

“Nothing works here without a magnifying glass”

An innovative, medium-sized turned parts manufacturer consistently backs micro-machining and is thriving on considerable growth rates, in spite of declining economic activity. The success story of Laufer GmbH in Hardt is closely associated with the Swiss lathe manufacturer, TORNOS. Working together in partnership, manufacturing strategies are developed, which now enable Laufer to supply turned parts even to the Czech Republic and the Far East.

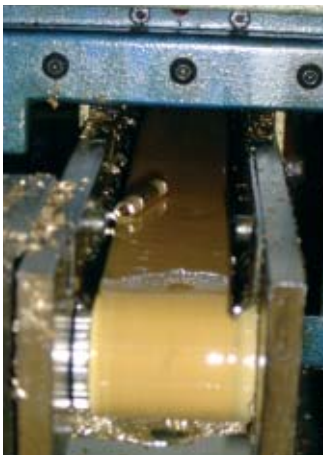


“Sometimes a week’s production fits on a Euro pallet”. At first glance, this statement does not necessarily indicate anything of great interest but when you see the pride and conviction with which Thomas Laufer, the youngest in the family, makes it, then it is worthwhile listening a bit more closely. During the course of the conversation, the initial appeal of the “Laufers” gives way to genuine admiration.

The father and founder of the company, Gerhard Laufer, was a foreman in the automatic turning shop of the company, Junghans. When things in the watch industry started to go downhill and Junghans was looking for possibilities of cutting costs, he seized the opportunity. At that time nobody talked about outsourcing, but Gerhard Laufer put it into practice. Together with his wife, he took over ten TORNOS automatic longitudinal lathes and continued to make watch components for Junghans on his own. Soon afterwards, new customers arrived and in 1988 the move to the company’s present building in Hardt took place. In the same year, the first new machine was purchased, a TORNOS MS 7 with bar feeder. In 1991 and 1994 his two sons, Andreas and Thomas, joined the company and soon convinced their father that he should go over completely to new technologies.

A pioneer of NC technology

The company already had twenty cam-operated automatic lathes when it risked the leap into NC technology in 1994. It was a TORNOS ENC 74, which was bought as the demonstration machine. This was followed one year later by the second machine of the same type, because the two sons had completely got to grips with the NC technology, which was still in its early days, and opened up for the company a range of parts, which up to that time had not been possible. Antenna components and micro-turned parts with complicated back-machining were added to the programme of watch components. At the time, the “Laufers” were told confidentially by TORNOS about the new DECO-concept and because the co-operation had worked so well up to that point, they decided to go for it. In July 1996 the first prototype found its way to Hardt. It was the first DECO-



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machine in Germany and Gerhard Laufer has never regretted his decision. "I was convinced of the concept right from the start; the quality was right and the support from Moutier was exemplary." In 1997 production was doubled not least because of this machine, the production area was increased from 500 to 1300 m² and in 1998 the second DECO was purchased. The third machine, a DECO 13, which was bought in 2000, with a diameter range up to 16 mm, was used mainly for prototype production and supplying samples.



The courage to take risks

Every flight must come to an end sometime and the downturn in the mobile phone market at the start of this century hit the Laufers very hard. 2002 was then the worst year in the company's history, but instead of resigning themselves to the situation, the "Laufers" recalled the family virtues and decided to really relaunch themselves. Together it was decided to get into CNC multi-spindle technology with immediate effect. In February 2002, Gerhard, Andreas and Thomas Laufer were in Moutier for the first turning tests. The part in question was one for a turbocharger, of which 9 million were to be produced. The requirements of this part shattered all previous limits and, together with the TORNOS technologies, the process was refined until the developers could go no further. The material, a high-temperature resistant stainless steel, material number 1.4845, is in any case, extremely difficult to machine and the very complex part geometry and the diameter-to-length ratio (\varnothing 4.5 / 22mm) did



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nufacturing series running into millions. And this is in a diameter range where others dare not go. Our strengths are within the range from 1 to 16 mm, with 90 percent of our parts being less than 6 mm”. M1 screws, M1 set screws with slot and point or buttons of 1.3 mm diameter – Laufer even delivers parts like these to the Czech Republic and China. Customers from the

electronics and car industries have realised that they cannot produce such parts of the same quality and at the same price locally and therefore they come to Hardt. For this reason the 25 employees and approximately 30 TORNOS machines run at capacity around the clock. The order books are full until the end of 2005 and the next plans for expansion are already on the table.

not simplify manufacture on a MULTIDECO 20/6 in any way. After a nine-month trial phase, “Laufers” had control of the manufacturing process and their company was on course once again. Whilst the life of the tools was initially about 500 parts, approx. 5000 parts can now be manufactured with one set of tools. And that pays in anyone’s language. “We have super machines, a super oil and super tools but we’ve still not finished yet”, says Andreas Laufer – perfectionism runs in the family.



Advancing to new dimensions

During the same year, changes occurred in rapid succession. In January an additional DECO 10 was delivered and in March the first MULTIDECO 20/6b, again a TORNOS machine, which was the first to be delivered to Germany. “We have not lost our willingness to take risks but to be fair it must be said that we have never yet been disappointed by TORNOS”, said Gerhard Laufer. “However, it must also be understood that we are now moving in quite different dimensions. Whilst before we were happy with quantities of 100,000, we are now ma-





Looking forward to new products from TORNOS

This year TORNOS will be bringing some new machines onto the market and "Laufers" are already waiting in the wings. After all, they want to be the first again to try out one of the new CNC longitudinal lathes or multi-spindle lathes from TORNOS in practice. Ultimately, they owe part of their success to these machines. With an availability of 95 percent, a rate of complaint in the thousandth range and a productivity, which has no equal, TORNOS machines are a reliable investment for Laufers. In 2003, they produced approximately 25 million parts in 15 to 17 shifts per week; from January to October 2004, 33 million exacting turned parts had already left the two production halls of Laufer GmbH precision-turned parts. Sometimes, there was just one Euro-pallet per week, but, as we have said, it is sometimes worthwhile looking a little closer.

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