

Herbert Arnold GmbH & Co. KG, founded in 1950 in Weilburg, Germany, is one of the worldwide leading manufacturers of burners, tools and machines as well as ready-to-use systems for customers in the area of photovoltaics, glass and quartz glass processing, fiber-optic and

Arnold Group



*Wolfgang Schürgers,
CSO,
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the automotive production. The core competence in the area of photovoltaics is the mechanic cutting and grinding/polishing of poly-, mono- and multi-crystalline silicon ingots and blocks.

REPORTED BY JEANNY H. LIM

Interview with Wolfgang Schürgers, CSO, Arnold Group

What do you see as the trends and market forces driving PV technology in the second half of 2011?

Equipment manufacturers in the photovoltaic sector orientate themselves mostly in the ITRPV Roadmap for the second half-year 2011 and the following years. This Roadmap is published by the Crystalline Cell Technology und Manufacturing (CTM), an interest group of the worldwide inter-trade organization for the standardization of production equipment SEMI. This Roadmap is revised every two years. In the trend-setting paper of the branch, there are indicated trends and requirements—both general technology developments and also cost developments. The general mega trends of the branch will continue accordingly. The further extension of production capacities with focus on Asia and continuous price pressure on the complete production chain are belonging hereto.

For that reason, the equipment manufacturers, as for instance our company Arnold Group, are forced to produce machines and cells offering higher productivity with improved quality. With the focus on intensive cost pressure, this could be achieved, e.g., with increased automation.

How are PV prices expected to develop in the second half?

The photovoltaics market has consider-

ably cooled down during the first half. Stockrooms of module manufacturers are nearly filled, the reason might be overcapacity produced by manufacturers. The consequence has been seen with noticeable price reduction in the first half of 2011. Future price development is strongly dependent on the market situation in the second half of 2011. With respect to the current intensive discussions concerning renewable energies on global level, we think the near future will be optimistic for us.

Where do you put your focus this year, in terms of business growth and technology development?

The Arnold Group offers its machines and cells for processing silicon extensive possibilities in order to generate additional customer value. We are focusing on the key market—Asia. Here, we will also supply machines which excel by high throughput with constant high product quality and extremely high process safety. An Asian customer has calculated a 2.5 up to 3-fold higher throughput of the machine compared with the one of an Asian competitor. Initial high investment costs pay off in a relatively short period and in the long run. For a comparable result, the customer does not only require less machines and consumption goods but also saves enormous production space, expensive raw material and last but not least employees.

Especially for the Asian market, Arnold has hired qualified Asian employees for sales and service. The Arnold Group also plans show rooms and service centers in cooperation with our local partners on the Asian market. We are more and more concentrating our activities on exhibitions and events. With our strategy 'quality instead of quantity', we are offering important advantages for future-orientated customers.

With uncertainty circling the funding of PV systems in countries around the world, what challenges are market par-

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Participants facing and what are the potential solutions?

The reduction—by progressive stages—and thus, the foreseeable end of the feeding allowance for solar power is an enormous chance for the industry. Energy demand is continuously rising. The increased awareness of consumers for renewable energies is raised and is partly enforced by specific guidelines of the world policies. Impulses of a steep and continuous growth are coming from different markets in the world. Decreasing feeding allowances have led to also decreasing prices for modules in the past and have raised the requirements. The important demand upon manufacturers will be to control decreasing end consumer prices by simultaneous reduction of production costs. This, however, requires high efficient and lean production facilities.

The Arnold Group will be an innovative partner and will also offer high-quality machines, innovative processes and efficient production systems for brick processing in the future. By optimizing production processes, a higher throughput with fewer machines will contribute to achieving grid parity. 

Jeanny H. Lim is Editor-in-Chief of InterPV. Send your comments to swied@infothe.com.

Surface grinding machine 72/860.1000-125/156

The machine is suitable for grinding of the lateral areas of squared mono- and multi-crystalline silicon work pieces in the format 125 x 125 mm² and 156 x 156 mm², with four parallel arranged grinding aggregates. Workpiece lengths of 400 up to 1000 mm can be processed.