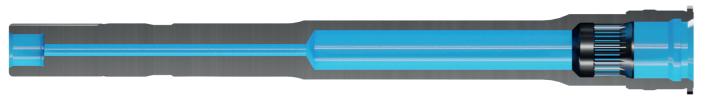


 μ -THINKING[®]. Great things always start in detail.

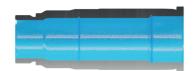


SHAFT MACHINING 4.0

MITTENDREHSPINDEL MDS 170, MDS 230 and MDS 300: Comprehensive, flexible and highly precise processing of shafts (raw and finish machining) in one hydraulically actuated clamping operation – with or without workpiece stop in horizontal as well as vertical spindle set up.



Turning and milling of both shaft ends in one hydraulically actuated clamping operation: Example shows an E-Mobility shaft



- hydraulically actuated with an system pressure of 70 bar
- max. rotational speed of 3.000 I/min
- max. torque of 250 Nm and max. axial force of 600 daN

- integrated rotary encoder for radial positioning
- flexibly exchangeable clamping technique
- spindle cooling & temperature as well as stroke monitoring



Gleitbackenspannfutter

Clamping range exchangeable, up to Ø 75 mm

Clamping zones centering in one or two zones with jaws

Weight 24 kg

Included pre-centering for an optimal loading of shafts

2

Spannzangenfutter

Clamping range exchangeable, up to Ø 100 mm

amping zones centering in one or two zones with collets

Weight 23 kg

Included pre-centering for an optimal loading of shafts



Zentrier- & Planspannfutter

 $\begin{array}{ll} \textbf{Clamping range} & \text{exchangeable,} \\ & \text{up to } \varnothing \text{ 60 mm} \end{array}$

Clamping zones centering and planeclamping

Weight 25 kg

Included pre-centering for an optimal loading of shafts



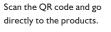
Hydrodehnspannfutter

 $\begin{array}{c} \textbf{Clamping range} & \text{exchangeable,} \\ & \text{up to } \varnothing \text{ 100 mm} \end{array}$

amping zones centering in one or two zones with membranes

Weight 21 kg

Included pre-centering for an optimal loading of shafts







TOGETHER WE'RE CREATING PRODUCTION TECHNOLOGY FOR FUTURE INDUSTRIAL MANUFACTURING.

We rank among the top quality and technology leaders in the special field of clamping technology and equip numerous renowned companies operating worldwide with highly precise, efficient and smart solutions for their production.

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