

TECHNICAL REPORT / INTERVIEW "GOOD THINGS BELONG TOGETHER!"

Georg Noll Freiburg relies on Müller Hydraulik when it comes to high pressure, for example, even for Mapal, Aalen. The basis of the partnership: same values, best performance ... and a missing key.

Based on more than 200 Yamazaki Mazak models, they design individual solutions for leading companies in Baden-Württemberg – like most recently, for example, for Mapal, Aalen. For this purpose, Müller developed the cooling lubricant high pressure filtration system. Has Mapal previously used cooling lubricant high pressure filtration in machining operations?

Radion Sigfrid: The topic of high pressure is nothing new at Mapal. I think that they have been machining under high pressure for at least 20 years. However, high pressure with Müller as a partner and the combiloop is something new.

Did a specific factor tip the scales on part of Mapal for the cooperation with Müller? Radion Sigfrid: In my opinion, they were convinced by the constructive solution competence Müller had to offer.

Bernd Eckstein: I think that, in addition to technology, the people behind it and the close proximity were important factors – for us, these have always been extremely important aspects in a partnership. A successful, globally acting company such as Mapal, needs the certainty that there is something behind it. This resulted in the first discussion with Müller in Villingendorf. Subsequently, Mr Jürgen Müller personally visited Mapal. In addition to responding to the requirements on site, as a person responsible for the Müller development and production, he was competently able to answer any questions posed by the technical contact partners at Mapal. This made a really good impression. And very simply put: Good things belong together!

I would like to come back to the topic of "proximity" and "person" at a later point. Could you explain what you understand under the term constructive solution competence with more detail? Where there specific requirements?

Radion Sigfrid: You must envisage the following situation: The customer has a certain volume of space in his production. At some point, existing machines will be replaced or new ones will be added. That fact is: Machine tools are always getting bigger; but generally, the



space surrounding them remains the same. Therefore, peripheral devices must be smaller – but maintaining the same quality and performance. And in my opinion, that is the constructive solution competence presented by Müller: compactness with great performance in the field of high-pressure filtration.

Frank Pregger: This puts it in a nutshell. At Mapal, we integrated two new Mazak VTC processing systems and two new Mazak Integrex multi-tasking machines – by and large into the "existing space". Furthermore, there were a series of requirements, particularly with regard to high pressure and flush performance. Among other things, different types of deep holes – we are talking about processing with 30–40 x D (!) – were carried out on machines, with extremely fine chipping material to some extent. And of course, with a necessary, prescribed medium purity of 40 μm. Therefore, it became necessary to fully flush the chips in the entire interior of the machine. The consequence: An aggregate, which reliably yields 70 bar at 27 l/min and a high flush performance in low pressure (approx. 300 l/min) during long-term use. And thus, with a temperature-stable medium, energyefficient and as already mentioned, especially compact. This is what the combiloop can do, with and thanks to the high-quality regulating pump technology, two automatic filters connected in series with a large cycle for the fine filtration and the attached immersion cooler.

You just spoke about the topic of energy efficiency. How important is it in modern machining or in the present case?

Frank Pregger: It is an important topic and gaining more and more importance. It also has to do with a possible reduction of operating costs. Today, this is an absolute must. Furthermore, the topic of energy efficiency at Mapal already ranks high due to the ISO 5001:2011 certification alone.

Radion Sigfrid: As you know, as part of this certification, certain requirements must be met, which was achieved with the integrated combiloop. In this case, the regulating pump technology has major advantages. Reason being, in order to yield the high-pressure and flush performance required on part of the customer, we would have had to continue with a 12 kW constant pump. Based on the Müller regulating pump technology, we only need 5.5 kW drive power – in other words, around 60% less performance and energy – per system. That is huge.

Let us turn to the factor mentioned above, "person" and "proximity". Why are these such important factors for you?

Bernd Eckstein: For more than 45 years, we have been the exclusive partner of the



Japanese premium machine manufacturer Mazak for Baden-Württemberg and we are rather proud that almost half of all Mazak machines that are operated in Germany, Switzerland and Austria, are all available in our region. This presence is based on that fact that we are viewed as a system solution partner for our customer, who ensures excellence throughout the customer relationship – from the initial consultation through to after sales. In doing so, the factors, proximity and person, are very decisive. For example, for the sales force, we employ experienced machining professionals. This ensures that we really understand our customer and their requirements. For the peripherals, we only work with partners that also fully respect our claim to excellence. The topic of proximity and person has to do with trust, short routes, speed and flexibility. In the end, it has to do with an excellent result for our customer, which is based on effective cooperation on an equal footing.

Frank Pregger: And, if I may add, in the case of Müller, "proximity" and a missing key were the basis for the familiarisation for our partnership.

A missing key as the basis for a partnership?

Frank Pregger: Yes, that is a nice story. At the Turning Days 2011, Müller Hydraulik had their stand right next to ours. On the morning of the first day of the trade fair, their fair hostess could not be found with the key to the coffee room. Starting a trade fair without coffee – you wouldn't wish that on anyone! So we offered Mr Müller a hot beverage and started talking and it started something like this: "Tell me, what do you actually do, what can your systems do?" The response "cooling lubricant high pressure" greatly aroused our curiosity, because that was exactly what we were looking for: a specialist that delivers high pressure over 20 bar and thus, closes the gap between integrated pumps and large plants. We then decided that we should meet immediately after the fair. To put it another way, a missing key was the key to our successful partnership.

Mr Eckstein, Mr Pregger, Mr Sigfrid, thank you very much for this good discussion.

The interview was led by Matthias Boch / mobilee.de





// combiloop CL5: tailored power cooling lubricant system



// Combination of automatic filters for the full flow





// Clever construction on top of the clean liquid tank: Efficient, powerful, particularly compact

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