



MANZ AG

CONFERENCE CALL 6M RESULTS 2011

AUGUST 11, 2011 / MARTIN HIPPEL

**HIGH TECH
FOR A
GREEN FUTURE!**

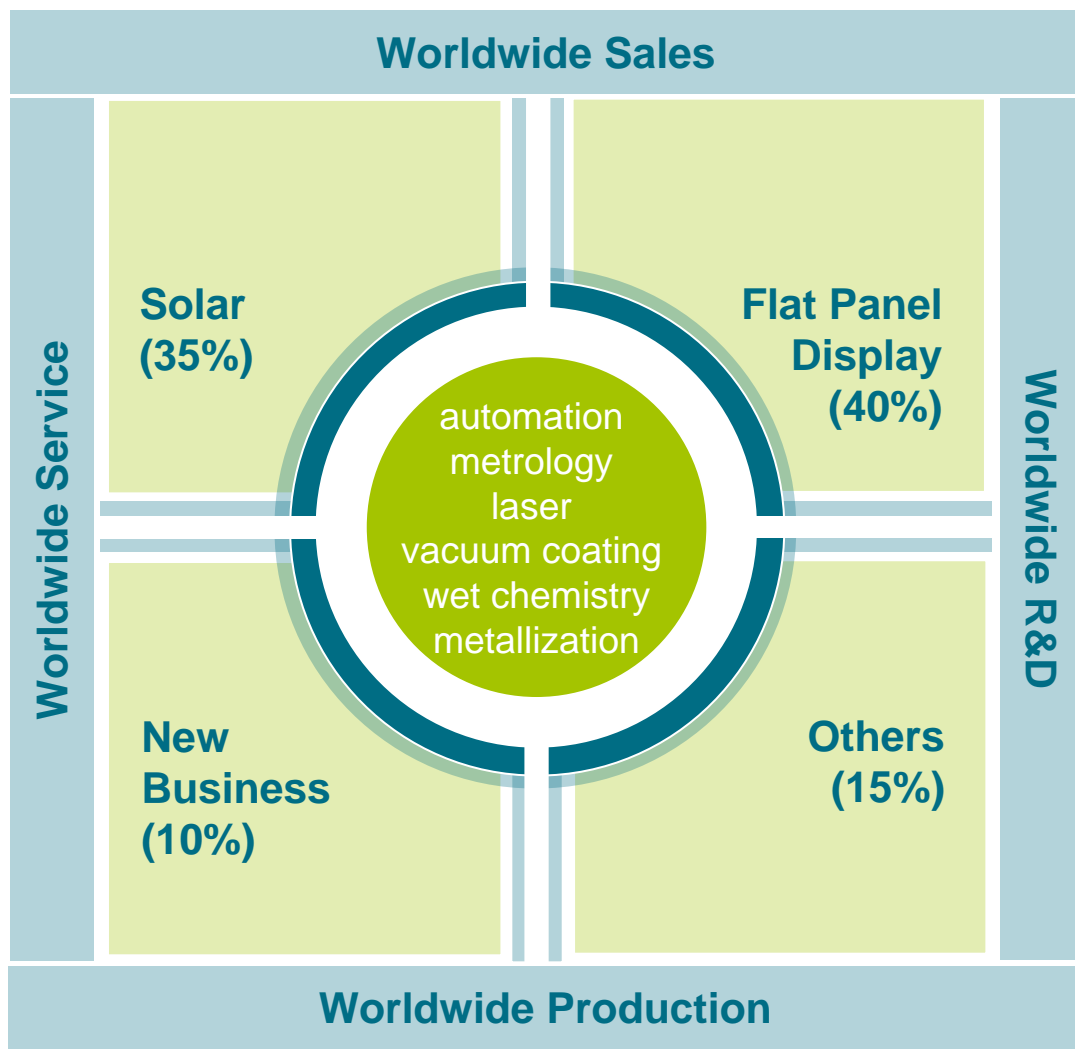
Mission Statement

Manz AG is a supplier of high-tech manufacturing equipment for key technologies of our times, such as sustainable power generation, displays for global communication needs and e-mobility.

Motivation

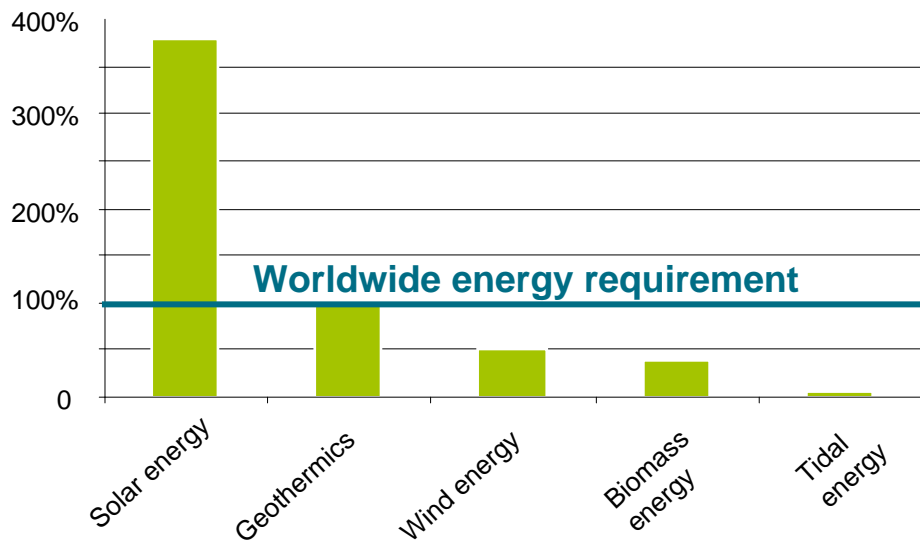
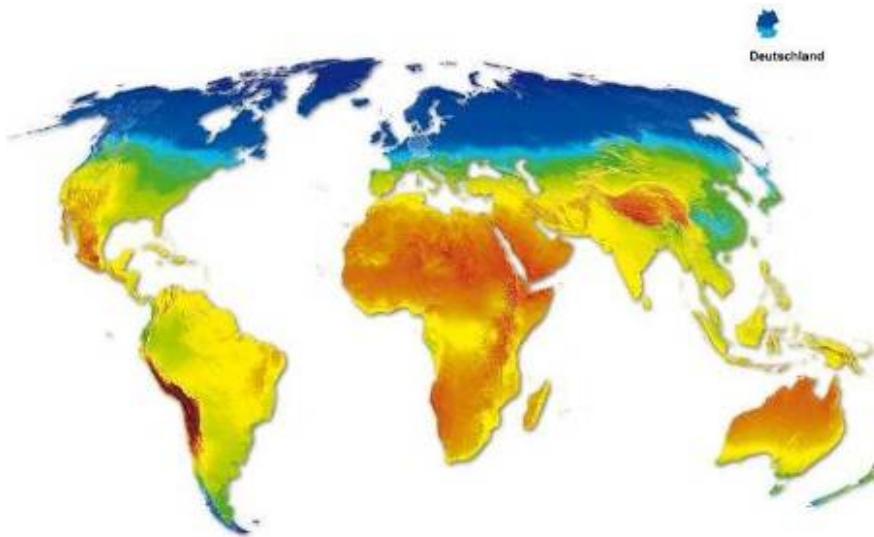
- Vital importance to growth industries to cut production costs in very short cycles
- Further development of the end product itself leads to new production technologies and processes
 - With advanced equipment Manz actively contributes to make end products available to the mass market and helps to save our environment and resources by
 - increasing efficiency
 - increasing throughput
 - decreasing material consumption
 - decreasing cost of ownership





Strategic pillars of Manz

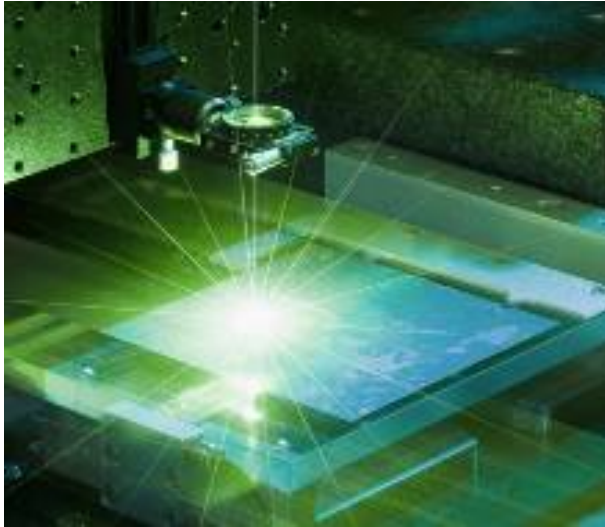
-  **Integration**
-  **Diversification**
-  **Internationalization**



- Solar energy contributes less than 0.1% to the global energy supply. In Germany, the share is 2 %
- More than 50% of all solar modules worldwide are installed in Germany
- Large parts of the earth with significantly higher solar radiation are hardly using photovoltaic's yet
- Increasing need of energy will not be covered by fossil fuels in future
- Worldwide energy requirement cannot be covered by other renewable energy sources. Solar energy covers worldwide energy requirement by 380 %!

Challenges for market development

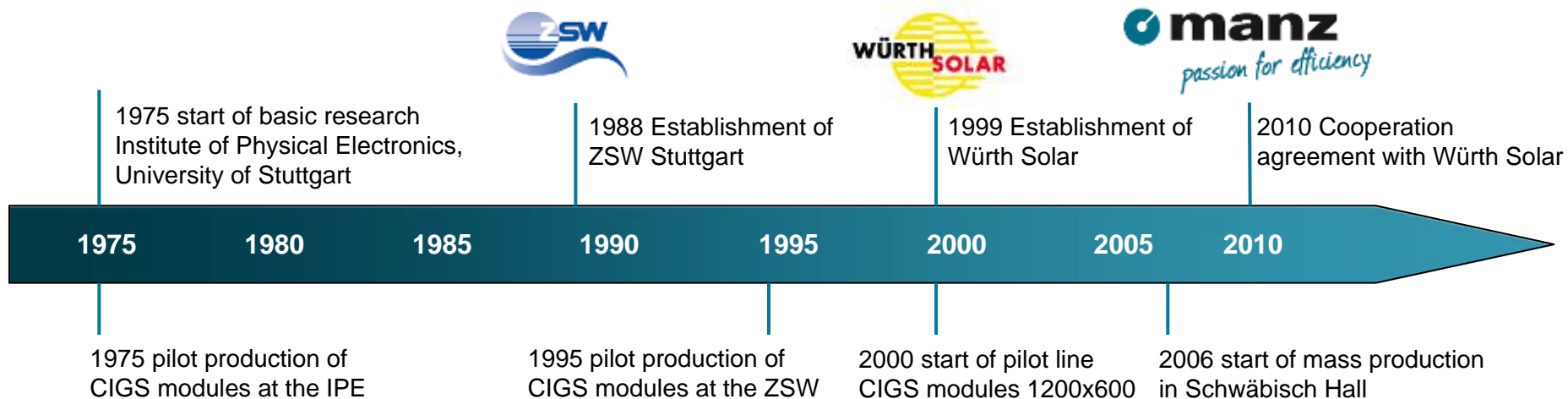
- Costs of PV still too high
 - ➔ Material costs have biggest influence (50-70%) on total costs
 - ➔ Material costs can be influenced directly by decreasing material consumption or indirectly by increasing efficiency
 - ➔ Increasing efficiency is key to success of PV



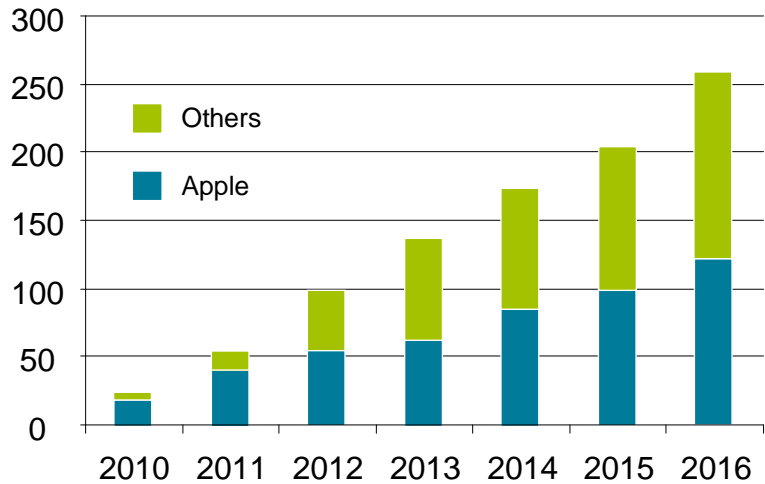
Enabling technologies of Manz for further development of PV market:

- Highly efficient laser processes
 - Selective Emitter (cSi) increases efficiency by up to 0.5% and thus has a great influence on competitiveness of customer and on energy costs
 - Laser scribing solutions (tfs) minimize dead area of solar module and thus increase its efficiency and decrease cost/watt
- Advanced automation systems
 - SpeedPicker (cSi) with lowest breakage rate for highest throughput and safe wafer handling has a big impact on decreasing production costs
 - Total fab automation (tfs) allows „chaotic storage“ and thus reduces storage space significantly. Customers work more efficiently and cost-effectively
- Highest degree of integration
 - Processes are coordinated and perfectly connected with each other which leads to significantly decreasing production costs





- Market uncertainties caused by currently lower demand impacts the business
- High interest in our CIGS technology is unbroken
- Unchanged high confidence of Manz in CIGS business model
 - Manz approach already delivers competitive cost at a size around 300 – 500 MW
 - CIGSfab reaches efficiency in mass production of almost 13%
 - Manz is the only one to offer working process and equipment expertise in CIGS
 - Large improvements in R&D and standardization of our machines reduce capex
 - With ZSW and Würth experience we have the ability to rapidly continue development of CIGS technology. This gives the maximum security for customers' investments in a CIGS production line



Touch Screens for Tablet PC Shipment Forecast (in Mio)
Source: DisplaySearch Q1'11



- Development of technology has led to a sustainable boom in the field of touch panel applications such as iPhone®, iPad®, navigations systems...
- Unchanged high demand for LCD-TVs
 - Worldwide TV-market has grown in total by 17% in 2010
 - Growth rate of LCD almost doubled this figure with 31%
 - Double digit growth rate also estimated for 2011
- Other technological achievements such as 3D TV will keep growth rates on this high level in future

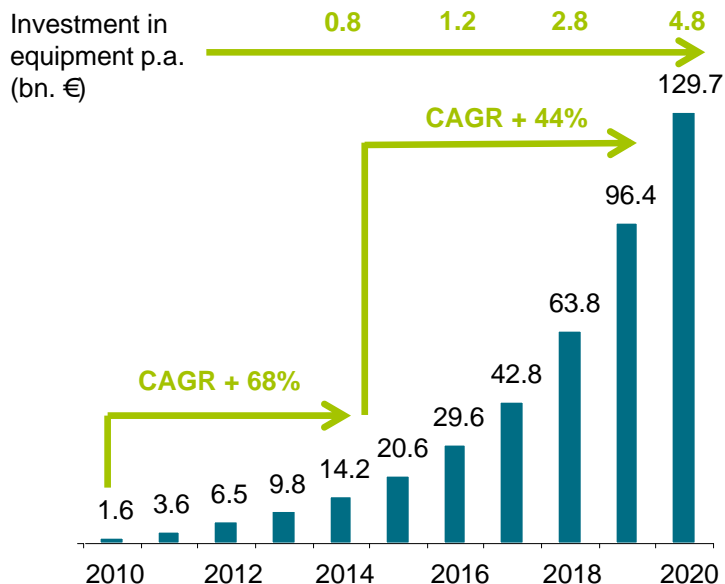
Challenges for market development

- Despite rapidly growing sales figures producers are facing a decline in turnover due to price decline of end products
 - Producers need to invest in advanced equipment that allows them to significantly reduce their production costs



Enabling technologies of Manz for further development of market:

- Manz is technology and quality leader for wet chemical processes
 - Ability to develop new processing tools in short cycles allows customers to cut costs within short time periods
- Excellent market position in Asia
 - Only local competitors
 - Market share 30%
- Highly efficient automation systems
 - Shortest handling times for large substrates. Approximately 35 seconds for Generation 8 substrate. High throughput means lower costs!
- Material-protecting production equipment
 - Minimal glass breakage in production. Downtime means high costs due to clean room requirements
- Highest degree of integration
 - Processes are coordinated and perfectly connected with each other which leads to significantly decreasing production costs



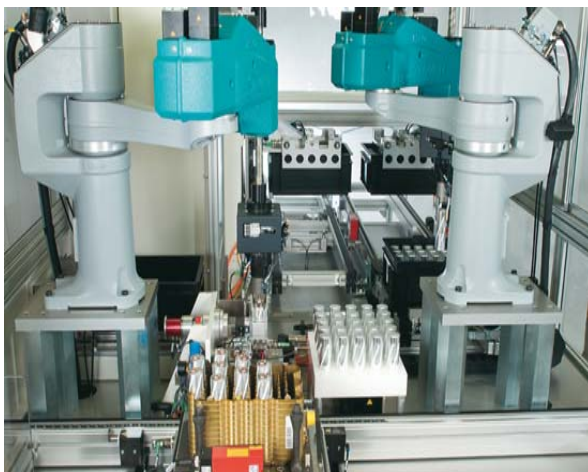
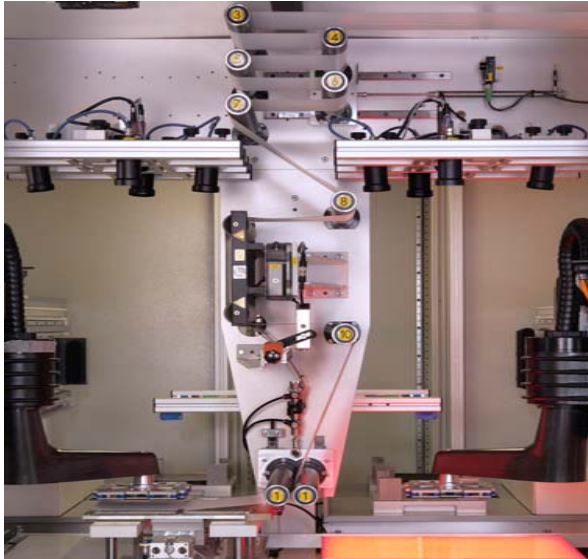
Production Volume Battery Cells 2010-2020 (in mio. kWh)
Source: Zukunftsfeld Elektromobilität, VDMA/Roland Berger 05/2011



- Megatrend in the automotive industry on the way to sustainable mobility will be the introduction of electric power drive
 - Shortage of resources and reduction of carbon dioxide are driver of this development
- Advanced equipment has a share of approx. 50% of total manufacturing costs in mass production of Li-Ion batteries
 - Equipment is key to success for this new technology
- High double digit annual growth rate of production volume of Li-Ion batteries within the next 10 years
- High demand for equipment already today, due to investment of many small companies
- On the long term estimated investment in equipment up to almost 5 billion EUR per year
- Storage of energy with Li-Ion batteries is another great opportunity

Challenges for market development

- Battery technology is still too expensive
 - Advanced equipment to significantly cut costs is needed!



- Production solutions that range from battery cell manufacturing (reel to cell) to the assembly of the individual cells into battery packs (cell to pack)
 - Advanced automation systems e.g. for high speed cutting of coated electrodes or the assembly of single cells to battery systems for high throughput, process reliability and thus decreasing production costs
 - Laser solutions e.g. for sealing of battery cells. High precision ensures high efficiency
 - Approved testing equipment for maximum quality
- Highest degree of integration
 - Processes are coordinated and perfectly connected with each other which leads to significantly decreasing production costs

INTEGRATION

- Manz has a great expertise in all relevant process steps
 - Increasing degree of maturity brings along a higher degree of integration of the different production processes
 - Manz offers highest integration degree in the production process
 - Manz can thus realize significant cuts in production cost in short cycles

DIVERSIFICATION

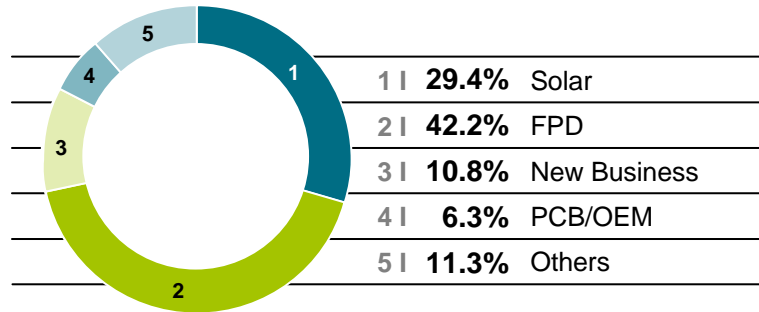
- Manz has consciously decided to concentrate its activities on three strategic business units
 - Manz is not dependant on the development of one branch
 - High degree of synergy effect is of vital importance
 - Manz is a strong and reliable partner because downturns in one branch can be compensated with other strategic business units

INTERNATIONALIZATION

- Manz has worldwide sales, service, production and R&D
- Manz takes advantages of its sites in low cost countries such as Slovakia or Hungary
- Manz' position in Asia is outstanding. With production sites in China and Taiwan Manz can offer its customers German high-tech engineering and quality as well as local sales and service
 - Manz has technological advantages compared to local competitors, cost advantages compared to European competitors

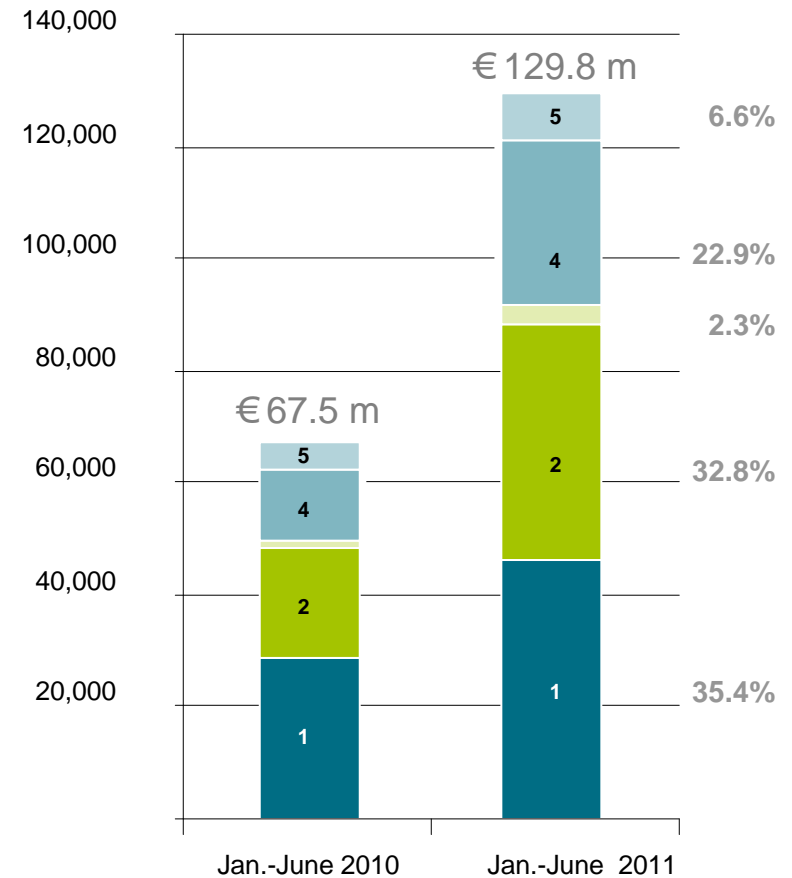
FINANCIAL FIGURES

Order Backlog: €120.2m as of June 30, 2011



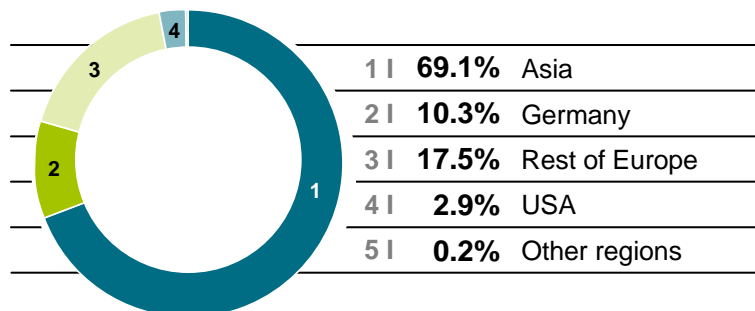
Revenues by business units

in Euro thousand



Revenues by region

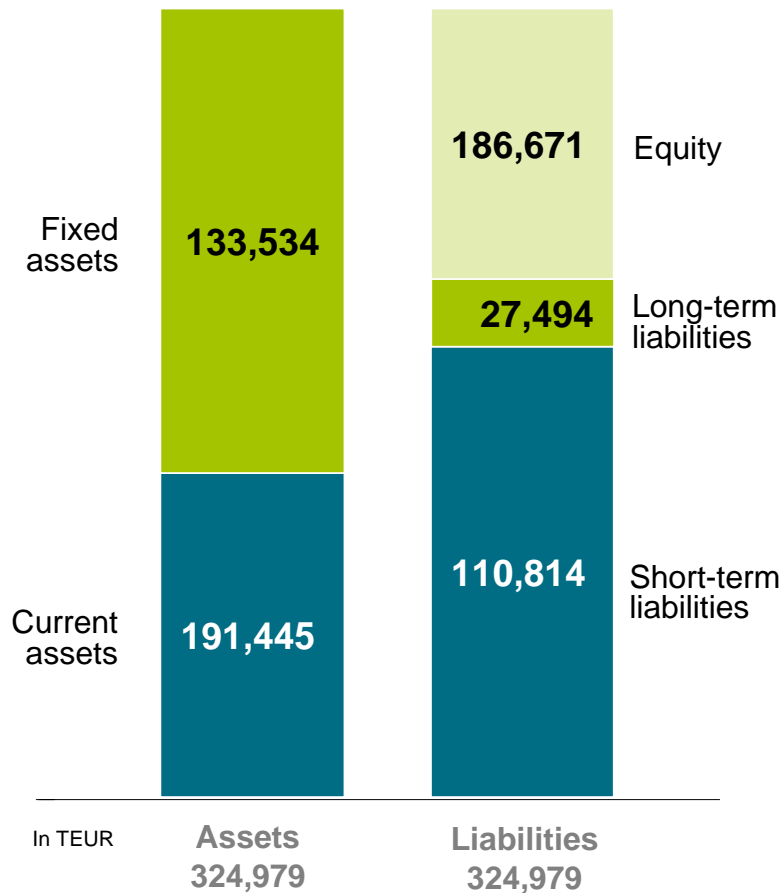
As of June 30, 2011



1 | Solar 2 | FPD 3 | New Business 4 | PCB/OEM 5 | Others

in TEUR	Jan. 1 - June 30 2011	Jan. 1 - June 30 2010
Revenues	129,793	67,514
Total operating revenue	142,276	77,602
Cost of materials	89,869	45,942
Personnel expenses	32,075	22,672
Other expenses	14,343	11,253
EBIT	3,538	-1,541
EBT	3,208	-1,148
Net income for the period	2,875	-0,664

- Revenues rose by 92% to € 129.8m in first half year 2011(previous year: € 67.5m) reflecting the strong growing business in all business units
- Total operating revenue almost doubled to 142.3m compared to € 77.6m in first half year 2010
- Material cost ratio increased to 63.2% (previous year: 59.2%)
- Personnel cost ratio decreased from 29.2% to 22.5% as a result of the better used capacities
- EBIT is at € 3.5m (previous year: € -1.5m)
- EBT of € 3.2m compared to € -1.1m last year



- Equity rate with 57.4% is at a good level and reflects the solid balance sheet
- Short-term liabilities including accounts payable increased strongly from €76.4m at the end of 2010 to €110.8m due to increasing business and expanded credit lines
- Fixed assets increased to €133.5m (€122.3m at end of 2010)
- Current assets increased significantly from 160.7m at the end of 2010 to €191.4m due to an increase of inventories as well as accounts receivable as a result of the strong growing business

in TEUR	As of June 30 2011	As of June 30 2010
Cash flow from operating activities	-12,026	-5,274
Cash flow from investing activities	-13,404	-13,520
Cash flow from financing activities	33,063	11,050
Cash	44,788	52,573

- Operating cash flow at € -12.0m due to significant increase in inventory and accounts receivable reflecting the expansion of our business
- Negative cash flow from investments as a result of acquiring intangible assets and capitalized R&D as well as equipment
- Increase of cash flow from financing activities as a reflection of changes in short term loans which were used to finance working capital

- Positioning as a leading supplier of integrated production equipment for the Solar, FPD and Li-Ion battery industry reduces dependence on certain branches
- Manz will continue its positive development in revenue (increase in turnover by more than 30%)
- Manz will take advantage of huge retrofit potential in PV with its solutions to upgrade existing production lines in order to make them profitable again
 - SpeedPicker for safe wafer handling with lowest breakage rate
 - Selective Emitter for increase of efficiency by up to 0.5%
 - Laser scribing solution with IPCS for smallest dead area on market and thus highest efficiency and profit
- Manz will put a strong focus on cost reduction by
 - redesigning the products and thus realize a lower material ratio and decrease labor costs
 - increasing standardization and thus reduce production costs
 - the straight use of the low cost facilities in Eastern Europe, Taiwan and China
 - savings on the supplier side due to local sourcing in China and lower material costs
 - an improvement of internal processes and thus a shorter time to market

>> Guidance for full fiscal year 2011:

- **We anticipate sales of €240-250m for the full year 2011 (without CIGSfab)**
- **We expect an EBIT margin of at least 5%**
- **Ongoing macroeconomic and sector problems might have a negative impact on our targets**

CONTACT



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