



**KÄCHELE**  
VIBRASTOP



# Large-scale machining centre KAE XL 2018



FLEXIBILITY FOR YOUR SUCCESS

# KAE XL 2018



The large-scale machining centre KAE XL 2018, enables KÄCHELE to machine tools for PCP and mud stators, PCP solid and hollow rotors, mud rotors and large components for aerospace, drive engineering, mould and die making, and last but not least for the energy sector.

It is well-suited for machining screw spindles, hydraulic cylinders, crankshafts and camshafts, plasticizing screws as well as for ball screw spindles and drive shafts made of materials up to approx. 65 HRC.

- Milling, turning and whirling possible on one machine without rechucking
- Large working area for components with diameters from 100 mm to 500 mm and max. 8,000 mm length
- Hard-machining up to 65 HRC and soft-machining
- Wet and dry machining
- Outstanding cost efficiency as a result of high machine cutting capacity
- Finish-machining of large precision parts



# TECHNICAL DATA



## MACHINE DATA

- Workpiece diameter:  
100 to 500 mm
- Workpiece length:  
max. 8,000 mm
- Machine weight:  
156 t
- CNC control:  
Siemens Sinumerik 840 D,  
5-axis simultaneous machining possible

## OUTER WHIRLING UNIT

- Spindle passage:  
dia. 510 mm
- Spindle speed – continually variable:  
1 – 500 rpm
- Torque at the spindle:  
max. 4,400 Nm

- max. output:  
60 kW
- Possible lead angle:  
 $\pm 50^\circ$

## HSC MILLING SPINDLE

- Speed:  
max. 20,000 rpm
- max. output at 100% duty cycle:  
40 kW
- Torque:  
50 Nm
- Swivel angle B-axis:  
 $\pm 110^\circ$
- Coolant pressure through the spindles

For decades, renowned pump manufacturers all over the world have been using stators made by KÄCHELE in Weilheim/Teck (Germany). An experienced team of engineers develops and tests the optimum geometries and elastomer compounds for a wide range of very different applications. Using an injection moulding process, KÄCHELE produces stators up to a length of 6 m in any diameters and from any known elastomers: whether conventional or self-lubricating rubber, with or without anti-twist protection, as re-clampable or maintenance-free versions up to 200 °C operating temperature.