



Landhändler  
verantwortlich für Qualitätsprüfungen  
Hard  
Min: 67 t Sauf  
MAX: 134 t Sauf (2 Silos)  
DE: 1 d  
22.48 M.  
V: 100  
R2: ca.  
3 Schichten  
5 T  
V2: 1 d





Squeezing out every drop into bottles: To the left, the four steps to cooking oil—the rest becomes animal feed (middle) or fuel (right)

Originally, the experts from Porsche Consulting came to Teutoburg as slimming consultants, with a carefully worked out individual diet plan aiming at 100% performance and zero fat—and found themselves in an oil mill oozing with edible fats, of all places. Of course, the plant in Ibbenbüren, nestled in the hills of the Teutoburg Forest near Osnabrück, deals in the highest quality cooking oils, absolutely in a class of their own—the Teutoburger Ölmühle is the market leader in its segment. An out-and-out success story, especially as production at the oil mill is totally self-sufficient in energy, and creates no waste. Lesser quality husk oil is used to fuel the mill's own heat and power plant, and the energy-rich oil residues are marketed as feed and biomass fuel.

These were reasons enough for the jury to choose the oil mill as the best up-and-coming company for 2007. This initiative, which promotes start-ups and the entrepreneurial spirit in Germany has the support of *Stern*

magazine, the ZDF TV channel, the Deutscher Sparkassen- und Giroverband (German Association of Savings Banks and clearing houses)—and of Porsche and Porsche Consulting. And so the idea of lean processes has also found its way to Ibbenbüren, where it fell on fertile ground, for the experts found not just oil, but also fat build-up in the wrong places. “We’re a young company, but even so you can still get lazy and start carrying too much weight around with you,” says Dr. Michael Raß, 43, one of the founders.

As a doctoral candidate in chemical engineering at the University of Essen, Michael Raß, and the man who is now his business partner, Dr. Christian Schein, 42, studied the environmentally-friendly processing of rapeseed oil at the institute of Prof. Felix H. Schneider. Their work formed the basis of a technical and ecological innovation: Every single 1.5 mm grain is hulled by means of a patented method before being processed further. So only the rape seed itself, less than 1 mm



wide and consisting of 50% oil, is pressed, using a particularly gentle cold press, in which the mill's crushing gear (the "worm") is cooled to less than 40°C (104°F). The result: an extremely healthy, pure, golden yellow oil with a mild, nutty aroma. It has no trace of bitterness, which normally comes from residues in the husks and has to be removed from normal oils using various chemicals, or high temperatures in refinement processes, all of which damage the quality of the oil.

It is not only gourmets that have learned over the past six years to be grateful for Raß's leap to business independence with his partners, after a major food company had rejected the procedure after declaring that the technology could not be scaled up from the laboratory to mass-industrial production. Scientists Raß and Schein started up together with a third business partner, Wilhelm Kortlüke, with no significant equity and just €3.5 million in credit. In 2001 they

built their mill on the green fields near their homes, in the middle of the rapeseed-growing region of the Münsterland.

Six years later, in November of 2007, Porsche Consulting arrived on the scene. Till Friedrich, Knut Krümmel, and Klaus-Dieter Pannes conducted the pro bono project, which included several two-day workshops and a three-week course on the company's premises. The crux of the mission: to detect and eliminate waste, and to enhance value creation by means of transparency, synchronization, and perfection; in short, implementing the idea of a lean, process-oriented enterprise. "We wanted to get thinking processes working," says Friedrich.

For Raß, what the changes essentially mean is "regulating growth"—for rapeseed oil is a winner. Ten tons of seed were processed per day at Ibbenbüren in ▶



The final touch: The bottles are labeled



Example of transparency: Clear instructions for the employees



Split time as incentive: The set-up time of 35 minutes has now been cut to 30

2002, the first year of production; the current level is 120 tons. What was then a daily fill of 4,000 bottles is now up to 40,000. The plant has been expanded from the original 4,700 to 20,000 square meters and employs fifty full-time and eighty part-time staff—up from just four people when it was founded.

When there is that much movement going on, clarity and transparency are urgently needed in order to promote the introduction of lean processes. Photos displayed on closets in the filling hall document what the closet is supposed to look like inside. Every piece has its place, and everything is clearly labeled and identified, to enable every employee to follow up. The boss has set a good example. As a motivation measure, Michael Raß photographed his own desk before and after tidying it up, and published the photos in the staff magazine.

Over time, standards have been created that have brought tangible improvements, for instance in set-up times. Information is put up on the site showing every step for resetting equipment for a new fill in new bottles, and all machines and equipment parts are labeled. Thanks to these measures, set-up times have been cut from four hours to thirty minutes. Till Friedrich's ambitious target, though, still has to be met: twenty minutes.

Dr. Michael Raß admits to having been resistant to advice. "I thought, who do they think they are, to come in here and give me advice?" He has now become taken by the philosophy of Porsche Consulting. It probably helps that the representatives of this Porsche subsidiary do not at all conform to his image of consultants. Instead of theory, they went straight to practice. As Raß says: "The Porsche consultants went hands on, so they could understand what makes my company and my employees tick." The shelves in the warehouse also show what can really be achieved by



Michael Raß (l.), Christian Schein: Partners who take the broader view

consistently tackling waste. Many are practically empty. More efficient production and clear cuts in set-up times mean that production can today be arranged to fit orders. Expensive stockpiles have been reduced, and customers get even fresher goods.

The next project is to slim down raw materials procurement. Only just enough seed will be delivered, just in time for direct further processing. That will cut the goods stocks by several million euros, and improve the oil mill's liquidity.

Now that Porsche Consulting has helped redirect growth so successfully into lean procedures, and to stimulate and implement thought processes, Raß and his partners have even more incentive to open up new markets. The course is set. For instance, in Great Britain, the health-conscious islanders are thirsting for the fine Westphalian oil. We just hope that they aren't going to use it to deep-fry "chips." ◀