

Dear Business Partners and Friends,

More production area for more lathes means more potential for turnover – provided that the orders are there. And as we all know, that's a challenge especially today. The VDMA incoming orders figures show this too. No one wants to make any forecasts right now, and that's a good thing.



Of course, a situation like that isn't necessarily the desired environment of the market when it comes to launching a real innovation. At least, you wouldn't think so. A risk? Perhaps. But we mainly see an opportunity here – for us but especially also for our customers. Above all, the combiloop CL3 E is and will remain a clever investment today and in the future too.

Why? In recent years we've been working intensively to make compact CL high pressure as flexible for you as possible. Our aim: to create a CL high-pressure optimum within a minimum of space. But in doing this we also want to develop something that allows performance via customizing and where investments are not unnecessarily tied up – e.g., spatially through a complete fusion with another unit, as a result of which a lot of limits can be set in the equipment.

Our development department, our product management, we've all given this a great deal of thought. And the result is a completely different approach: the first detachable compact CL high-pressure unit in the world.

If we summarise the primary product benefits of the new innovative concept, we come up with the following:

(A) Units can be placed either separately or together = modularity / modular intelligence

- // Flexibility in terms of place of use / space required / alterations. In the future too!
- // Investment security!

(B) Best in Class under the bar feeder: CL3 technology + innovations = module / design

- // Rapid amortisation
- // Greater economy and competitiveness
- // More process reliability

We hope you'll really enjoy discovering the new combiloop CL3 E. Yours sincerely, Jürgen and Martin Müller

Solving high-pressure paradoxes: maximum compactness combined with greater process reliability!

The innovative product concept makes it all possible – from the automatic filter to the regulating pump and cooling. High performance now also under the bar feeder.

The approach to the solution is both simple and ingenious: The combiloop consists of two elements that can be placed separately. "The clever thing is that by separating the units, we're able to offer our customers maximum performance combined with maximum flexibility. In-house we call that modular intelligence, and I also think that's a very good description. We're simply creating more space for our technology, but we're nevertheless more compact overall because we don't normally extend beyond the feeder's outer edges even when the units are placed separately. However, the combiloop CL3 E can of course also be positioned next to the feeder or lathe like a traditional auxiliary unit", explains Müller product manager Alexander Lang.



combiloop CL3 E: maximum flexibility and performance thanks to a modular division

The clever thing and what makes it all possible: modular intelligence!

Element 1 – functional reliability – primarily covers everything about high pressure generation, the controller and a large clean liquid tank. Element 2 is the filtration unit which houses the correct process-safe filtration technology – from an exchangeable filter to an automatic filter, depending on the customer's particular application. A self-cleaning automatic filter for example allows filtration of very high levels of contamination with a high fine chip volume. And control effect high pressure returns the medium to the internally cooled tool at up to 300 bar with great energy efficiency and sustainably. Whether it's steels and hard alloys or materials producing very fine chips – the new combiloop CL3 E high-pressure bar feeder combination will in future allow process-safe and very space-saving machining.

The product benefit is also a new benchmark for the industry in terms of future-orientated investment. Besides the modular expansion stages that also boast better performance parameters than commercially available solutions, the combiloop CL3 E also works as a stand-alone solution – irrespective of the feeder service life and above all irrespective of how the

COMBILOOP CL3 E: the optimum solution for under the bar feeder – and next to it.



machine utilisation and the order/production situation or space change. "The combiloop CL3 E can adapt itself at any time to customers' future business. It represents the sum of our technological achievements and clever new innovations", explains Stefan Mauth, head of design in the Müller development department. "The combiloop CL3 E is a very customer-focussed product. Performance and flexibility in a very limited space go hand in hand with ease of use, installation and maintenance." Operation



Rear side – left: high-pressure pump in the functional unit
Rear side – right: filtration unit with pressure-regulated service connections

A look inside the filtration unit, here with a self-cleaning automatic filter

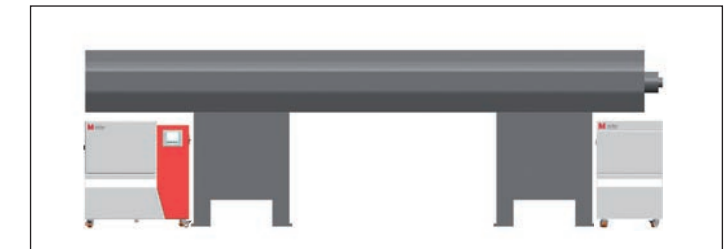
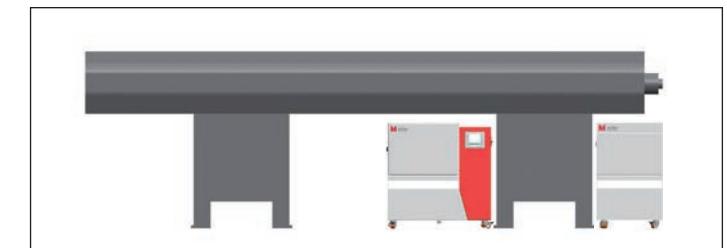
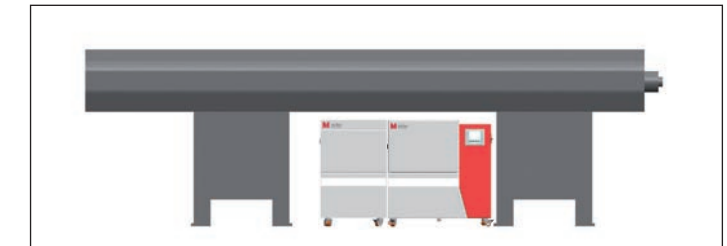
of the combiloop CL3 E is intuitive and the function visualisation occurs during operation via an LED colour guidance system – visually and attractively integrated into the design. The combiloop CL3 E also impresses by virtue of its advanced technologies and innovative new features that will set a new standard. These include for example:

- // a flow monitor that's integrated as standard, and optionally as an adjustable flow monitor,
- // an integrated plate heat exchanger that, thanks to cooling of the full flow and bypass filtration, among other things increases dimensional accuracy and thereby reduces scrap, and
- // filter change pre-warning on exchangeable filter systems, which drastically reduces filter-related maintenance intervals and downtimes.

No (space) restriction – a truly sustainable acquisition

Alexander Lang goes on to explain: "The division allows the customer to place the elements where there's space. There's not JUST ONE situation under the loader, and there's a large number of loader models. At the same time, high pressure means that there's no need to make compromises in terms of cost savings and quality improvement.

There's also our system partnership advantage with leading partners that guarantees smooth interaction with most common cutting machines straight from the factory. – The combiloop CL3 E marks a milestone here."



THE MAIN ADVANTAGES AT A GLANCE:

- + Fits under almost all bar feeders
- + Compactness and flexibility up to max. 300 bar
- + eco+ regulating pump with delivery rate up to 27 l/min: energy efficiency and less heat influx
- + Easily accessible technology, simple and ergonomic filter changing
- + Advance warning for filter change on exchangeable filter systems
- + Flow monitor as standard + optional: adjustable flow monitor (max. 2 service connections)
- + Plate heat exchanger (cooling) integrated: full flow and bypass filtration
- + Desludging box monitoring



More advantages? Here:

Find out more about the new combiloop CL3 E at: cl3e.muellerhydraulik.de/en/