing half-year and q3 results, and with EUR 40.40 at the end of the year, it was significantly higher than the issue price. At the end of the year, the free float market capitalisation as defined by Deutsche Börse, amounted to EUR 53.5 million. In consideration of all stock exchanges an average of 8,640 shares has been traded on a daily basis. Thanks to this average trading volume, Roth & Rau belongs to the most liquid securities in the Entry Standard and thus qualified for an admission to the Entry Standard Index started on 25 October 2006. This selection index comprises 30 companies belonging to the Entry Standard having the highest stock market turnover.



Closing prices on Xetra, Source: Deutsche Boerse, www.handelsblatt.de

# Investor Relations – voluntary measures increase transparency

An open and continuing exchange of information with participants of the capital market is a core issue of our investor relations activities. We have been in close contact with our investors since the IPO. Besides the approach of investors on the occasion of the IPO, the management organized a Road Show in October in Frankfurt and in December in Munich to introduce themselves to a high number of investors.

We used our participation in different capital market conferences in Frankfurt, such as the Nano Equity Europe Conference on 11 July, the Small Cap Conference on 30 August and the SEQ - Smart Equities Conference on 16 November to inform the financial community on the latest developments in our Company, to intensify existing contacts and to create new contacts to potential investors. A transparent and immediate communication by way of a permanent reporting is just as important to us as the management's regular presence at capital market conferences. For this reason, we meet numerous requirements, on a voluntary basis, going beyond those required for the Entry Standards. We see it as our obligation to create an increased transparency for our shareholders and use the practices of the Prime Standard as our guidance. In concrete terms, we currently meet the following measures on a voluntary basis:

- Publication of the Directors' Dealings of the members of the Management Board and the Supervisory Board
- Far-reaching compliance with the principles of Corporate Governance
- Bilingual financial market communication
- Quarterly reports
- A minimum of one analyst event per year
- Publication of the quarterly reports within 45 days after the end of the reporting period
- Publication of the Annual Report within 90 days after the end of the reporting period

In addition to our half-year report, we voluntarily reported on the first and third quarter by publishing comprehensive press releases. Next year, we will go one step ahead and publish quarterly reports in the narrower sense. In addition, all interested parties may use our website as another regular source of information which is always up-to-date. Its comprehensive offer includes, for example, a download sector containing all current publications as well as a comprehensive price inquiry tool. And, in case of any further questions or feedback, we are always available by telephone.

#### Dividend

In line with our growth strategy, we plan to use the net profit for the year for further growth, subject to the consent by the shareholders to be given at the General Meeting. In case of a future positive earnings development, we believe to be able to pay a dividend to shareholders in the medium term.

# An easy-going Approach, Creativity and a good Deal of Humour

When Kristin Roth, Sales Manager of Roth & Rau, addresses the aspect of customer relations that is most important to her, she doesn't talk about prices and quality: They are a matter of course. "The chemistry between people must be right," she says, and goes on to explain: "When, as a general contractor, we supply turnkey solar cell production lines, we are talking about large-scale projects with a total duration of up to 15 months. This is where a close and trusting relationship with our customers is of tremendous importance."

Under the name "Advanced Solar Cell Manufacturing" (ASCM) Roth & Rau offers an all-in solution for the fully automatic and low-cost mass production of solar cells. This solution was created as a so-called in-line concept. A transport conveyor is charged with wafers at the front end of the production line. They go through all production steps in fully automatic operation until the solar cell is finished. Advanced stands for the special extras Roth & Rau offers its customers: Higher efficiency. The solar cells which have passed through a Roth & Rau line have an efficiency ratio of up to 16 %, and this is crucial for the profitability of the installation later. "We are able to achieve this as a result of many years of development in the field of plasma technology and thanks to the application of an optimised manufacturing technology, which was developed by our research partner ECN, the Energy Research Centre of the Netherlands," Kristin Roth explains.

The entire project design is always tailored to the customers' specific business plans. There are hardly any standardised workflows in this regard. Nearly all the customer's wishes can be incorporated, ranging from throughput and automation to an individual colour concept for the production line. In addition to the complete project management for customers, Roth & Rau provides consultation to them during the planning phase, selects individual units, performs acceptance tests of individual units, transports and installs such units on site, provides the software and technology. But the most important task and, at the same time, the crux of the entire project is to optimise the production line and harmonise the individual process steps. It takes up to six months until all machines are optimally tuned to each other and a maximum throughput and efficiency ratio can be achieved.

In addition to Roth & Rau with its SiNA® installation, three other suppliers provide 9 installations in all, which are interconnected by at least five automation systems. Each installation has to be supplied with

Kristin Roth Sales Manager 27

ROTH &RAU

3

635

36

various utilities and fluids such as electricity, water, gas, chemicals, etc. If all these parts are arranged in a line one after the other, a hall at least 100 metres long and 15 metres wide is needed for a 50 MWp production line. Working on a large-scale project is a 7-strong team of engineers, technicians and commercial staff, plus one project manager and one research employee – at Roth & Rau alone. Adding to this are the many employees of the customer, subcontractors and various transport companies to ensure that the production line will turn out up to 2,000 solar cells per hour in the end.

These facts and figures make it clear what a logistical and organisational challenge it is to design, build, deliver and install a turnkey production line. And it is only natural that, in the course of the project, situations may arise which require quick, creative and unconventional solutions but which are unforeseeable

# ASCM

- 30 or 50 MWp annual production capacity per line, corresponding to a net throughput of 1,200 or 2,000 wafers per hour, respectively
- Minimum efficiency ratio of cells at the start of production is 15.0 % on multicrystalline wafers with the potential to reach 15.8 % after an optimisation phase
- Low variation in quality between wafers
- Minimum wafer-to-cell yield: 92 %
- Minimum availability of line: 85 %

even if the best and most detailed planning is used. In taking on these challenges, the employees of Roth & Rau rely on many years of experience in the industry, professionalism and technological know-how. And on the very soft skills emphasised by Kristin Roth: "What is most invaluable to the success of such a project is great flexibility, a certain easy-going approach, creativity and a good deal of humour."

Simone Gorny



# Management Report

## **Business and Conditions**

## **Company structure and business activity**

Roth & Rau AG develops and manufactures plants and process systems based on the plasma and ion beam technology and provides them to a worldwide customer base working in most different industries. The production of these plants is located at the Company's headquarters in Hohenstein-Ernstthal. In addition, we are represented in Shanghai with a sales and service agency.

Our most important sales markets are Germany and Europe with a sales percentage of 37 % and Asia with 56 %. Last year, we were able to significantly improve our market share in the segment of antireflection coating plants. Its worldwide percentage (apart from Japan) amounts to 60 %, in China we have a market share of 70 %. This in-crease of the market shares has been promoted by the development of ever increasing cell factories having annual production capacities of more than 100 MWp – our SiNA<sup>®</sup> plants are especially suited for these kinds of factories.

In German-speaking countries, marketing activities are carried out by in-house marketing staff. In other sales markets, we cooperate with a number of long-term distribution partners. Distribution works according to the Key Account Management system and organises its responsibilities in accordance with our customers and not our products. Some of our most important customers are Q-Cells, Schott Solar, Isofoton, Conergy and Infineon, among others.

Our business activities are divided in two business segments, photovoltaics and plasma and ion beam technology, last year, the segment of photovoltaics accounted for approximately 85 % of our total sales figures.

### **Photovoltaics**

In the segment of photovoltaics, we produce plants for use in solar industry. Roth & Rau belongs to the leading manufacturers of antireflection coating systems which enable an efficiency increase of crystalline silicon solar cells. Our main product in this segment is the plant series SiNA®. Currently, we provide SiNA® models with five different production capacities to meet the individual needs of our customers. In addition, we have been offering turnkey production lines for cost-effective mass production of solar cells since 2005. This so-called ASCM concept (Advanced Solar Cell Manufacturing) comprises the support of customers in planning, procuring, installing and commissioning of a solar cell production line up to a complete turnkey solution. Last year, we had a break-through in this business. After long years of development activities, we marketed the first plants in the context of a major project in cooperation with Conergy AG. This order has a total volume of EUR 53m and will be completed in the first half-year of 2008. In addition to the plants for silicon wafer-based photovoltaics, we offer a hydrogenation plant for thin-film solar cells, the so-called LAiLA plant.

### Plasma and ion beam technology

In our second business segment of plasma and ion beam technology, we supply customers in different industries, such as e.g. micro and nano technology, optics or medical technology, but also research and development facilities. One of the most important products is IonScan 800, a system for the surface treatment of semiconductor wafers. While this system has been on the market for a short time only, it is already an established product. In August, the US American company TriQuint Semiconductor Inc. ordered a plant and thus enabled Roth & Rau to access the important American semiconductor market. With IonScan 800, Roth & Rau is one of two providers of the Ion Beam Trimming technology, a process increasingly required for new, pioneering technologies in the semiconductor industry. Furthermore, Roth & Rau offers MicroSys 500 DLC, a coating plant for infrared optics for distance sensors and night vision devices as well as its AK series which are used predominantly as research plants in

photovoltaics. While MicroSys 500 DLC is characterised by its special coating technology, the AK series comprises a flexible plant concept to process larger surfaces offered by a few competitors only.

### **Controlling system**

The controlling of Roth & Rau AG by the Management Board is carried out mainly by way of financial figures like sales, EBIT and cash flow. As the major part of orders are handled in the context of projects, a monthly, project-related controlling takes place, one for each business segment. Part of these controlling activities are comparisons between Plan and Actual situation with regard to project costs and a verification of the project schedule. Results will be reported to the Head of Finances and the Chairman of the Management Board. Another important controlling factor is the forecast for orders received. The Chairman of the Management Board is informed of this forecast on a quarterly basis in separate reports for each segment.

### Strategy

Our strategy in the business segment of photovoltaics focuses on the expansion of our leading market position for antireflection coating systems. To continue the positive development of our market shares in the most important sales markets, we work continuously on the optimisation of our plants by adapting them both to the latest developments in technology and the individual needs of our customers. In the further development of our SiNA® series, we currently focus on the increase of our production capacities. Furthermore, we expand our customer base in the domestic and foreign countries. We strengthen our activities in the segments of marketing and distribution mainly in growth markets for solar cell manufacturing like China, Japan and the U.S.

In addition, we plan to develop the successfully started business with turnkey production lines (ASCM) so that it will form a stable third foothold of our Company. Besides the major project with Conergy, we were able to win another customer for this product in the second half of the year 2006. The order was from Taiwan so that our ASCM concept enabled us to gain access in Asia as well.

Another long-term objective is to significantly increase Roth & Rau's share in the value-added chain of solar cell manufacturing. For this purpose, our research and development department is currently working on a way to replace processes of solar cell manufacturing which are still carried out on a wet-chemical basis with plasma processes.

At the moment, most part of all solar cells are produced based on crystalline silicon. However, we expect that the importance of thin layer technologies will increase over the next years due to their low demand of silicon. Therefore, we will enhance our activities in the segment of thin film solar technology and will participate in different research projects. A technology called "epitactic wafer equivalent" forms an interesting alternative for us among the high number of solutions. In this technology, wafers made of low-quality, cost-effective silicon being available in sufficient quantities, are coated with a layer of high-value silicon. Any wafer treated in this manner can subsequently be processed just like any conventional wafer. We wish to commercialise this technology in the next two and a half years in cooperation with Fraunhofer-Institut für Solare Energiesysteme (ISE).

As we have already communicated in the context of the IPO, we plan to supplement our portfolio by suitable acquisitions. We are currently verifying different alternatives. Conceivable targets of an acquisition would be synergy effects in the segment of crystalline solar cells, the increase of the share of self-produced products in turnkey projects or an expansion of the activities in the thin layer solar technology.

The strategic orientation in the segment of plasma and ion beam technology also focuses on the increase of the export share of our products. We already have a stable market position in this segment, especially in the German-speaking area. In future, we wish to be increasingly present on an international level and push the expansion of the global distribution network. Objective of these measures is to open up both new distribution markets and additional customer potential.

Another target is to qualify the product group lonScan, currently used successfully in the semiconductor industry for precision processing of surfaces in the nanometer range, for the use in new sales industries like Data Storage or Precision Optics by way of a further development and an adaptation of the technology.

In addition, the PlasmaCure<sup>®</sup> System, a new process to harden UV-sensitive finishes developed in cooperation with Dürr Systems GmbH and Ciba Spezialitätenchemie AG, should reach a marketable status.

### **Development of the national economy**

In 2006, the German economy has grown as strongly as never before since the boom year of 2000, according to data provided by the Statistisches Bundesamt (Federal Statistical Office). The gross domestic product (GDP) increased by 2.7 % compared to the previous year. Contrary to the two previous years, especially a domestic use of 1.5 percentage points and the exterior contribution of 1.1 percentage points promoted the economic growth. Especially gross fixed capital formation have risen as strongly as never before since the reunion, but even private consumer spending increased for the first time. Foreign trade was still dynamic in the past year. Real exports increased by 12.5 % and thus exceeded imports rising by 11.1 %.

Also, the economic situation in Euroland recovered significantly. It grew by 2.6 % after 1.4 % the year before. Also global economics expanded strongly in 2006 again with an increase of approximately 5 %, according to ifo Institut für Wirtschaftsforschung (Economic Research Institute). The development of fast growing newly industrialised countries like China, India, Russia and Eastern Europe as well as the upswing of the global economy during the past three years were decisive factors for this development. Countries like the U.S. and Japan were able to further enhance their growth rates even though the dynamics of these two countries decreased noticeably toward the end of the year.

### **Industry development**

In view of growth rates of more than 20 %, the photovoltaics market developed in line with the expectations of different market studies. The industry-wide shortage of silicon has not yet had an effect on our business, as investments in new cell production capacities are already intended for the period after the end of silicon shortage. In our region, we recognised a significant shift of the market focus towards Asia, especially China. The development of South European markets like Italy, Spain, Portugal and Greece is going slower than expected. Reasons were unsafe political conditions with regard to development programs. Increased investments in the production of thin layer solar modules were made especially in Germany. However, we assume that crystalline solar cells will continue to dominate the market as thin layer technology is still inferior in many areas.

# Assessment of the business development by the Management Board

The year 2006 was the most successful business year in our Company's history as regards the order situation. In this respect, we benefit mainly from the strong growth of the global photovoltaics market. We were able to significantly exceed our expectations in the photovoltaics segment with sales numbers of EUR 36,238k. In the segment of plasma and ion beam technology, we reached sales figures of EUR 6,615k after EUR 9,338k the year before. This development results from fluctuations in the scope and type of orders which are typical for the business with customised plants. To be able to meet the increasing demand for our products in the future, we have strongly invested in the expansion of our personnel capacity in 2006 resulting in an increase of costs of personnel of 51.4 % compared to the previous year. This development is also reflected in the EBIT margin amounting to 10.5 % which is slightly below our target for the business year. The hiring of new employees and the construction of our new photovoltaics site in Hohenstein-Ernstthal are important steps along our growth path. The competitive situation developed very positively. In the field of photovoltaics, Roth & Rau belongs to the leading equipment manufacturers thanks to its product portfolio. Competitors offering comparable products were not able to gain essential market shares last year or even lost market shares. There were no important shifts in the competitive structure of the segment of plasma and ion beam technology.

## **Sales and Profits Development**

In the business year 2006, we were able to increase sales revenues by 28.3 % to EUR 42.853k and thus exceeded our target of EUR 38,000k to EUR 40,000k. The foreign share in sales revenues amounted to EUR 32,083k or 74.9 % (previous year: EUR 20,426k / 61.2 %). The biggest part of foreign sales was realised in Asia. Thanks to the consequent expansion of our distribution presence, we were not only able to participate in the Asian photovoltaics market which is growing strongly, but we also reduced our dependency from the German market. Total sales contain unvalued sales totalling EUR 3,974k. The partial realisation of profits for these sales figures will take place later (zero profit margin method). The segment of photovoltaics contributed EUR 36,238k or 84.6 % to the total sales figures and thus exceeded previous year's level of EUR 24,059k by 50.6 %. This significant increase results mainly from the high demand for antireflection coating plants SiNA®, the acquisition of new customers and the high loyalty of existing customers. Sales in the segment of plasma and ion beam technology amounted to EUR 6,615k after EUR 9,338k in the previous year. Segment sales in the business year of 2005 had been characterised by deliveries of several lonScan plants in the context of a number of one-time orders placed by a German chip producer which contributed 33.9 % to an above-average high sales figure of the business segment plasma and ion beam technology in 2005.

	31/12/2005	31/12/2006	Change in %
kEUR	33,397	42,853	28.3
kEUR	4,309	4,510	4.7
%	12.9	10.5	/
kEUR	2,530	2,904	14.8
	kEUR %	kEUR      33,397        kEUR      4,309        %      12.9	kEUR      33,397      42,853        kEUR      4,309      4,510        %      12.9      10.5

Other operating income decreased by 22.8 % from EUR 578k to EUR 446k which resulted mainly from lower proceeds from the sale of tangible assets. The finished goods inventory and work in process increased by EUR 189k. Capitalised cost of self-constructed assets containing mainly capitalised development costs decreased slightly from EUR 3,268k in the previous year to EUR 2,750k. In absolute numbers, costs of material rose from EUR 24,887k to EUR 31,781k, however, the costs of material ratio was at the previous year's level of 74.2 %. We hired a total of 44 new employees during the past year, 27 thereof in the second half year alone. This is represented in the significant increase of the costs of personnel which rose by 51.4 % to EUR 4,467k (previous year: EUR 2,950k). The costs of personnel ratio increased accordingly from 8.8 % in 2005 to 10.4 % in 2006. The expansion of personnel capacities and the construction of the new photovoltaics site are another step in the context of our growth strategy and an anticipation of the high utilisation to be expected in 2007. Other operating expenses increased to EUR 4,452k after EUR 3,216k in the previous year. This change is closely connected with the business volume which grew strongly, the costs for the establishment of our agency in China and the running stock exchange costs.

Earnings before interests, taxes, depreciation and amortisation (EBITDA) were approximately at the previous year's level with EUR 5,538k. In relation to sales, this results to an EBITDA margin of 12.9 % (previous year: 16.8 %). This development was caused by increased expenses resulting from a significantly higher business volume and an increase of costs of personnel in the course of the capacity expansion to ensure our future growth. Depreciation decreased due to significantly lower depreciations of intangible assets. They dropped by 21.2 % to EUR 1,028k (previous year: EUR 1,305k). Earnings before interests and taxes (EBIT) increased by 4.7 % to EUR 4,510k (previous year: EUR 4,309k). This corresponds to an EBIT margin of 10.5 % (previous year: 12.9 %). A look at the individual segments reveals that it is the segment of photovoltaics again which made the biggest contribution to earnings. Last year, EBITDA was at EUR 4,643k and EBIT at EUR 4,293k. This corresponds to a margin of 12.8 % or 11.8 %. While various development projects in this segment have, almost exclusively, been still under development and the burden from depreciation of capitalised selfmade products amounted to EUR 7k, the development of the segment of plasma and ion beam technology is strongly characterised by its strategic function as technology nucleus of the Company. In this segment, the EBITDA reached EUR 846k, EBIT amounted to EUR 169k after deduction of depreciations (including depreciations of capitalised self-produced goods of EUR 564k). This results in an EBITDA margin of 12.8 % and an EBIT margin of 2.6 %.

The interest and financial result totalled EUR 250k after EUR -213k in the previous year. Interest expenses dropped from EUR 220k to EUR 193k due to the repayment of long- and short-term liabilities. Furthermore, financial earnings increased thanks to the improved liquidity situation caused by the IPO to EUR 443k (previous year: EUR 7k). Therefore, earnings before taxes (EBT) increased by 16.2 % from EUR 4,096k to EUR 4,760k. Profits tax totalled EUR 1,856k after EUR 1,566k in the previous year. Tax quota increased from 38.2 % in 2005 to 39.0 % in the past business year. This change was caused mainly by the increase of non-deductible operating expenses. The net profit for the year increased by 14.8 % from EUR 2,530k to EUR 2,904k. This results in earnings per share of EUR 1.44.

# **Order Situation**

Order Situation		31/12/2005	31/12/2006	Change in %
Orders received	kEUR	37,113	129,073	248
Orders on hand	kEUR	15,965	102,185	540
Book to Bill Ratio		1.1	3.0	/

The business year 2006 was an all time high for Roth & Rau with regard to orders received. We received orders for a total of EUR 129,073k which is more than three times the number of the previous year. Foreign customers contributed EUR 59,771k. These results were achieved predominantly by the dynamic investment activity in the Chinese and Taiwanese market. Most Asian customers ordered SiNA® antireflection coating plants, but we also sold a turnkey production line to a customer based in Taiwan. The biggest individual order of EUR 53m was placed by Conergy AG for several turnkey production plants. This order not only meant a break-through for us in the turnkey business, but it also contributes significantly to further growth. We expect further orders of this kind in the segment of turnkey plants in the upcoming year, however, we assume that individual projects of this scale will not be placed regularly. Therefore, the photovoltaics segment's share in orders received amounted to 92.8 %, the remaining 7.2 % came from the segment of plasma and ion beam technology. Here, orders were placed mainly from the field research & development for photovoltaics, from the semiconductor industry and research & development activities on a university and institute level. The agreement with the American semiconductor company TriQuint Semiconductor Inc. on the delivery of an Ion Scan800 was of special importance. With this agreement, we succeeded in selling this new technology in the American semiconductor market for the first time, which, according to our expectations, will lead to further orders. The Book to Bill Ratio, representing the relationship between orders received and sales, has

developed positively as well. Last year, it increased to 3.0 after 1.1 in the previous year. Orders on hand amounted to EUR 102,185k as of 31/12/2006 (previous year: EUR 15,965k) corresponding to a production capacity of eight to ten months. Some long-term projects, like the delivery of turnkey lines in the context of the Conergy project, will only be completed at the beginning of 2008.

## **Financial Situation**

# Principles and objectives of the Financial Management

Roth & Rau's financial management is oriented towards financial flexibility and a solid financing structure. Our business activities are financed mainly be prepayments made by customers and own resources. We have been using the capital market as a financing alternative for the first time since our IOP last year. We attach great important both to a wide diversification of maturities in the different financing types and the optimisation of our financing costs. A sufficient number of unused credit lines ensures a short-term liquidity in addition to existing liquid funds.

### Accounting

For the business year of 2006, Roth & Rau AG published audited Financial Statements according to the principles of IFRS for this first time. To enable a better comparability, the Financial Statements for 2005 were retrospectively audited according to IFRS. For this reason, previous year's figures may differ from figures published in the past. For example, the figures previously set off in the item Receivables from manufacturing orders were broken down into receivables and payables. As a consequence, manufacturing orders in process as at 31 December 2005 were retroactively stated EUR 1,311k higher, at EUR 5,153k, and a corresponding item Payables from build-to-order manufacturing was created in the amount of EUR 1,311k.

### **Financial situation**

Roth & Rau AG's successful IPO significantly improved the Company's financial situation during the past year. Compared to 31 December 2005, the balance sheet total increased by EUR 49,115k to EUR 68,686k. The share capital increased from EUR 1,500k to EUR 2,300k. EUR 26,655k were included in the capital reserve. The net profit for the year of EUR 2,904k had another positive effect on equity that increased by EUR 30,371k to EUR 35,118k. Accordingly, the equity ratio increased from 24.3 % to 51.1 % . Long-term liabilities decreased slightly from EUR 3,525k to EUR 3,224k. Main reason for this development was the repayment of long-term loans amounting to EUR 1,073k. This effect was thwarted by the increase of deferred taxes by EUR 750k. Short-term liabilities increased from EUR 11,299k to EUR 30,344k. This development was due to the increase of the position trade payables and miscellaneous liabilities to EUR 26,100k (previous year: EUR 5,204k). It was mainly caused by the clear increase in payables from build-toorder manufacturing, from EUR 1,311k to EUR 22,175k, which was a result of high prepayments received on manufacturing orders still in process. Short-term loans were reduced by EUR 2,121k to EUR 1,396k. Both reserves for pensions and other short-term reserves were approximately at previous year's level with EUR 422k and EUR 2,179k, respectively (previous year: EUR 400k and EUR 1,991k respectively).

Selected figures on the financial situat	tion	31/12/2005	31/12/2006	Change in %
Balance sheet total	kEUR	19,571	68,686	251
Equity	kEUR	4,747	35,118	640
Equity ratio	%	24.3	51.1	/

On the assets side, long-term assets increased by 15.9 % from EUR 6,224k to EUR 7,211k. Main reasons were the increase of intangible assets by EUR 908k caused by capitalised costs of R&D. Short-term assets increased significantly from EUR 13,347k to EUR 61,475k. This development was caused by three essential factors: first of all, inventories increased significantly from EUR 846k last year to EUR 20,493k by 31 December 2006. This includes prepayments made on inventories of EUR 19,959k which arose mainly for the Conergy project. Another factor was the increase in Receivables from goods and services and other receivables from EUR 9,941k to EUR 16,513k. These receivables include manufacturing orders in process, which amounted to EUR 11,533k, after EUR 5,153k in the previous year. This increase may be attributed to a higher order volume. Moreover, funds received in the context of the IPO caused an improvement of the liquidity situation. In total, liquid funds increased to EUR 24,469k (previous year: EUR 2,560k). Thanks to this strategic liquidity reserve we believe to be in a good initial position to be able to react immediately to acquisition options arising in the market.

On account of the significant increase of inventories in connection with the increased business volume and the rise of the business-related liabilities, the operative cash flow decreased from EUR 2,766k in the previous year to EUR -321k. The cash flow from investment activities amounted to EUR -2,032k after EUR -2,431k in the previous year. For further explanations on the investments,

please refer to page 39. The inflow of funds from financing activities also increased strongly to EUR 24,261k (previous year: EUR 927k) because of the IPO and consists of the net proceeds of the issue amounting to EUR 27,455k, minus the repayment of credits of EUR 3,194k.

Selected figures on the liquidity situation		31/12/2005	31/12/2006	Change in kEUR
Cash flow				
from ordinary operations	kEUR	2,766	-321	-3,087
Cash flow				
from investment activities	kEUR	-2,431	-2,032	399
Cash flow				
from financing activities	kEUR	927	24,261	23,334

### **Research & Development**

Research & Development plays an essential role in our Company and is closely connected with our strategic targets. We will only be able to achieve a unique selling proposition, open up new usage areas and thus ensure the future success of our Company by a continuous improvement of our plants and an up-to-date development according to the state of the art.

Last year, one focus in the segment of photovoltaics was the development, establishment and commissioning of the pilot plant MAiA, where new plasma processes for solar cells manufacturing can be tested and different plasma processes can be combined. This pilot plant is part of our strategic target to significantly increase Roth & Rau's share in the value-added chain in solar cell manufacturing by implementing additional plasma processes. Furthermore, this plant is used for the development and qualification of new coating processes, like the coating of front and rear sides of a solar cell. This new process is required to realise innovative, more efficient solar cell concepts. With this development, Roth & Rau ensures a unique selling proposition of its coating systems and thus the potential for further growth. In addition, Roth & Rau is working on a new generation of the plant series SiNA® which should be launched in the second half of 2007.

To realise the strategic target, i.e. the expansion of the activities in the segment of thin film solar technology, another focus was on different development projects for this technology. We were able to realise a pilot project for the manufacturing of thin film solar cells on foils in cooperation with the Energy Research Centre of the Netherlands ECN. Further development and commercialisation is planned for the start of 2009. Furthermore, a new plant platform for the manufacturing of thin film solar modules has been developed in the context of the cooperation agreement with the Swiss thin film specialist Oerlikon Solar. Research & development activities in the business segment of plasma and ion beam technology focused mainly on the further development of the plant type IonScan. The objective is to meet the individual needs of our customers even better and to open up new sales industries. For the strategic development of Plasma-Cure®, a new process to harden UV-sensible finishes, a production-simulating pilot plant has been tested and refined in the Technology Centre of the company Dürr Systems GmbH in Stuttgart. Potential customers working in the automotive supply industry used this pilot plant for comprehensive sampling so that we came a big step closer to launching this new development. Last year, we filed a patent application for one new development. It was an "ECR plasma source" representing a refinement of plasma sources for special applications in the semiconductor industry.

Eleven employees worked in our research & development department as of 31 December 2006 (previous year: eight). During the past business year, we invested a total of EUR 2,747k in research & development and were thus at the previous year's level. 1,282k of the total investments were provided in form of public grants by the government, the Federal State of Saxony and the European Union.

Our employees are in close communication both with our customers and partners in the field of science when working on research projects. Some of our research partners are the Energy Research Centre of the Netherlands (ECN), Fraunhofer-Institut für Solare Energiesysteme (ISE) and Fraunhofer-Institut für Werkstoff- und Strahltechnik (IWS Institute for Material and Beam Technology) in Dresden.

# Investments

In 2006, Roth & Rau invested an aggregate sum of EUR 2,032k (previous year: EUR 2,805k). EUR 1,465k thereof were capitalised development costs. The remaining EUR 567k were invested in EDP equipment, tangible assets and investment property. A total of EUR 1,437k was invested in the segment of photovoltaics and EUR 563k in the segment of plasma and ion beam technology.

# **Employees**

In line with the strong operative growth and in view of the strong order situation to be expected next year, we have significantly expanded our personnel resources. As of 31 December 2006, we employed 137 staff members and, therefore, 52.2 % more than at the balance sheet date of 2005. In total, we hired 47 new members of the staff. Both of the two business segments and the departments of finances, purchasing, quality management and IT were strengthened by new employees.

We experienced a change in our personnel structure by opening our agency in Shanghai at the beginning of 2006, as we hired the first three employees in a foreign country. Furthermore, we have formed a new department consisting of seven employees who are responsible for our strengthened activities in the marketing of turnkey production lines for solar cell manufacturing. The company's success depends strongly on the technical know-how of our employees. We attach great importance to an adequate qualification as well as advanced training which is especially adapted to our needs. Therefore, we hold an advanced training seminar on "Vacuum Technology" on a regular basis which is intended especially for new staff members working in production. Last year, 28 employees took part in this seminar. In addition, we are open to individual qualification measures. In each individual case, we jointly develop a concept under which we provide both technical and financial support, if appropriate. We currently employ mainly engineers and skilled workers or master craftsmen. Last year, our qualification structure shifted slightly in favour of engineers. Additionally, we endeavour to continually train young people. At the end of the business year, we employed eight apprentices in the commercial segments (previous year: seven).

Employees according to segments	31/12/2005	31/12/2006	Change in %
Photovoltaics	52	76	46.2
Plasma and ion beam technology	24	32	33.3
Others	14	29	107.1
Total	90	137	52.2

Qualification structure	31/12/2005	31/12/2006
Engineers	39.2 %	43.8 %
Skilled workers / master craftsmen	58.1 %	54.7 %
Helpers	2.7 %	1.6 %

Costs of personnel amounted to EUR 4,467k in the past business year and exceeded the previous year's level by 51.4 % (previous year: EUR 2,950k) on account of the strong increase of personnel. EUR 3,784k thereof were wages and salaries, EUR 683k benefits for social security and expenses for pension benefits. The average period of employment amounts currently to 5.5 years. Fluctuation was at 5.6 % last year (previous year: 5.4 %).

# **Protection of the Environment**

As a company whose business activities contribute to the further development of regenerative energies, the protection of the environment is a central issue for us. Even in our daily working environment, we attach great importance to a careful use of resources as well as to avoiding or reducing waste. As no waste products polluting the environment are generated in our production process, no special measures for the protection of the environment are to be observed.

# **Supplemental Report**

In January 2007, we started with the construction of our new site in Hohenstein-Ernstthal. This project comprises the construction of three production halls with a production area of approximately 7,500 sqm and an administrative building with an area of 2,600 sqm. Total investments amount to EUR 8.5m. EUR 3.3m will be financed from self-generated funds, EUR 2.0m by a bank loan and the remaining EUR 3.2m by way of investment grants as well as GA subsidies (Common Task - Improvement of the Regional Infrastructure).

Further events, having a significant effect on the sales,

earnings and financial situation of Roth & Rau AG have not occurred after the end of the business year of 2006.

# **Notes on Takeover Obstacles**

In accordance with the Übernahmerichtlinie-Umsetzungsgesetz (German Takeover Directive Implementation Act) enacted on 14 July 2006 all companies listed at a stock exchange are, for the first time, required to report in their Management Report for the year 2006 on structures and mechanisms existing in the company which are likely to hinder the takeover or exercise of control. Roth & Rau hereby reports on these so-called takeover obstacles, if any, on a voluntary basis, in order to improve the transparency for our shareholders.

#### **Composition of the capital subscribed**

The share capital of Roth & Rau AG consists of 2,300,000 bearer shares without nominal value (individual share certificates) with a pro-rata share in the share capital of EUR 1.00 per share certificate.

### Transfer restrictions and restrictions on voting rights

In the context of the IPO, the founders of the Company, Dr. Dietmar Roth, Dr. Bernd Rau and Dr. Silvia Roth, undertook to refrain from selling any share in the company held by them until the end of a 12 month period after the first listing on 11 May 2006 (lock up obligation). The Management Board is not aware of any further transfer restrictions.

Each share grants one vote at the General Meeting. No restrictions of the voting rights exist. The Management Board is not aware of any agreements on the joint exercise of votes.

### Important participation

Rohwedder AG held 20% of the shares in Roth & Rau AG at the balance sheet date of 2006. In February 2007, Rohwedder sold its stake in an off-exchange transaction except for 100 shares. Confidentiality was agreed upon with the buyer.

# Provisions on the appointment/dismissal of members of the Management Board and amendments of the Articles of Incorporation

We comply with the legal provisions of the Articles 84, 85 AktG (German Stock Corporation Act) or Articles 179, 133 AktG for the appointment and dismissal of members of the Management Board and amendments of the Articles of Incorporation. No deviating provisions exist at the moment.

# Authorities granted to the Management Board for the issue or redemption of shares

Until 09 April 2011, the Management Board is authorised to increase the share capital by up to EUR 1,150,000.00, subject to the consent to be given by the Supervisory Board by way of one or several issues of new individual bearer share certificates. Furthermore, the Management Board is entitled, subject to the Supervisory Board's consent, to exclude the share purchase warrant of shareholders. The Company is authorised to acquire own shares in an amount of up to 10 % of the share capital until 09 October 2007.

### **Risk Report**

In the context of its business activities carried out on an international level, Roth & Rau AG, naturally faces a number of risks. An essential responsibility of the management is to recognise these risks, and the opportunities connected with them, in due time and to generate action alternatives. For this purpose, the Management Board implemented a risk management system which forms a strong part of all existing organisational, reporting and management structures.

### **Risk management system**

Roth & Rau's risk management system is based on clearly defined organisational processes and authorisation procedures. The "Manual for Risk Management" is the binding basis for all employees and, by way of a work instruction, forms an integral part of the quality management. Our quality management is certified according to ISO 9001:2000. Individual risks are recorded in all operative departments on a regular basis, such risks are subsequently analysed and proposals for managing such risks are prepared. Decisions on these measures are made at the operative management level or directly by the Management Board, depending on the risk assessment. All employees are made aware of potential risks and are required to report accordingly. In addition, project risks are analysed as early as in the acquisition phase to recognise technical, technological, financial and user-specific risks and to minimise them. Based on these individual assessments, total reports are prepared on a quarterly basis enabling the Management Board to control and assess the current risk situation. In accordance with this assessment, the Management Board informs the Supervisory Board on a continuing basis. The further development and optimisation of the risk management is a continuing process and all people involved consider it a permanent task being closely connected with the Company's growth.

#### Risks posed by business environment and industry

Our business activity depends strongly on the willingness and ability of our customers to invest, especially those customers working in the photovoltaics industry. Macroeconomic and managerial factors but also the development of the industry play an important role in this respect. Amendments of the regulatory conditions and of enterprise allowances granted by the government for photovoltaics may have an effect on our Company's success. To prevent this risk and to reduce the risk of a downward trend of the economic development in individual markets, were further work on an international expansion. Last year, the foreign share already amounted to 74.9 %. We have a broad customer base in Europe, Asia, Australia and the U.S. Another important effort to positively influence the demand for our products is the permanent refinement of our product and service portfolio as regards current trends and customer needs. Continuing investments in the segment of research and development ensure the technological lead of Roth & Rau AG and therefore have another positive effect on customer loyalty.

In the past, a significant part of our research and development projects were subsidised by the government. Whether such grants can be expected in the future, depends on different factors which we are unable to influence. In case of a decrease of the government subsidies, we would have to ensure the financing of these projects using other means. However, sufficient liquid funds and credit lines are at our disposal enabling us to immediately react to new situations.

### **Company-strategic risks**

Company-strategic risks are likely to occur mainly due to the fast technological change and the market launch of new technologies. Roth & Rau's plants for the photovoltaics industry are oriented toward antireflection coating of commonly used silicon wafers. In future, new technologies of solar cells might sell in the market for the surface coating of which Roth & Rau has not developed a suitable product. In order to avoid this situation, research & development is of special importance for Roth & Rau. We continuously work on the further development of our plants as well as their adaptation to the latest developments in the market in close cooperation with partners, customers and research centres like Fraunhofer-Institut für Solare Energiesysteme and Energy Research Centre of the Netherlands (ECN). Thanks to a permanent dialogue with experts from the relevant markets, we ensure at any time that new trends and technologies are recognised in due time.

#### **Performance risks**

One of our most important performance risks is the procurement risk and, in this field, especially the dependency on individual suppliers. Roth & Rau AG only produces the know-how-containing components of its products in-house and therefore depends on the supply by third parties in important partial segments. Essential components are normally acquired by one supplier each. The Company has made provisions in case these suppliers are unable to meet their obligations and is thus able to use one other provider. However, it cannot be excluded that such a change of supplier might result in more unfavourable purchasing conditions or is connected with delays in the manufacturing process of our products.

Furthermore, Roth & Rau's products are subject to a quality risk. Roth & Rau controls any defects of its products by way of a permanent monitoring of the manufacturing processes and control of the plants on different manufacturing stages. The assembly of the plants at the customer's site is carried out by qualified field technicians and engineers of Roth & Rau AG. All plants are handed over only after a complete check of the plant for possible defects.

### **Personnel risks**

Roth & Rau AG's success decisively depends on qualified executives and employees. Risks exist mainly in the fluctuation of employees holding key positions, the headhunting of qualified employees by the competition and the finding of new, suitable employees in a sufficient number. Roth & Rau manages this risk by an adequate payment of the staff, provisions for the existence of deputies and a long-term planning of potentials and recruits.

#### Information technology risks

We reduce possible risks in the IT sector by regular investments in modern hardware and software. We have back-up systems, virus and access protection as well as suitable encoding systems to protect our data against the access by third parties and to protect our Company against the loss of data.

### **Financial risks**

In the context of financial management we intensively deal with the control of risks arising from financing. A comprehensive cash management system, long-term cooperation with outside creditors as well as long-term liquidity planning counteract these risks. We were able to improve our equity ratio to 51.1 % and to increase our liquid funds to EUR 24.5 million thanks to our IPO and the capital increase connected therewith. This enables us to react shortly and flexibly to chances arising in the market at any time. At the moment, we consider the risk of interest rate changes to be low as we only have few long-term credits. We repaid our long-term loans almost completed in July 2006.

Furthermore, as an internationally active Company, we are subject to risks arising from unfavourable exchange rate developments. The biggest part of our sales is generated in Euros, a smaller part in foreign currency, mainly US Dollars, on account of the high share of exports to foreign countries outside of Europe. We conduct exchange guarantee businesses on a regular basis to minimise risks from exchange rate fluctuations and to achieve a higher security for our planning activities.

### Legal risks

An important basis for the success of our business activity is a comprehensive technological knowledge which needs to be protected. For this reason, a number of our processes are protected by patents or we have filed patent applications. However, a big part of our knowhow cannot be protected or is not protected by patents for other reasons. In order to protect this know-how as best as possible, we enter into confidentiality agreements with our employees, partners in research and development projects as well as with customers. However, despite our careful precautions, it cannot be excluded that important knowledge reaches third parties by unauthorised access or unauthorised disclosure or that unauthorised persons copy or use our products and ideas. Accordingly, we are unable to exclude that we infringe third parties intellectual property rights without our knowledge. These cases pose the risk that competitors are able to push through their own patents or industrial property rights in court proceedings. However, no such legal disputes or proceedings are pending at the moment.

At the end of 2006, Roth & Rau AG received a statement of claim relating to an accident which happed in December 2004 and caused significant injuries of an employee belonging to a customer based in Frederick, Maryland (USA), who operated a plant delivered by Roth & Rau AG. The proceedings are currently under appraisal. At the moment, our legal counsels consider the position and defence of Roth & Rau to be very justifiable and enforceable. In their opinion, a sentence against Roth & Rau is currently improbable, however, such cannot be excluded. A product liability insurance would take effect in this case and pay for any claim up to the agreed maximum sum. A provision was created for the deductible of EUR 25k.

### **Total risk**

Roth & Rau AG's risk situation has not significantly changed since the publication of the securities prospect on the occasion of the IPO in May 2006. The Company's risks are manageable. We are currently not expecting fundamental changes of the risk situation. Furthermore and from today's point of view, no risks are foreseeable for the future which are likely to endanger the continuance of the Company.

# **Forecast Report**

In the opinion of leading economic research institutes, the economic upturn should continue next year in Germany. Indicators for this development is mainly a significant recovery of the job market, according to information provided by Institut für Weltwirtschaft, Kiel, (IFW - Institute for World Economics). This development might even compensate for the effects of the increase of the value added tax, the decreasing expansion speed in the rest of the world, the weaker domestic demand and a slightly lower export activity. In addition, a significant decrease of the energy prices should also have a supporting effect. Based on these factors, IFW expects an increase of the real gross domestic product of 2.1 % in 2007.

Different tendencies are recognisable regarding the outlook for the economic development in industrialised states in 2007. In the opinion of IFW, the economic development will remain weak in the United States and only recover in 2008. Experts forecast a continuing upwards trend for Europe, despite numerous weakening influences from financial politics. However, a notably slower development is to be expected in the first months of the year resulting from the increase of the value added tax in Germany which will also affect the rest of Euroland. A continuing high dynamics is to be expected mainly for company investments in Europe. The economic expansion in Asia and here especially in Japan should continue with a moderate speed. Driving force will be company investments as well.

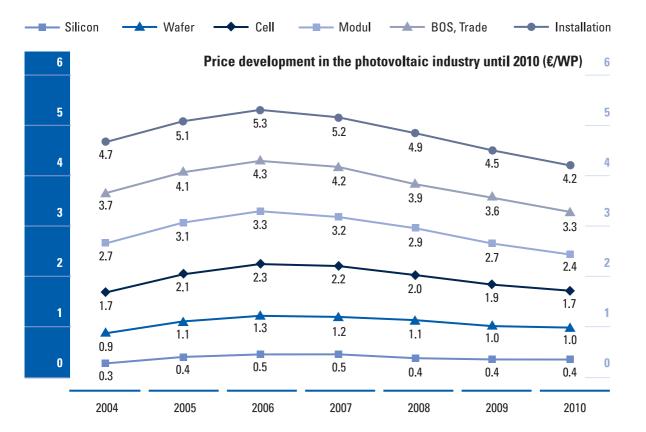
### **Industry boom continues**

We assume that the dynamic development of the global photovoltaics market will continue in the next year. As forecasted by different studies, we believe that growth rates of approximately 20 % are an realistic estimate. The thin film solar segment will probably grow overproportionally, it will, however, not endanger the market dominance of crystalline solar cells. Experts expect a general drop in prices in all areas of the value added chain until 2010, ranging from wafer to the installation of the modules, such price drop will be recognisable beginning next year.

A significant trend to larger factories and higher production capacities is recognisable in solar cell production, caused, last but not least, by cost aspects. In Germany, this trend is intensified by high quality requirements to solar cells and their efficiency while manufacturers in China still focus mainly on pure mass production. Another industry development indicates an increasing consolidation within the value added chain, i.e. some manufacturers will offer all aspects of the value added chain as a one-stop shop, ranging from wafer to module. On a regional level, we expect a shift of the markets towards Asia. Contrary to that, the development in South Europe, especially in Spain, Italy, Portugal and Greece will move significantly slower than expected which might be explained by the political circumstances.

### Strategic outlook for 2007

For Roth & Rau AG, 2007 will be another year characterised by growth. Our products place us in a very good position both in the segment of crystalline silicon solar cells and thin film solar technology. Our plants are especially well suited for the increasingly large cell factories with high production capacities. The trend to consolidation supports our business with complete turnkey solutions for solar cell manufacturing. In line with overproportional growth rates in the thin film segment, we wish to further expand our activities in this field in dif-



LBBW, Market Study on Photovoltaics, March 2006

ferent ways. An important strategic partnership is our cooperation with Oerlikon Solar. We are always up-todate regarding the state of the art thanks to different research projects and are thus able to refine the alternatives most interesting for us. In addition, an acquisition in the thin film segment is conceivable. We are currently conducting negotiations with different pos-sible partners. The expected price drop in the market will only have an insignificant effect on our Company as we are equipment manufacturers and our plants only contribute an inferior part to the manufacturing costs of a solar cell. The essential cost factor is the silicon wafer accounting for approximately 70 % of the costs. For this reason, technical properties are decisive for the investment in equipment. Thanks to the permanent further development of our plants and the consequent orientation on customer requirements, with regard to low defects, a higher throughput and a higher efficiency, we are able to maintain prices at a constant level and, simultaneously, offer improved technological equipment. Next year's most important investment will be the construction of the new photovoltaics site in Hohenstein-Ernstthal for EUR 8.5 million. We plan to move into this new site in September and will use the new capacities in a targeted manner for the further growth of our Company.

### **Order development**

For the business year of 2007, we expect an inflow of orders at the previous year's level, without taking into account the major project with Conergy. On account of the good reference of this major order, we expect further orders in the field of turnkey production lines in 2007. We have received new orders for both business segments during the first months of the new year. For example, the 100th SiNA® plant was sold to a Chinese customer. Further orders relate to projects in the thin film solar segment and the sale of components in the business segment of plasma and ion beam technology. We are currently conducting numerous promising negotiations with new customers both from the photovoltaics and the semiconductor industry.

### Sales and earnings development

In view of the high amount of orders on hand and the still positive industry environment, we plan to reach sales of about EUR 100m and to further increase our EBIT. A large part of the sales revenues will be generated in Germany due to the orders from Conergy and Q-Cells. As regards foreign countries, we see growth potential mainly in China on account of the numerous expansion plans of our customers.



# Round or Square

Research & Development has traditionally played a prominent role at Roth & Rau. Not only is R&D of existential importance to future success, but it is what the company originated from in 1990. Three physicists, Dr. Dietmar Roth, his wife, Dr. Silvia Roth, and Dr. Bernd Rau, did research in the field of thin film and plasma technology at Chemnitz University of Technology for years. However, their common objective was to move on from fundamental research to application-oriented products. This idea of developing, from the results obtained by research, innovative products which are, most importantly, suitable for commercialisation, continues to be the guiding principle of Research & Development at Roth & Rau today.

In the meantime there are 11 people employed in classic Research & Development. One emphasis is on photovoltaics, notably the enhancement of existing products with a view to upscaling them, that is, how to produce even more solar cells with an even higher efficiency ratio in even less time. In order to do so, it is necessary to study new materials and develop new processes. Another important strategic line of action is to increase Roth & Rau's share of the value-added chain in solar cell production. Solar cell production processes which are still based on wet chemical methods today may be replaced by plasma processes in the future. "Our Research & Development team consequently ensures that we will be able to provide a number of processes from a single source," explains Dr. Hermann Schlemm, Head of Photovoltaics Research & Development.

However, plasma technology is interesting for more than just photovoltaics. Technologies are also developed for use in other future-oriented industries such as semiconductors. Roth & Rau has had a cleanroom for some time to ensure that the high cleanliness standards required by this industry are met. All employees and visitors alike have to follow special "rules of the game" to prevent dirt or dust particles from entering the cleanroom: First of all, the entrance to the cleanroom is separated from the surrounding area by a lock. People are not allowed to enter the cleanroom unless they are covered by lint-free workwear and wear a hood and overshoes. Inside, employees covered in very much the same way work on various research projects. The installations assembled there include an IonScan 800 for customer applications. Although this installation type is already successfully being commercialised, it once originated from this very cleanroom as a research project.

Like the SiNA<sup>®</sup> (see page 12) in photovoltaics, the lonScan 800 installation is used for the surface processing of wafers. However, wafers in the semiconductor industry are processed individually and differ greatly from those used in photovoltaics. "The most obvious difference is this: Semiconductor wafers are







round, while photovoltaic wafers are always square", explains Dr. Bernd Rau, Director of Engineering. The final products resulting from a semiconductor wafer are 1,000 to 2,000 tiny chips. They are later used in computers or mobile phones. The requirements made on these chips vary greatly, but they are always very high. To ensure that these requirements are met these chips have to be processed in the nanometre range, that is, within a range no longer visible to the human eye. One nanometre is equal to one millionth of a millimetre, that is, 10-6 millimetres or 0.000 001 millimetres. By comparison, the diameter of a hair is 50,000 times greater. The chips processed on the IonScan 800 are mainly used as radio-frequency (RF) filters in mobile phones, where they ensure that the correct frequency can be transmitted and received. An ion beam processes the wafer surfaces, removing any unevenness created by preceding operations. Thus, the frequency to be transmitted by the chips is precisely adjusted in a manner similar to the tuning of the strings of a musical instrument. These chips are very expensive to produce because such a semiconductor wafer passes through some 20 to 30 production steps. "Therefore, the aim is to achieve a high yield of chips per wafer, for example by the subsequent treatment of the wafer using the IonScan technology, to ensure that chips of uniform quality are produced from the centre to the edge of a wafer," Dr. Rau explains.

However, research and development is also part of Roth & Rau's day-to-day business. Every project engineer is a developer whenever he or she deals with research and development projects for industrial enterprises, research institutions and university facilities. It is not uncommon for such very specific oneoff production to result in applications which evolve to become sophisticated products such as the SiNA® or the lonScan 800 later. Many other applications of plasma technology are conceivable. Roth & Rau products could achieve added value in any area of surface processing and finishing. Finding and developing such applications is the task of Roth & Rau staff, not just in the Research & Development Department.

Simone Gorny

# IonScan 800

- Film thickness trimming and surface planarisation by the computercontrolled, meander-like scanning of the surface to be processed with an ion beam, the local removal rate being controlled by the dwell time
- Suitable for levelling surface profiles with deviations of up to 500 nm
- Attainable surface quality:
  0.5 to 2 nm roughness
- Wafer sizes: 4-8 inches
- Processing time: less than 5 minutes for 6-inch wafers, less than 9 minutes for 8-inch wafers
- Fully automatic cassette-to-cassette wafer handling to the SEMI standard

# Balance Sheet

Notes No.	31/12/2006 k€	31/12/2005 k€
2.3; 3.1	3,521	2,613
2.4; 3.2	3,328	3,204
2.5; 3.4	8	0
2.6; 3.3	195	243
2.7; 3.5; 4.9	159	164
	7,211	6,224
2.8; 3.6	20,493	846
2.9; 3.7	16,513	9,941
2.10; 3.8	24,469	2,560
	61,475	13,347
	No. 2.3; 3.1 2.4; 3.2 2.5; 3.4 2.6; 3.3 2.7; 3.5; 4.9 2.8; 3.6 2.9; 3.7	No.    k€      2.3; 3.1    3,521      2.4; 3.2    3,328      2.5; 3.4    8      2.6; 3.3    195      2.7; 3.5; 4.9    159      2.7    159      2.8; 3.6    20,493      2.9; 3.7    16,513      2.10; 3.8    24,469

Total assets	68,686	19,571

k€
1,500
0
409
0
2,838
4,747
1,076
2,049
400
3,525
5,204
244
3,517
343
1,991
11,299
14,824

Total liabilities and shareholders' equity	68,686	19,571

# Income Statement

	Notes	2006	2005
	No.	k€	k€
Sales revenues	2.14; 4.1	42,853	33,397
Change in stocks of finished products			
and work in process		189	-576
Capitalised internal activities	4.2	2,750	3,268
Other operating income	4.3	446	578
		46,238	36,667
Cost of materials	4.4	31,781	24,887
Personnel costs	4.5	4,467	2,950
Amortisation of intangible fixed assets and			
depreciation of property, plant and equipment	4.6	1,028	1,305
Other operating costs	4.7	4,452	3,216
Operating profit		4,510	4,309
Financial result	4.8	250	-213
Earnings before income taxes		4,760	4,096
Income taxes	4.9	1,856	1,566
Net profit for the year		2,904	2,530
Profit carried forward from previous year		2,838	331
Allocation to retained earnings		165	23
Profit carried forward		5,577	2,838
Earnings per share in accordance with IAS 33, undiluted (€ po	er share) 4.10	€ 1.44	€ 2.07

# Cash Flow statement

Notes	31/12/2006	31/12/2005
No.		
Net loss (-) / profit (+) for the period	2,904	2,530
Depreciation/amortisation of fixed assets	1,040	1,312
Change in deferred taxes	755	1,224
Change in value of derivative financial instruments	12	0
Income/Expense not affecting payments	9	0
Change in pension provisions	22	20
Cash flow	4,742	5,086
	_	
Decrease (+) / Increase (-) in stocks	-19,433	109
Decrease (+) / Increase (-) in receivables and other assets	-6,589	-4,274
Gains (-) / Losses (+) from disposals of fixed assets	7	-57
Decrease (-) / Increase (+) in advance payments received on purchase orders	75	-1,742
Decrease (-) / Increase (+) in business-related payables	20,877	3,644
Increase (+) / Decrease (-) in working capital	-5,063	-2,320
Cash inflow / outflow from operating activity 5	-321	2,766
Investments in intangible assets and property, plant and equipment	-2,032	-2,805
Incoming payments from disposals of fixed assets	0	374
Cash inflow / outflow from investment activity 5	-2,032	-2,431
Incoming payments from capital increase	27,455	420
Loan borrowing	0	1,000
Loan redemption	-3,194	-493
Cash inflow / outflow from financing activity 5	24,261	927
Increase (+) / Decrease (-) in cash	21,908	1,262
Cash balance at beginning of period	2,561	1,299
Cash balance at end of period	24,469	2,561
	24,405	2,501

# Statement of Changes in Equity

1 January to 31 December 2006	Subscribed capital k€	Capital reserves k€
1 January 2006	1,500	
Net profit for the year		
Capital increases	800	28,000
Allocation to retained earnings		
Costs of providing equity (after taxes)		-1,345
Valuation of derivative financial instruments and cash equivalents without a	affecting net income	
Equity	2,300	26,655

# 1 January to 31 December 2005

1 January 2005	1,080
Net profit for the year	
Capital increases	420
Allocation to retained earnings	
Equity	1,500

Changes in equity are explained in section 3.8.

Retained earnings	Other reserves	Profit carried forward	Total
k€	k€	k€	k€
409		2,838	4,747
		2,904	2,904
			28,800
165		-165	0
			-1,345
	12		12
574	12	5,577	35,118

386		331	1,797
		2,530	2,530
			420
23		-23	0
409	0	2,838	4,747

# Notes

# **1. General information**

### 1.1 Basic principles

Roth & Rau develops and manufactures components and process equipment for plasma and ion beam supported thin-film and surface engineering processes for application in production, pilot manufacture and research & development in various industries.

The current focus is on supplying production equipment to the photovoltaic industry. Roth & Rau is among the leading manufacturers of anti-reflection coating equipment for crystalline silicon solar cells. In addition, Roth & Rau provides complete solar cell manufacturing solutions and intends to expand its activities to the area of thin-film solar cells in future.

The company employed 137 people at 31 December 2006, the financial statement date. It had 8 apprentices at the end of 2006. Like in the previous year, the Management Board of Roth & Rau consisted of two members.

Roth & Rau AG is registered in the Commercial Register of the Amtsgericht Chemnitz (Local Court of Chemnitz) under HRB 19213.

Roth & Rau AG's registered office is at 09337 Hohenstein-Ernstthal OT Wüstenbrand, Germany, Gewerbering 3. The Annual Financial Statements are available at the company's registered office and are published on the Internet.

Roth & Rau AG's Annual Financial Statements 2006 have been prepared in accordance with International Financial Reporting Standards (IFRS). Unless otherwise indicated, all amounts are stated in thousands of euros (k€). Specific rounding rules are applied. This may lead to differences due to rounding. Individual Balance Sheet and Income Statement items have been combined in order to present the information more clearly.

Period accounting in accordance with s. 275 para. 2 HGB (German Commercial Code) has been used for the Income Statement. The minimum requirements of structure in accordance with IAS 1.75 have been fulfilled.

In accordance with the size categories defined in s. 267 para. 1 HGB, the company is a medium-sized company.

In addition to the Income Statement and the Balance Sheet, the other components included in the Annual Financial Statements are a Statement of Changes in Equity, a Cash Flow Statement and the Notes.

## 1.2 Important events in the financial year

First listing of Roth & Rau AG's shares in the open market (Entry Standard) of the Frankfurt Stock Exchange on 11 May 2006.

Roth & Rau AG set the course for more growth, expanding production capacity by establishing a new site. At the end of the third quarter 2006, new orders had already tripled. This positive trend continued during the months that followed. To ensure future growth, the company laid the foundation stone for the construction of a new photovoltaic site in Hohenstein-Ernstthal on 15 January, setting the stage for the continuation of this positive development.

On 15 January 2007, Roth & Rau AG was awarded the "Chemnitz Milestone", an annual award given by the Marketing Club of Chemnitz in recognition of special entrepreneurial achievement. After the award ceremony, Dr. Dietmar Roth and Prof. Eicke Weber, Director of the Fraunhofer Institute for Solar Energy Systems (ISE), signed a memorandum of understanding providing for the commercialisation of the thin-film solar cell technology known as "epitactic wafer equivalents". Since 11 May 2006, Roth & Rau AG has no longer been an affiliated company of Rohwedder AG's consolidated group.

Roth & Rau AG secured a large-scale order (14 June 2006) for the supply of several turn-key solar cell production plants totalling €53 million. The project is the largest single project of its kind world-wide.

In May 2006, Roth & Rau AG signed a cooperation agreement with the Swiss company OC Oerlikon (formerly Unaxis). It provides for Oerlikon using Roth & Rau AG's know-how in the manufacture of efficient production lines for its own process and production technology to manufacture solar modules on a large scale. Oerlikon will use the platforms supplied by Roth & Rau under the agreement as uniform front-end components in production plants for the solar industry. The cooperation with Oerlikon will open up new markets to Roth & Rau for its anti-reflection coating plants, which have already become well established in the market. Most notably, the company will gain access to the markets of other coating technologies in the fast-growing area of thin-film silicon.

# 2. Information on accounting and valuation methods

### 2.1 Reporting principles

All International Financial Reporting Standards (IFRS/ IAS) by the International Accounting Standards Board (IASB) and the interpretations by the International Financial Reporting Interpretations Committee (IFRIC) as applicable and binding in the EU at the financial statement date have been applied without restriction to these Annual Financial Statements in accordance with IFRS and to the comparison data they include.

Annual Financial Statements in accordance with IFRS were prepared for the first time at 31 December 2002.

The financial year corresponds to the calendar year.

The International Accounting Standards Board (IASB) adopted a number of amendments to existing International Accounting Standards (IAS) and published new International Financial Reporting Standards (IFRS) as part of its improvement project. They must be applied to and are binding for financial years beginning on 1 January 2006 or later. The new standards to be applied from 1 January 2006 do not materially affect the company's Annual Financial Statements.

It is standard practice for us to state receivables from and payables for goods and services in the Balance Sheet as current (short-term) items. We show pension liabilities as non-current debt due to their long-term nature.

Deferred tax assets and liabilities are shown as noncurrent items.

The presentation in the financial result of the Income Statement did not have to be changed.

A true and fair view of Roth & Rau AG's financial situation and results is given by the application of the standards.

### 2.2 General information on the Balance Sheet

Valuations are not affected by provisions for tax purposes. They are determined based solely on an economic presentation of the company's financial situation within the scope of IASB provisions.

The structure of the Balance Sheet in accordance with IFRS is based on the maturity of individual Balance Sheet items.

The Annual Financial Statements are based on the assumption that the company will continue in operatio-

nal existence (going concern principle). Income and expenses are allocated to their appropriate accounting periods on a pro-rata basis and recognised in the Income Statement of the period to which they are economically attributable.

The Annual Accounts have been prepared on the basis of amortised historical acquisition and production cost, except securities available for sale and derivative financial instruments, which have been stated at their fair market value.

Unless otherwise indicated, assets and liabilities are stated at their nominal value less any value adjustments necessary.

Items are capitalised if all material rewards and risks associated with their use accrue to the company. These assets are accounted for at amortised acquisition or production cost.

The methods used for statements, accounting and valuation in the previous year have generally been maintained in the reporting year.

Deferred taxes were previously calculated using Rohwedder AG's uniform group tax rate of 37 %. Starting from 2006, deferred taxes are calculated using Roth & Rau AG's individual tax rate of 38.5 %. Net profit for the year 2005 has been reduced by 36 due to this change. The previous year's figures have been adjusted accordingly.

Previously, the total amount of payments received was deducted from manufacturing orders in process on the assets side. Starting from 2006, payments received will be allocated to each order. If the resulting balance per order is on the assets side, it will be shown under Receivables. A balance on the liabilities side will be shown under Payables. This change does not affect net income. The previous year's figures have been adjusted accordingly. Outstanding contributions to capital from shareholders were previously stated as a separate Balance Sheet item. In the figures as at 31 December 2005, these amounts are now included in the Receivables and other assets item.

# 2.3 Intangible assets

Intangible assets purchased in return for payment are stated at acquisition cost. They are amortised on a straight-line basis over three years in accordance with their expected useful life.

Intangible items arising from internal activities are capitalised at their production costs if the criteria for assets are met. This is specifically the case if a future economic benefit covering not only normal costs but also relevant development costs can be expected to be gained from the assets. This concerns a number of Roth & Rau AG's development projects that are funded by grants from different federal and state ministries as well as the European Commission, and projects undertaken with private cooperation partners which are still in the development phase or already in the pilot phase. Development costs specifically include direct and overhead cost portions of personnel costs and cost of materials for internal and external application-oriented, engineering and other divisions, to the extent that these divisions render relevant services, as well as costs of trial equipment and pilot stations used for research and development.

Borrowing costs are recognised as an expense when incurred.

As a matter of principle, government grants are accounted for as a deduction from acquisition or production cost.

Capitalised development costs are amortised over an expected useful life (3 years) starting from the time the development result is first used. Unplanned amortisation is undertaken, if necessary.

Intangible assets are reviewed for impairment if facts or changed conditions indicate that it might be impossible to realise the book value of an asset. An impairment affecting net income will be recognised as soon as the book value of an asset exceeds the amount the asset can realise.

In accordance with IAS 38, research costs are recognised as expenses as incurred.

### 2.4 Property, plant and equipment

Property, plant and equipment is accounted for at acquisition or production cost in accordance with IAS 16, plus incidental acquisition cost, less planned depreciation. These assets are depreciated on a straight-line and pro-rata basis over their useful economic lives. Any impairment expected to persist and exceeding the decrease in value resulting from asset utilisation is taken into account by unplanned depreciation. Appropriate write-ups are undertaken if the reasons for any unplanned depreciation no longer exist. No material unplanned depreciation had to be undertaken.

As a matter of principle, investment grants and subsidies are deducted from acquisition costs or production costs. Such investment grants are recognised at the time the company receives the funds.

No special depreciation for tax purposes is taken into account. Costs of financing are not capitalised. Maintenance costs are recognised directly as expenses.

All property, plant and equipment is depreciated on a straight-line and pro-rata basis over the planned periods below:

Buildings	25-33 years
Technical installations	8-10 years
Furniture and office equipment	3-14 years

The production costs of self-made property, plant and equipment are determined based on direct costs and appropriate overhead rates.

There were no assets to be accounted for based on IAS 17.8 Finance Leases.

### 2.5 Other non-current receivables

The company's Other non-current receivables are valued at amortised acquisition cost. Receivables bearing interest at a rate customary in the market are accounted for at their nominal value.

### 2.6 Investment property

Land and buildings held to generate rent income (investment property) are accounted for separately from the rest of property, plant and equipment at amortised acquisition cost. The useful lives on which depreciation is based correspond to the useful lives of property, plant and equipment used by the company itself.

# 2.7 Deferred taxes

Income taxes are calculated on Earnings before taxes, based on the applicable tax rate. Deferred taxes are recognised on temporary differences between the balance sheet for tax purposes and the IFRS Balance Sheet using the liability method in accordance with IAS 12.

The tax rate used to calculate deferred taxes is 38.5 %.

Deferred taxes on the assets side have not been offset against deferred taxes on the liabilities side.

### 2.8 Stocks

Raw materials and supplies as well as work in process and finished products are shown under Stocks. Shortterm advance payments made on inventory items are capitalised at their nominal value.

As a matter of principle, raw materials and supplies are stated at acquisition cost.

Work in process and finished products are stated at acquisition cost or production cost. Production cost includes not only directly attributable costs but also production-related material overhead costs and production overhead costs, including manufacturing-related depreciation and adequate portions of necessary overhead.

In accordance with IAS 23.11, borrowing costs are not capitalised as part of acquisition cost or production cost for lack of a direct connection.

If necessary, stocks have been stated at the lower net sales value that can be realised for them.

No write-ups have been necessary in the reporting period.

# 2.9 Receivables from goods and services and other receivables

Receivables and other assets are stated at their nominal value.

Receivables in a foreign currency are converted at the exchange rate applicable on the effective date of the transaction in accordance with IAS 21.21 and later stated at the exchange rate applicable at the balance sheet date in accordance with IAS 21.23.

Future receivables from manufacturing orders are accounted for using the percentage-of-completion method in accordance with IAS 11, provided that a customer-specific manufacturing order existed. The relevant share of profits is recognised depending on the percentage of completion, provided that the percentage of completion, total costs and total revenues of the orders concerned may be reliably determined in terms of IAS 11. The percentage of completion of individual orders is determined using the cost-to-cost method. No partial profit is recognised if the percentage of completion is less than 50 %. In those cases, the share of revenue from the order is determined as the amount of order-related costs incurred using the zero profit margin method. Order-related costs include costs directly attributable to an order and portions of overhead. Borrowing costs are recognised as expenses.

Advance payments received for an individual order are deducted from the order's share of revenues determined as described above. The resulting balance is accounted for either as receivables from or as payables for build-toorder manufacturing.

### 2.10 Cash and cash equivalents

Liquid funds are stated at their nominal value. Changes in cash forming part of the funds in accordance with IAS 7 are shown in the Cash Flow Statement.

Cash includes bank deposits and cash in hand. This item further includes securities from investments in a money market fund and a money market floater which are available on a daily basis. These securities belong to the category "available for sale" without exception and are stated at their fair market value. Any change in value occurring before they are sold is recognised in equity without affecting net income. Purchases and sales are accounted for as at the day of performance.

### 2.11 Non-current provisions

Only pension provisions are recognised in this item.

Pension provisions are accounted for using the projected unit credit method in accordance with IAS 19. Future liabilities are stated based on actuarial expert opinions taking into account the time values of external plan assets.

As a matter of principle, employee benefits are based on benefit promises (retirement benefits, disability benefits and benefits for surviving dependants). Their amounts usually depend on the salary. There are pension reinsurance policies, which have been pledged to the beneficiaries.

The conditions for valuation as a plan asset have been

met. Therefore, values on the assets side have been balanced with the provision.

In addition to accrued rights known at the balance sheet date, expected rates of salary and pension increases as well as the rate of inflation expected in future have also been included in the calculation. In accordance with IAS, the discount rate is based on the market interest rate. Following an amendment to IAS 19, an additional option was introduced, allowing to account for actuarial gains and losses from benefitsoriented pension liabilities immediately. The corridor method was used.

Calculations are based on the biometric probability data of the mortality tables 2005 G by Prof. Klaus Heubeck.

### 2.12 Non-current loans

Non-current interest-bearing debt has been accounted for at its repayment amount.

### 2.13 Current provisions

Provisions have been set up for contingent obligations to any third party if such obligations are likely to lead to a charge to assets in future. Such provisions are stated taking into account all identifiable related risks at the expected performance amount without offsetting them against recourse claims. No provisions have been set up for future expenditures unrelated to obligations visà-vis third parties.

### 2.14 Other current debt

Current liabilities have been stated at their repayment amount or performance amount.

### 2.15 Recognition of income and expenses

Sales revenues, interests and commissions income from financial services and other operating income are not recognised until the services have been rendered and the goods or products have been delivered, that is, not until the risk has passed to the customer. Sales revenues from product sales (work supply) are usually not recognised until acceptance by the customer.

Due to the long-term nature of build-to-order manufacturing with fixed price agreements in plant engineering, order-related revenues and costs are recognised as sales revenues from build-to-order manufacturing and as a decrease in work in process based on the progress of work at the balance sheet date. The requirements for using the percentage-of-completion method provided in IAS 11 are fulfilled. This method is applied to manufacturing orders whose results may be reliably estimated and which are more than 50 % complete. If less than 50 % are complete, the percentage-of-completion method is applied in such a manner as to recognise no partial profit.

Operating costs are recognised as affecting net income at the time the goods or services are used or at the time they are incurred.

Interest income is recognised on a pro-rata-temporis basis, interest expense incurred is recognised partly using the real interest method and partly on a pro-rata basis, depending on the contractual obligation.

Warranty provisions are set up at the time corresponding sales revenues are recognised.

### 2.16 Derivative financial instruments

The company uses derivative financial instruments essentially as hedges to control risks due to foreign currency fluctuations in its operating activities. They are not used for purposes of speculation. Derivative financial instruments are accounted for and valued for the first time on the day of the transaction and in subsequent periods at their fair market value.

If a derivative financial instrument is used to hedge foreign currency risks of expected future receipts or disbursements of foreign currency and if the conditions for hedge accounting (cash flow hedge) are met, any change in the fair market value of the derivative financial instrument is allocated to retained earnings in accordance with IAS 39 without affecting net income. Derivative financial instruments were held at the balance sheet date.

# 2.17 Estimates and assessments of management

To a certain extent, assumptions and estimates affecting the amount and statement of assets and debt, income and costs accounted for have to be made in the preparation of the Annual Financial Statements. These assumptions and estimates essentially relate to impairment reviews of intangible assets, the uniform assessment of useful economic lives for property, plant and equipment and let property, the recoverability of receivables and the reporting and valuation of provisions. Underlying these assumptions and estimates are premises which are based on our current state of knowledge at any one time. Most notably, both the conditions present at the time the Annual Financial Statements were prepared and the realistically assumed future development of the global and industrial environment were taken as a basis for the expected development of business in future. If these underlying conditions develop in a manner different from these assumptions or beyond the control of management, actual amounts that arise may differ from the estimates originally expected. If actual developments differ from what was expected, the premises will be modified and, if necessary, the book values of relevant assets and debt will be adjusted accordingly.

The underlying assumptions and estimates were subject to no significant risks at the time the Annual Financial Statements were prepared. Therefore, the book values of assets and debt stated in the Balance Sheet are currently not expected to be substantially adjusted in the next financial year



Notes



# 3. Explanations of individual balance sheet items

# **Non-current assets**

	Acquisition and production cost							
Movements in	At 01/01	Additions	Disposals	Transfers	At 31/12			
intangible assets	k€	k€	k€	k€	k			
2005								
Industrial property rights								
and similar rights and assets	38	7	0	0	44			
Development costs	2,125	1,610	831	0	2,905			
	2,163	1,617	831	0	2,949			
2006								
Industrial property rights								
and similar rights and assets	44	31	0	0	75			
Development costs	2,905	1,465	0	0	4,370			
	2,949	1,496	0	0	4,445			
Movements in property,								
plant and equipment								
2005								
Land	70	0	0	0	70			
Buildings	1,706	187	0	0	1,892			
Techn. installations & machines	1,259	576	332	0	1,502			
Other inst., office furn. & equipment	453	149	2	0	601			
Adv.paym'ts made & inst.u.constr.		276	0	0	276			
	3,488	1,188	334	0	4,341			
2006								
Land	70	0	0	36	106			
Buildings	1,892	39	0	31	1,962			
Techn. installations & machines	1,502	-17		241	1,726			
Other inst., office furn. & equipment	601	502	15	0	1,088			
Adv.paym'ts made & inst.u.constr.	276	-20	0	-241	15			
	4,341	504	15	67	4,897			
Movements in								
financial investments								
	374	0	0	0	374			
Investment property	374	0	0	0	374			
2006								
Investment property	374	31	0	-67	338			
	374	31	0	-67	338			

	Book values	I	<b>Depreciation / Amortisation</b>			
At 31/1	At 01/01	At 31/12	Transfers	Disposals	Additions	At 01/01
k	k€	k€	k€	k€	k€	k€
1	23	25	0	0	10	15
2,59	1,978	311	0	741	904	148
2,61	2,000	336	0	741	914	163
3	19	42	0	0	17	25
3,48	2,593	882	0	0	571	311
3,52	2,613	924	0	0	588	336
7	70	0	0	0	0	0
1,68	1,571	205	0	0	70	135
96	812	543	0	107	203	447
21	181	390	0	0	117	273
27	0	0	0	0	0	0
3,20	2,634	1,137	0	107	391	854
	70	0	0	0	0	0
10						

70	0	0	0	0	0
1,687	272	0	0	67	205
960	763	0	0	220	543
211	535	0	8	153	390
276	0	0	0	0	0
3,204	1,569	0	8	440	1,137
250	131	0	0	7	124
250	131	0	0	7	124
	1,687 960 211 276	272    1,687      763    960      535    211      0    276      1,569    3,204	0 272 1,687 0 763 960 0 535 211 0 0 276 0 1,569 3,204	0      0      272      1,687        0      0      763      960        8      0      535      211        0      0      0      276        8      0      1,569      3,204	67    0    0    272    1,687      220    0    0    763    960      153    8    0    535    211      0    0    0    276    276      440    8    0    1,569    3,204

131	12	0	0	143	243	195
131	12	0	0	143	243	195

### 3.1 Intangible assets

Intangible assets include purchased software and development costs.

Movements in intangible assets are shown in the table on page 66 / 67.

Development costs for new products and production processes of 2,747 (2,780 in previous year) were capitalised in the reporting period in accordance with IAS 38. Net additions to development costs after deduction of grants in the amount of 1,282 (1,170 in previous year) requested and received for development costs were 1,465 (1,610 in previous year). Development costs not eligible for capitalisation amounting to 35 were booked as an expense.

Essentially, the development costs capitalised in the financial year 2006 were for the following projects:

In photovoltaics they notably include projects to

- implement additional plasma processes in one plant (develop, build and start up the pilot plant "MAiA"); coating of the front and back of a solar cell;
- manufacture thin-film solar cells on film material.

In plasma and ion beam technology projects were capitalised to

- enhance the lonScan plant type;
- enhance plasma sources for special applications in the semiconductor industry.

### 3.2 Property, plant and equipment

Movements in property, plant and equipment are shown in the table on page 66 / 67.

Major additions recorded concern technical equipment for newly created workstations in production and measuring and processing equipment in the research and development department.

### 3.3 Investment property

Movements in the financial investments are shown in the table on page 66 / 67.

This item is a property located at: "Gewerbering 10, Hohenstein-Ernstthal OT Wüstenbrand".

It was first stated under this item in the Annual Financial Statements at 31/12/2004.

A lease exists for the property, effective from 1 November 2004 and non-cancellable until 31 October 2009, with a renewal option.

A new transformer station was built in the reporting period.

Since 1 July 2006, the separate administration building has been used by the company again. Its amortised acquisition cost (book values as at 30 June 2006) have been transferred to Property, plant and equipment.

Rent income in the year 2006 was 43 (40 in previous year). Only insignificant expenses were incurred for maintenance in the reporting period.

The property was accounted for at amortised acquisition cost for lack of market data or comparative figures. The time value established in a due diligence analysis performed on the occasion of the IPO was 296 as at 31 December 2005 (book value as at 31 December 2005: 243).

### 3.4 Other non-current receivables

Deposits paid for leases that were entered into are stated under Other non-current receivables. The deposits amount to 8 (0 in previous year).

# 3.5 Deferred tax asset

Deferred tax assets are explained under 4.9.

## **Current assets**

### 3.6 Stocks

kEUR	31/12/2006	31/12/2005
Raw materials and supplies	218	177
Work in process	131	128
Finished products and goods	185	0
Advance payments made	19,959	755
Total	20,493	1,060
Advance payments received for orders	0	-214
Total	20,493	846

The stocks of raw materials and supplies as well as work in process have been pledged to the lending bank by way of security as collateral for existing guaranteed credit lines.

## 3.7 Receivables from goods and services and other receivables

kEUR	31/12/2006	31/12/2005
Receivables from goods and services	2,905	3,649
Receivables from affiliated companies	188	0
Manufacturing orders in process	11,533	5,153
Other assets	1,887	1,139
Total	16,513	9,941

Receivables from goods and services are due in less than one year. There were no foreign currency receivables at the balance sheet date. Bad debt allowances amount to 31 (22 in previous year). Actual bad debt losses recorded in the reporting period amount to 15 (0 in previous year).

All receivables have been assigned to the lending bank by way of security for the guaranteed credit lines. Receivables from affiliated companies are receivables from Rohwedder AG resulting from passed-on charges from the IPO.

Manufacturing orders in process / kEUR	31/12/2006	31/12/2005
Recognised partial sales revenues	24,439	12,878
Advance payments received	35,081	9,036
Balance	-10,642	3,842
Assets shown in Balance Sheet	11,533	5,153
Liabilities shown in Balance Sheet	22,175	1,311
Balance	-10,642	3,842
Costs	21,368	10,840
Partial profit	3,071	2,038

Long-term manufacturing orders are accounted for using the percentage-of-completion method, provided that the conditions in accordance with IAS 11 are met. Their calculation is based on the ratio between orderrelated costs incurred and the contract's estimated total costs. The POC valuation table shows the amounts of partial sales revenues and related costs, the partial profit and related advance payments received. This valuation method is applied to all long-term orders, but no partial profit is stated if less than 50 % have been completed (zero profit margin method). In accordance with the profit elimination principle, order-related revenues for such orders are recognised in the amount of orderrelated costs incurred. Sales revenues from long-term manufacturing orders include order-related revenues without partial profit recognition of 3,974 in the financial year (750 in previous year).

The item "Manufacturing orders in process" includes build-to-order manufacturing projects in process with an asset-side balance. Their order-related manufacturing costs plus recognised profits less recognised losses exceed the advance payments received.

"Payables for order manufacturing", where the advance payments received exceed the production costs and recognised profit portions less recognised loss portions, are stated in the Balance Sheet item current debt.

Other receivables and financial assets / kEUR	31/12/20	)06	31/12/2005
Tax refund claims		772	0
Advance payments of commissions		136	13
Accrued expense grants (R&D)		636	718
Receivables from shareholders		168	393
Accrued income and deferred expenses		32	5
Creditors with debit balances		26	0
Other		117	10
Total	1,	887	1,139

In accordance with IAS 20, grants and subsidies are not accounted for until the required eligibility criteria are met and until it can be reasonably expected that the grants and subsidies will actually be provided. Other assets essentially include claims for government funds from research and development projects and receivables from existing shareholders amounting to 168 (393 in previous year). At 31 December 2005, the receivables from shareholders include an outstanding contribution to subscribed capital of 168, which was paid in by 2 March 2006. As a matter of principle, asset-related grants and subsidies are accounted for as a deduction from acquisition and production cost.

Loans to shareholders have been granted indefinitely and bear interest at 6 % per annum. Receivables from volume-based supplier rebates, insurance indemnities and interest receivables from the cash equivalents accounted for are stated under the item "Other".

#### **3.8 Cash**

Liquid funds are stated at their nominal values.

This item includes not only cash in hand and short-term bank deposits maturing in less than 3 months but also time deposits, overnight deposits, securities to be classified as cash equivalents from investments in a money market fund and a money market floater which are available on a daily basis. These securities belong to the category "available for sale" without exception and are stated at their fair market value. Any change in value occurring before they are sold is recognised in equity without affecting net income. Purchases and sales are recognised as at the day of performance.

#### 3.9 Equity

For detailed information on changes in Roth & Rau AG's equity in the financial year 2006, please refer to the Statement of Changes in Equity.

The share capital was 2,300 (1,500 in previous year) on 31 December 2006.

The share capital as at 31 December 2006 is divided into 2,300,000 individual bearer shares.

On 10 April 2006, the General Meeting resolved, in accordance with ss. 182 et seq. AktG (German Stock Corporation Act), to increase the company's share capital by up to 800 from 1,500 to up to 2,300, divided into up to 2,300,000 (individual) bearer shares of common stock by issuing up to 800,000 new shares entitled to profits from 1 January 2006 at an issue amount of €1.00 per share to the exclusion of existing shareholders' subscription rights. Existing registered shares were simultaneously converted into bearer shares. The resolution by the General Meeting was entered in the Commercial Register on 11 April 2006.

The shares were first listed in the Entry Standard segment of the stock exchange on 11 May 2006.

The company received 28,800 in proceeds from the sale of 800,000 shares at an issue price of EUR 36 per share at the initial public offering of 11 May 2006.

The capital increase of 800 was entered in the Commercial Register of the Amtsgericht Chemnitz (Local Court of Chemnitz) on 10 May 2006.

By changing the Articles of Incorporation, the Annual General Meeting of 10 April 2006 authorised the Management Board to increase the company's share capital with the Supervisory Board's consent by up to 1,150 within the period until 9 April 2011 by issuing, either once or several times, new individual bearer shares for contributions in cash or in kind (authorised capital). The Board of Management will take its decision about the content of share rights and the conditions under which the shares are issued with the Supervisory Board's consent. The appropriate entry in the Commercial Register was made on 10 May 2006.

The company owned no shares in itself at the balance sheet date.

There was no conditional capital as at 31 December 2006. There are no stock options.

The capital reserve includes the premiums arising from the issue of shares while offsetting the IPO costs of 2,175 less the income tax advantage of 829 relating thereto.

An amount of 23 was allocated to retained earnings from the net profit for the year under the German Commercial Code as at 31 December 2005 following the General Meeting's resolution of 10 April 2006. The retained earnings item includes not only the allocation to legal reserves but also the differences resulting from changing over to IFRS for the first time. In 2006, 50 %, or 165, of the net profit for the year under the German Commercial Code was allocated to retained earnings in accordance with s. 58 AktG.

Changes in the value of securities available for sale and in the valuation of derivative financial instruments, including the deferred taxes to be calculated on them, are stated in Other reserves without affecting net income.

## **Non-current debt**

#### **3.10 Non-current loans**

kEUR	31/12/2006	31/12/2005	Redemption	Maturity
Delage Landen Ioan	5	8	monthly	30/11/2008
GEFA loan	1	11	monthly	31/01/2007
Savings bank loan No. 8942027912	0	798	six-monthly	31/03/2018
Savings bank loan No. 8922014254	0	47	monthly	30/01/2016
Savings bank loan No. 8942010181	0	141	six-monthly	30/09/2016
Savings bank loan No. 8922014262	0	23	monthly	30/04/2016
Savings bank loan No. 8942010190	0	83	six-monthly	30/09/2016
Savings bank loan No. 8942018956	0	89	six-monthly	30/09/2010
	6	1,200		
Less current portion	-3	-124		
	3	1,076		

The liabilities to the savings bank of Chemnitz were fully repaid in June 2006.

### 73

## **3.11 Deferred tax liabilities**

Please refer to 4.9.

## 3.12 Non-current provisions

This item includes pension provisions only.

Actuarial gains and losses are amortised using the corridor method. They are not taken into account unless they exceed 10 % of the defined benefit obligation. The amount exceeding the corridor is spread over the average remaining period of service of active employees and accounted for as affecting net income. In the Income Statement, current service expense is stated under the expenses for retirement benefits, interest expense in the financial result and income from plan assets in other operating income.

Underlying assumptions: (current year = previous year)	%
Interest rate	4.5
Pension increase rate	2.0
Labour turnover rate	0.0
Expected income from plan assets	-

Composition of provisions / kEUR	31/12/2006	31/12/2005
Defined benefit obligation at year-end	632	532
Actuarial losses not taken into account	-57	-20
Less fair value of plan assets	-153	-112
Value of provisions at 31/12/2006	422	400

Calculation of annual expense / kEUR	31/12/2006	31/12/2005
Current service expense	38	35
Interest expense	24	23
Less expected income from plan assets	-40	-38
Total	22	20

# 3.13 Payables for goods and services and other payables

kEUR	31/12/2006	31/12/2005
Payables for goods and services	3,643	3,482
Payables from build-to-order manufacturing	22,175	1,311
Payables to affiliated companies	0	44
Other payables	282	367
Total	26,100	5,204

For Payables from build-to-order manufacturing, refer to 3.6.

Other liabilities are due as follows: Within less than 1 year: 282 Between 1 and 5 years: 0

All Payables for goods and services are due within one year. There were no payables in a foreign currency at the financial statement date.

Other current liabilities / kEUR	31/12/2006	31/12/2005
Tax liabilities	94	115
Benefits-related liabilities	0	71
Debtors with credit balances	83	0
Deferred income and accrued expenses	14	49
Liabilities to employees	0	16
Liabilities to shareholders	84	60
Rest	7	56
Total	282	367

## 3.14 Advance payments received

Composition / kEUR	31/12/2006	31/12/2005
Total	35,614	9,495
Of which: due within less than one year	35,614	9,495
Of which: secured by bank guarantees	14,657	4,925
Of which: balanced with stocks	0	214
Of which: balanced with receivables	6,467	3,658
Of which: balanced with payables	28,613	5,379
Of which: shown on the liabilities side	534	244

## **3.15 Current loans**

All current loans are due within one year. For securities provided, refer to 3.7.

The liabilities to shareholders (Dr. Dietmar Roth, Dr. Silvia Roth, Dr. Bernd Rau) are loans of 1,000 due by 30 June 2006 and bearing interest at 6 % per annum. These loans were renewed for an indefinite period upon maturity.

Shareholder loans further include claims for the return of 393 resulting from the failed cash payment for the capital increase of December 2005. Other liabilities further include the remaining interest of 84 for 2006.

#### 3.16 Actual tax liabilities

This item comprises the expected payment of trade tax arrears of 135 for 2006 (343 in previous year).

#### 3.17 Current provisions

Current provisions for personnel essentially concern overtime, management bonus, employers' liability insurance association contributions and leave.

Outstanding invoices and services essentially concern sales commissions and outstanding invoices for material and external labour.

The calculation of the warranty provision is based on historical warranty expenses and estimates relating to future costs.

kEUR	31/12/2006	31/12/2005
Special open-account credit Savings bank of Chemnitz	0	1,000
Project financing credit Landesbank Baden-Württemberg	0	1,000
Current account credit with banks	0	0
Current portion of long-term loans	3	124
Shareholder loans	1,393	1,393
Total	1,396	3,517

Current provisions	Balance as at 01/01/2006	Use	Reversal	Addition	Balance as at 31/12/2006
Other provisions					
Personnel	382	272	1	451	560
Outstanding invoices /services	1,407	1,210	6	1,026	1,217
Warranty	170	170		300	300
Rest	32	32		102	102
Total	1,991	1,684	7	1,879	2,179

# 4. Explanations of individual income statement items

Period accounting has been used to prepare the Income Statement.

## **4.1 Sales revenues**

The company recognises sales in accordance with IAS 18.

Sales revenues were up 28.3 % on the previous year.

For a breakdown of sales revenues by product and region, refer to Item 6.

#### 4.2 Capitalised internal activities

In addition to the production costs of machines and equipment from in-house production, capitalised internal activities essentially include capitalised production costs for development services. The cost of goods manufactured includes both direct and indirect cost portions.

Grants of 1,282 were deducted from capitalised development costs in fixed assets for government-funded capitalised development costs.

#### 4.3 Other operating income

Other operating income for the financial year 2006 breaks down as shown in the table on page 77.

As a matter of principle, government grants are deducted from the acquisition cost of the assets concerned.

kEUR	31/12/2006	31/12/2005
Invoiced sales	31,292	24,947
Build-to-order manufacturing POC	11,561	8,450
- with partial profit recognition	7,587	7,700
- without partial profit recognition (zero profit margin method)	3,974	750
Total	42,853	33,397

kEUR	31/12/2006	31/12/2005
Capitalised internal activities for government-funded R&D projects	2,730	2,323
Capitalised internal activities for pilot equipment (joint venture)	17	457
Capitalised internal activities for equipment owned and used by the company	3	488
Total	2,750	3,268

Other operating income / kEUR	31/12/2006	31/12/2005
Income from foreign currency translation differences	1	7
Income from insurance indemnities	26	5
Income from reinsurance	40	38
Income from the reversal of provisions	7	35
Income from disposals of fixed assets	0	149
Income not relating to the period	36	19
Employment subsidies	4	19
Grants for non-capitalised R&D projects	16	0
Property rental income (investment property)	43	40
Equipment rental income	214	239
Offset benefits in kind	16	15
Rest	43	12
Total	446	578

## 4.4 Cost of materials

kEUR	31/12/2006	31/12/2005
Costs of raw materials & supplies and purchased goods	29,621	21,652
Costs of procured services	2,160	3,235
Total	31,781	24,887

The ratio of cost of materials to sales was 74.2 % (74.5 % in previous year).

## **4.5 Personnel costs**

kEUR	31/12/2006	31/12/2005
Wages and salaries	3,784	2,475
Employee benefits	636	430
Retirement benefit costs	47	45
Total	4,467	2,950

The average number of employees for the year has been calculated as follows:

	2006	2005
Production	42	37
Engineering and Sales	49	27
Administration	15	12
Subtotal	106	76
Apprentices	8	4
Total	114	80

We have created many new jobs thanks to the sustained growth of our production.

## 4.6 Depreciation / amortisation

Unplanned amortisation of "capitalised development costs" had to be undertaken in the reporting period as part of an impairment review because no economic benefit can reasonably be expected from the use or disposal of these intangible assets any longer.

Refer to section 3 for a breakdown of depreciation/amortisation.

kEUR	31/12/2006	31/12/2005
Planned depreciation/amortisation		
Intangible assets	529	414
Property, plant and equipment	441	390
	970	804
Unplanned amortisation		
of development costs	58	501
Total	1,028	1,305

## 4.7 Other operating costs

Other operating costs essentially include occupancy and running costs as well as administrative and distribution costs.

Major line items of Other operating costs are shown in the table below.

Other operating costs / kEUR	31/12/2006	31/12/2005
Occupancy and maintenance costs	49	78
Insurances	77	67
Utilities	84	69
Rent, leasing	124	68
Outward freight	669	432
Travel costs	607	368
Distribution costs	1,418	1,260
Costs arising from disposals of fixed assets	8	0
Other taxes	6	6
Rest	1,410	868
Total	4,452	3,216

Rest / kEUR	31/12/2006	31/12/2005
Office and communication	127	86
Advertising	170	151
Consulting	221	91
Vehicle fleet	71	60
Costs not related to the period	217	61
Other material	54	35
Employee benefit costs	6	7
Computer system maintenance	28	15
Contributions and fees	83	30
Current stock exchange costs	105	0
Commissions on guaranteed credit, incidental bank charges	201	108
Remaining costs	127	224
Total	1,410	868

## **4.8 Financial result**

kEUR	31/12/2006	31/12/2005
Interest income	443	7
	443	7
Interest expenses paid to banks	73	112
Interest expenses paid to shareholders	83	74
Interest expenses for pension provisions	24	23
Remaining interest expense	1	4
Depreciation of investment property	12	7
Subtotal	193	220
Total	250	-213

Interest income essentially includes income from short-term money deposits.

## 4.9 Income taxes

kEUR	31/12/2006	31/12/2005
Current tax expense	307	342
Deferred tax expense	1,549	1,224
Total	1,856	1,566

Deferred taxes have been calculated using a tax rate of 38.5 %.

A breakdown of accounted-for taxes into temporary differences in the accounting for and valuation of individual Balance Sheet items is given below.

Deferred taxes / kEUR	31/12/2006		31/	12/2005
	Asset-side	Liability-side	Asset-side	Liability-side
Fixed assets	104	1,347	106	1,001
Receivables		1,188		791
Provisions	55	108	58	86
Other	0	156	0	171
Total as per Balance Sheet	159	2,799	164	2,049

The Balance Sheet item Deferred tax liabilities as at 31 December 2006 includes deferred taxes of 35 which have been accounted for as having no effect on net income because the fair market value of money market instruments and derivative financial instruments is recognised directly in equity.

Reconciliation of tax expense / kEUR	01/01-31/12/2006	01/01-31/12/2005
Earnings before taxes	4,760	4,097
Expected tax expense at 38.5 %	1,832	1,577
Change in expected tax expense		
Tax effects on tax-exempt income	-21	-13
Tax effects on non-deductible operating expenditure	49	11
Other tax effects	-4	-9
Actual tax expense	1,856	1,566

#### 4.10 Earnings per share

Earnings per share are calculated as the quotient of the net profit for the year and the weighted average of the number of shares outstanding during the financial year.

The average number of shares in the year 2006 was 2,015,068 (1,222,264 in previous year).

Net profit for the year 2006 was €2,904,214.36 (previous year: €2,529,855.71). Accordingly, undiluted earnings per share are €1.44 (€2.07 in previous year).

No shares which could dilute earnings per share were outstanding either at 31/12/2006 or at 31/12/2005.

## 5. Explanations of the cash flow statement

The cash fund consists of the cash stated in the Balance Sheet.

Investments of 3,314 (3,975 in previous year) are stated net of 1,282 (1,170 in previous year) in government grants, at 2,032 (2,805 in previous year).

The cash flows of the financial year include 171 in interest paid and 389 in interest received. Income tax paid amounted to 665.

The cash inflow and outflow from financing activity includes bank loan payments received and payments received from the capital increase as well as payments made for the redemption of loans granted by existing shareholders.

## 6. Segment reporting

Roth & Rau AG's activities are divided into business areas as a primary segment reporting format in accordance with the rules of IAS 14. Segment reporting by primary segments shows the breakdown into the two business areas of photovoltaics and plasma & ion beam technology.

Segment information is based on the same accounting and valuation methods as the Annual Financial Statements.

Operating segment assets and segment debt consist of assets and debt, excluding financial assets and financial debt, and excluding income taxes, receivables from and liabilities to tax authorities. Depreciation/amortisation relates to segment fixed assets. Segment reporting is presented for the financial year 2006 only because no figures are available for the previous year.

The segment reporting presented below divides the company's business into two principal areas (primary reporting format). A distinction is made between the business areas of system solutions for photovoltaics and components & process systems for plasma & ion beam technology.

## Primary segment reporting by business segment

Segment information 2006	Photovoltaics	Plasma & ion beam technology	Unallocated
Sales revenues	36,238	6,615	0
EBITDA	4,643	846	48
Amortisation of capitalised development costs	7	564	0
Depreciation / amortisation	344	113	0
EBIT	4,293	169	48
Segment assets	37,501	6,166	24,823
Segment liabilities	26,810	3,877	2,799
Investments	1,437	563	32

Unallocated assets comprise cash (24,469), investment property (195) and deferred taxes (159). Unallocated debt comprises deferred taxes (2,799).

Sales revenues by regional distribution / kEUR	01/01-31/12	/2006 %	01/01-31/12/200	5 %
Germany	10,770	25.1	12,971	38.8
Outside Germany	32,083	74.9	20,426	61.2
EU	5,210	12.2	3,210	9.6
USA	1,557	3.6	189	0.6
Asia	24,089	56.2	16,898	50.6
Other	1,226	2.9	129	0.4
Total	42,853	100.0	33,397	100.0

#### Secondary segment reporting by region

The secondary reporting format is based on geographic segments and shows the distribution of sales by customer location. Since the company's assets are located in Germany almost without exception, all other information must be allocated to the geographic segment of Germany, making further segmentation unnecessary. Roth & Rau AG controls its activities using business segment results rather than regional earnings results, so it would not be meaningful to present regional segment results.

## 7. Other information

#### 7.1 Financial instruments

Asset-side primary financial instruments essentially include receivables, other financial assets and cash. Liability-side primary financial instruments essentially include liabilities accounted for at amortised cost. Holdings of primary financial instruments are shown in the Balance Sheet. If and to the extent that any default risks can be identified, such risks are recognised by allowances.

Derivative financial instruments held at the financial statement date were as follows:

Foreign exchange forwards are used to hedge foreign currency risks. These contracts relate to the hedging of

exchange rates of major cash flows from operating activities in a foreign currency. Roth & Rau AG uses foreign exchange forwards to hedge certain purchases of material and sales of equipment, depending on how important the transaction is.

There were foreign exchange forward option contracts at the balance sheet date which require the company to buy foreign currency amounting to USD 2,146k in exchange for € at a defined exchange rate/threshold at specified due dates. The market valuation of this forward contract resulted in a negative fair value of 44, which was recognised in equity without affecting net income.

Another foreign exchange forward options contract existed under which Roth & Rau AG supplies foreign currency amounting to USD 2,039k in exchange for € at defined exchange rates at specified due dates. The market valuation of this contract resulted in a positive fair value of 22, which was allocated to the reserve for cash flow hedges, also without affecting net income.

#### 7.2 Contingent liabilities

Contingent liabilities include possible obligations whose actual existence is contingent on the occurrence of one or more uncertain future events that cannot be fully controlled. They also include existing obligations which are not likely to lead to an outflow of assets. In accordance with IAS 37, contingent liabilities are not recognised in the Balance Sheet.

In accordance with a written confirmation by the company's tax advisor, fixed assets for which investment subsidies were granted but in regard to which, by the balance sheet date, the company had not yet fulfilled the requirements to keep these subsidies have not been found to have been used in any way (by sale to a company not entitled to subsidies) that would have an adverse effect on the subsidies granted.

#### 7.3 Financial risks

#### **Security policy**

The proceeds from the IPO are only invested with financial institutions of a high credit standing. Investments are made in financial assets subject to little or no variation in value. Investments are made in financial assets available at short notice to ensure that the financing and liquidity needs of planned capital spending and the advance finan-cing needs of operating activities can be met.

#### **Liquidity risk**

We use suitable budgeting instruments to control our future liquidity situation. Our budget doesn't show any liquidity bottlenecks at present.

Available credit lines of 22,148 existed at the balance sheet date, optionally available as an overdraft credit / guaranteed credit line / L/C credit line. Guaranteed credits / L/Cs drawn on as at 31 December 2006 amounted to 14,657.

#### Foreign currency risk

Foreign currency risks arise for Roth & Rau AG mainly because purchases are partly made in USD but the volume of sales in USD is not the same. We take this risk into account by constantly monitoring exchange rates and by hedging them as a rule (FX forwards / options).

#### **Interest rate risks**

Interest rate risks exist with regard to the liabilities to banks. They mainly relate to long-term loans. The company is not significantly exposed to interest rate changes thanks to the equity provided by the successful capital increase as part of its IPO in the past financial year.

#### **Default risks**

We have to make advance payments to suppliers as part of our sourcing activities. This may result in default risks. Advance payments made are partly secured by advance payment guarantees / L/Cs.

Default risks on the receivables side are secured by advance payments received and by L/Cs. The likelihood of bad debt losses is reduced by adequate financial controlling.

## 7.4 Other financial obligations Operating leases

Other financial obligations from lease agreements, operating leases and service agreements amount to €138 (46 in previous year) for 2007, and 131 (85 in previous year) for 2008-2011.

The repurchase price to be paid for a coating plant sold to a leasing company with an obligation to take the plant back in case of exceptional termination of the lease by the leasing company has been accounted for as a financial obligation of 247 (302 in previous year) based on the plant's "residual net present value" as at 31 January 2007.

#### Licence agreement

In 2000, the company purchased a technology licence for a 10-year term. The licence fee to be paid depends on the net sales generated for the licensed system.

#### 7.5 Information on related parties

The following are related parties of Roth & Rau AG: the members of the Management Board and Supervisory Board, including their family members, as well as any company which may have a material influence on Roth & Rau AG, the members of its Management Board and Supervisory Board and their family members.

All transactions with related parties are carried out at conditions customary in the market. No expenses were incurred or existed for allowances or bad debts with regard to related parties.

#### **Management Board**

The members of the Management Board in the financial year 2006 were as follows:

Dr. Dietmar Roth (Chairman) Dr. Bernd Rau

#### **Dr. Dietmar Roth**

Chairman of the Management Board, General Management of Operations, Strategy, Planning, Sales and Marketing, Finance, Investor Relations

- Member of the advisory committee on plasma technology at the German Federal Ministry of Education and Research
- Member of the administrative board of UCP Processing Ltd., Balzers, Principality of Liechtenstein

### Dr. Bernd Rau

Member of the Management Board, Production and Service, Research and Development, Quality Management, Technical Equipment The remuneration of the members of the Management Board amounted to 425 in the reporting period (335 in previous year). It included a fixed salary of 302 (282 in previous year) and a performance-based remuneration element, for which 123 (54 in previous year) have been provided. The service cost due to pension liabilities for the Management Board recognised in the Income Statement was 22 (20 in previous year).

Shares in Roth & Rau AG held directly or indirectly by members of the Management Board are as follows:

Dr. Dietmar Roth	209,990 individual shares	9.13%
Dr. Bernd Rau	209,990 individual shares	9.13%

#### **Supervisory Board**

The members of the Supervisory Board in the financial year 2006 were as follows:

Harald Löhle (Chairman) from 11 October 2004 Prof. Dr. Alexander Michaelis (Deputy Chairman) from 10 April 2006 Daniel Schoch from 10 April 2006 Joachim Rohwedder until 10 April 2006 Dr. Silvia Roth until 10 April 2006

#### Harald Löhle

Chairman of the Supervisory Board

- Member of the management board of Rohwedder AG, Bermatingen
- Member of the administrative board of ASIC Robotics AG, Burgdorf/Switzerland

#### **Prof. Dr. Alexander Michaelis**

Deputy Chairman of the Supervisory Board

- Head of the Fraunhofer Institute for Ceramic Technologies and Systems, Dresden
- Professor of Technische Universität Dresden, profes sorship for inorganic-non-metallic materials at the Institute for Materials Science

#### **Daniel Schoch**

Member of the Supervisory Board

- Executive (CFO) of BauBeCon Holding GmbH, Hanover
- Member of the supervisory board of Wärme Service GmbH, Hanover
- Member of the supervisory board of VBV Versicherungsmakler, Hamburg
- Member of the management board of Carls Zeiss SMT AG, Oberkochen (until 30 September 2006)
- Member of the board of directors of Carl Zeiss Inc., Thornwood, Delaware, USA (until 30 September 2006)
- Member of the advisory board of Carl Zeiss SMT S.A.S., Nanterre, France (until 30 September 2006)
- Member of the administrative board of TCZ GmbH, St. Gallen, Switzerland (until 30 September 2006)

#### **Joachim Rohwedder**

Member of the Supervisory Board (until 10 April 2006)

- Chairman of the management board of Rohwedder AG, Bermatingen
- Chairman of the advisory board of Rohwedder Automated Systems Inc., Markham / Canada
- Chairman of the advisory board of Rohwedder Pty. Ltd., Victoria / Australia
- Chairman of the advisory board of Elgo-Elektrik GmbH, Singen
- Chairman of the management board of the Robotics and Automation trade association of VDMA, Frankfurt, and a member of the restricted main board of VDMA

#### Dr. Silvia Roth

Member of the Supervisory Board (until 10 April 2006)

Prof. Dr. Alexander Michaelis and Daniel Schoch were elected members of the Supervisory Board at the General Meeting of 10 April 2006. By resolution of the Supervisory Board of 10 April 2006, Harald Löhle was elected Chairman of the Supervisory Board and Prof. Dr. Michaelis was elected Deputy Chairman of the Supervisory Board.

The members of Roth & Rau AG's Supervisory Board held the following shares in the company on 31 December 2006:

HL Vermögensverwaltungs GmbH (in which Harald Löhle holds 100 % of shares) held 1,500 shares in Roth & Rau AG as at 31 December 2006.

Mr. Rohwedder and Mr. Löhle are members of the management board of Rohwedder AG. Rohwedder AG held 460,100 shares (20 %) in Roth & Rau AG as at 31 December 2006.

No significant relationships involving deliveries of goods or the rendering of services have existed between Rohwedder AG and Roth & Rau AG since deconsolidation.

105,110 individual shares (4.57 %) were held by Dr. Silvia Roth, the wife of Dr. Roth and a member of the top management, as at 31 December 2006.

The total remuneration of Roth & Rau AG's Supervisory Board for the financial year 2006 was 36.

No agreements providing for severance pay or other benefits in favour of Supervisory Board members upon termination of their membership exist between members of the Supervisory Board and the company. There are currently no conflicts of interest between their duties to the company and their private interests or other duties.

There are no agreements with the company relating to pensions in favour of Supervisory board members.

#### 7.6 Auditor's fee

The fee for the auditor of the financial statements, Bodensee Treuhand GmbH Wirtschaftsprüfungsgesellschaft, recognised as an expense in the financial year 2006 is 47 for audit services, 31 for other certification services, notably as part of the IPO, and 61 for other services (IPO liability insurance premium).

#### 7.7 Events after the balance sheet date

Having obtained the Supervisory Board's approval, the Management Board of Roth & Rau AG resolved to establish a new site for the photovoltaic segment. Total investments in the construction project are approx. €8.5m, €3.3m of which are financed from own resources. The remaining €5.2m come from a bank loan, investment subsidies and funding for industrial enterprises by the Saxon State Ministry for Labour and Economic Affairs as part of Germany's joint federal/state programme for the improvement of regional economic structures.

On 22 February 2007, Rohwedder AG made an offexchange sale of 460,000 of the 460,100 shares held by it in Roth & Rau AG.

#### 7.8 Approval for publication

On 29 March 2007, the Management Board of Roth & Rau AG gave its approval to publish the present Annual Financial Statements prepared in accordance with IFRS.

Hohenstein-Ernstthal March 2007

Dr. Dietmar Roth

ROD

Dr. Bernd Rau

## Auditor's Opinion

We have audited the Annual Financial Statements prepared by Roth & Rau AG, Hohenstein-Ernstthal – comprising the Balance Sheet, Income Statement, Statement of Changes in Equity, Cash Flow Statement and Notes – and the Management Report for the financial year from 1 January 2006 to 31 December 2006. Preparing the Annual Financial Statements and the Management Report in accordance with IFRS as applicable in the EU is the responsibility of the company's representatives. Our task is to make an assessment, based on the audit conducted by us, of the Annual Financial Statements and Management Report.

We conducted our voluntary audit of the Annual Financial Statements along the lines of s. 317 HGB (German Commercial Code) taking into account the general auditing principles for financial statements as defined by the IDW (Institut der Wirtschaftsprüfer). In accordance with these principles, the audit has to be planned and conducted so as to give reasonable assurance that any inaccuracy or irregularity having a significant effect on the view of the financial situation provided by the presentation of the Annual Financial Statements in accordance with IFRS and by the Management Report is detected. A knowledge of the company's business operations and of its business and legal environment as well as anticipated potential errors are taken into consideration to determine the audit procedures. The audit includes assessments of the effectiveness of the reporting-related internal control system as well as of documentary evidence of accounting information and information provided in the Annual Financial Statements and the Management Report, predominantly on the basis of random samples. The audit also includes an assessment of the accounting principles applied and of the significant estimates and judgements made by the company's representatives as well as an evaluation of the overall adequacy of the presentation of the Annual Financial Statements and the Management Report. We believe that our audit provides a reasonably reliable basis for our assessment.

Our audit found no objections.

In our opinion, based on the findings of our audit, the Annual Financial Statements are in accordance with IFRS as applicable in the EU and give a true and fair of the company's financial situation. The Management Report is consistent with the Annual Financial Statements, it gives a fair overall view of the company's position and fairly presents the prospects and risks of future development.

Meersburg 5 March 2007

BODENSEE TREUHAND GMBH Wirtschaftsprüfungsgesellschaft

Dipl.-Kfm. Siegfried Markhart Auditor Dr. rer. pol. Michael Altmann Auditor

## Financial Calendar

## **Financial Calendar**

3 month report	15 May
General Meeting	6 July
6 month report	15 August
9 month report	15 November



2007

## Imprint

This Annual Report also exists in German. Both versions are available for download in the Internet under www.roth-rau.de under the heading "Investor Relations/Reports".

Roth & Rau AG Gewerbering 3 OT Wüstenbrand 09337 Hohenstein-Ernstthal, Germany Telephone: +49 (0) 3723/4988-0 Telefax: +49 (0) 3723/4988-25 Email: investor@roth-rau.de Internet: www.roth-rau.de

Contact for Investor Relations: Haubrok Investor Relations GmbH Simone Gorny Kaistraße 16 40221 Düsseldorf, Germany Telephone: +49 (0) 211/30126-130 Telefax: +49 (0) 211/30126-5130 Email: s.gorny@haubrok.de Internet: www.haubrok.de

## Publisher: Roth & Rau AG, Hohenstein-Ernstthal, Germany

Concept and editing: Haubrok Investor Relations GmbH, Düsseldorf, Germany

## Photos:

PhotoDisc, cover Martin Jehnichen, Leipzig, Germany Pages 1, 2, 5, 7, 9, 11, 13, 14, 17, 21, 27, 47, 49, 91 Rolf Großer, Dresden, Germany Pages 29, 50, 65

Design: M1 AG Werbung, Leipzig, Germany

Print: Druckerei Hennig, Leipzig, Germany



## ROTH &RAU

Roth & Rau AG Gewerbering 3 OT Wüstenbrand 09337 Hohenstein-Ernstthal Germany Phone +49 (0) 3723 - 49 88 - 0 Fax +49 (0) 3723 - 49 88 - 25 Email investor@roth-rau.de www.roth-rau.de