



Just in Time

The engineering company Trumpf and Porsche Consulting: much more than just a good team. With Swabian decisiveness, the family-run business consistently applies the principles of lean production and lean management and is now a world leader in laser technology.

By: Reiner Schloz, Photos by: Trumpf



Even our visit today had been planned with military precision. Dr. Mathias Kammüller, Managing Director and Spokesperson for the Machine Tools business division can always rely on his fastidious preparation and planning. No point therefore, in wasting time rushing from pillar to post. The most important relevant information is all you need. “What I would like to tell you and show you will take about forty minutes,” says Dr. Kammüller, “After that, just ask me whatever you need to know.”

Welcome to Trumpf. A pleasant and noticeably relaxed atmosphere prevails here at Trumpf’s headquarters in Ditzingen near Stuttgart. That can be seen right from reception through to management. People feel confident and secure here. The Leibinger family makes sure of that, just as it has been for over four decades. At that time, company founder Christian Trumpf, who had no children of his own, decided to take on his enterprising engineer Berthold Leibinger as his partner. This creative genius not only cost the managing director a salary, but Leibinger also a small fortune in licensing fees to take out valuable patents to protect his inventions designed to ensure the production of state-of-the-art punching and contour-nibbling machines in the style of a conveyor belt. In 1962, Leibinger held 1.2 percent of the company’s shares; now the family holds all of them. During his rise to the top to become the world leader in laser technology, Leibinger always relied on the creativity and loyalty of his employees, on his own intuition, and on the power of the family, whose main purpose in life was to throw themselves wholeheartedly into the business.

After forty years as the head of the company, Leibinger, who is still very active in his mid-seventies, has now switched roles to become the Chairman of the Supervisory Board. On November 18, he handed over the role of managing director to his eldest daughter, Nicola Leibinger-Kammüller, a literature major, married to Mathias Kammüller and a mother of four, is also re-

sponsible for corporate communications. Her brother Peter Leibinger is the deputy managing director and has been the head of the Laser Technology business division since 2003. Berthold Leibinger’s wife Doris also sits on the Board of Directors, along with Leibinger’s younger daughter Regine, who works as a freelance architect and designs all of the company’s important new buildings.

As “devout Protestants,” the family defines itself by a solid written family code which mandates that it holds at least one family day each year to strengthen the feeling of belonging. The code also states that the company’s independence must be given fundamental priority over the size of the company. Kammüller, who like his father-in-law, holds many public offices, is a member of the *Arbeitskreis evangelischer Unternehmer in Deutschland e.V.* (Association of Protestant Companies in Germany). Social responsibility is much more than just a word to the Leibinger family.

Although this combination also seems to be very unusual in the minefield that is global economics, it is an invaluable driving force for securing the future of the company. Trumpf, whose sales rose to €1.4 billion in the 2004/05 financial year, currently has over 6,000 employees, and runs sixteen production plants in Germany, France, Austria, Switzerland, Taiwan, China and the USA, and owns subsidiaries in twenty-three countries specializing in sales, customer service and production. With sales of 1.2 billion, the Machine Tools business division accounts for the lion’s share of the four business areas. Laser machines and lasers alone account for 70 percent of this, and are showing signs of continued growth.

This division represents a development, which began in the early 1990s during what was a weak period for the company. This is not the only reason why Kammüller refers, with a grin, to the company’s neighbor in Zuffenhausen that has been every bit as successful as Trumpf. ▶



“The company was faced with disaster, has turned itself around and has watched its sales figures rise ever since: things have gone pretty much the same way for us as for Porsche,” says Kammüller. Even the methods we used to make that spectacular recovery are similar. When sales suddenly began to take a turn for the worse, Trumpf, like Porsche, also became increasingly aware of the need for major change,” says Kammüller.

With great determination, Trumpf began to change its production processes from the bottom up to correspond to the principles of lean production. What began with the introduction of simple yet effective resources (clear pre-picking of parts to be assembled, targeted organizational principle for the required tools), momentarily reached its pinnacle with the introduction of what Trumpf calls its own synchronized production system. In 2000, the company switched from static station assembly to flow assembly. On the one hand, this represented a remarkable logistical feat, as Trumpf machines can weigh up to 22 metric tons. On the other hand, a lot of time and effort had to be spent convincing others of the benefits. Major anxieties surrounding job security quickly spread among the production staff. However, Trumpf has its own (family) rules in this area too. One of these rules says that: No member of staff will lose his or her job as a result of improvements achieved through Synchro. In order to combine forces for progress, Trumpf agreed with the Work's Council to redeploy three percent of the production staff. These eighty employees have since been exclusively involved in production optimization. The ongoing improvement process is accompanied by workshops, and above all, by an annual audit in accordance with the principles of lean production. “If you are going to do something like this, you have to do it right,” says Kammüller.

The progress the company has made is not to be underestimated. Even the production line in Ditzingen is a feast for the eyes. The production hall has such an empty and



Mathias Kammüller: “You have to do it right”

tidy feel about it that one gets the impression that nothing is going on, that something is missing. It is simply a matter of everything being in the right place in the quantities required. The machines to be assembled are transported on air cushions from one station to another. Trumpf's flagship plant in Grüşch near Davos in Switzerland is already one step ahead. The 200-meter long flow assembly line uses rails to keep the machines moving. After completing an initial project at the warehouse in Schwieberdingen, Germany, the consultants at Porsche Consulting were able to prove that they themselves could provide assistance to innovative machine-tool builders in this area as well. The Trumpf plant in Grüşch is currently in the process of attempting to reduce its cycle times by 20 percent within three months and thereby to produce 20 percent more machines on the same area with the same number of workers.

As all of the production plants work according to the same principle, the production network is also able to run smoothly according to the just-in-time principle or “*Genau zur richtigen Zeit*” as it is known officially at Trumpf: Grüşch is therefore supplied with sub-assemblies and parts to be used in the final assembly from five locations, each of which is no more than four hours away.

Whatever works “on a small-scale” also proves to be an effective recipe for success “on a large scale.” As a result, Trumpf has been making an international name for itself for many years now. Here too, all the plants work according to the same principles as headquarters in Ditzingen. Kammüller: “We either train people from outside at our premises or we send our people to the relevant location.” There is no place for discrepancies, however minor they appear to be. The plant in Farmington, Connecticut, is virtually the mirror image of the plant in Germany. The 500-strong staff not only works in production, but is also involved in research and development. “We can do everything in the USA that we are able to do in Europe,” says the managing director. One strategic benefit is that on the one hand, it is important in the USA to demonstrate pres-

ence and competence on the market, but on the other hand, this makes Trumpf more independent of economic developments in Germany. “In the past, we haven’t pushed problems to one side, we have taken them seriously and solved them, we have always taken care to ensure a good balance between change and continuity.” Trumpf’s idea has proved to be a great success. In 2002, the company achieved a double win in the “Factory of the Year” competition (Machine Tools and Laser Technology).

Trumpf is an extraordinary company on a global scale, and it is still far from achieving its aim. Kammüller is very determined and you can see the anticipation in his face. “We are going to implement a similarly elaborate program in the office soon,” he says. ◀



In Ditzingen (above), Trumpf uses air cushions (bottom right) for its production processes; in Grösch, rails are used (bottom left)