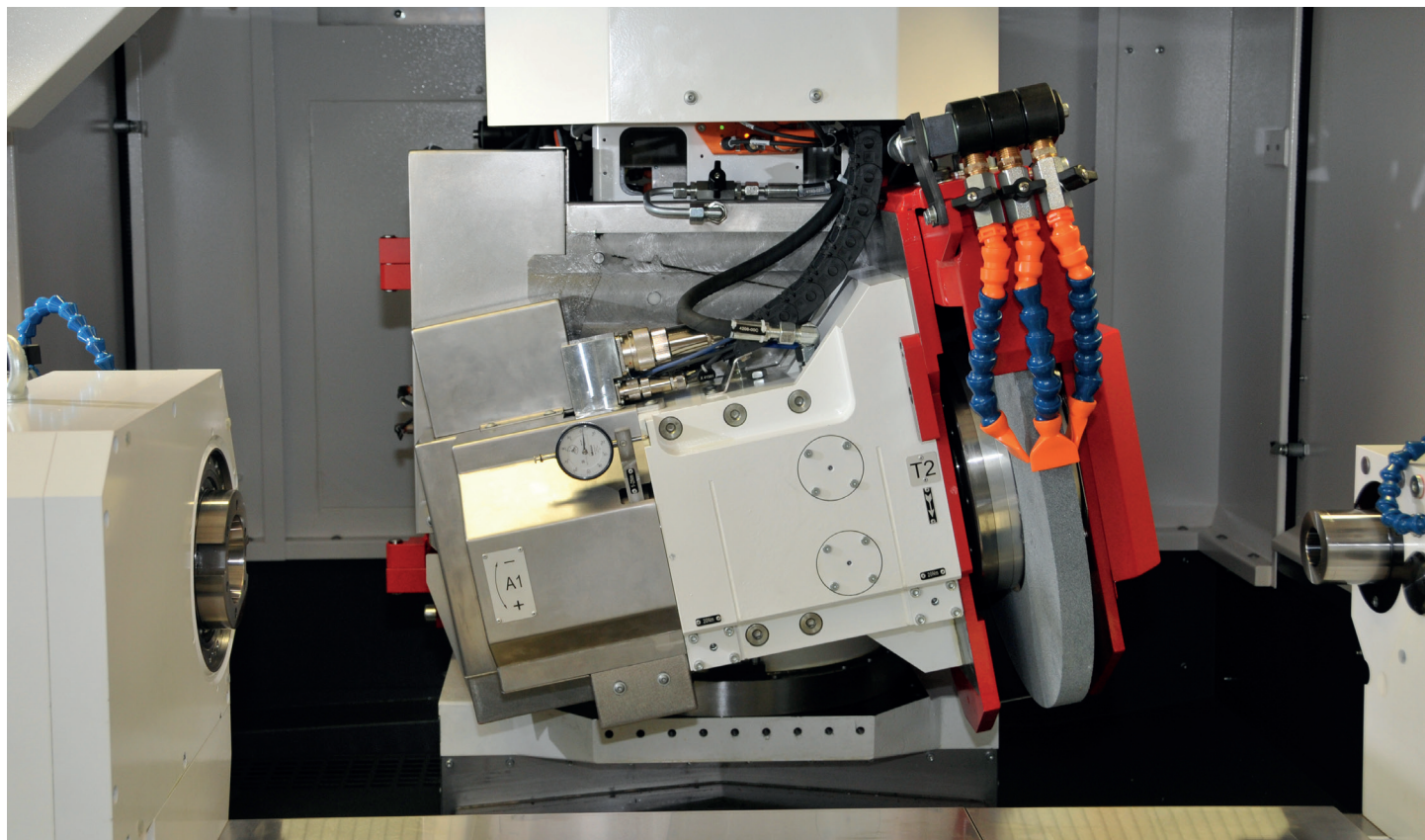
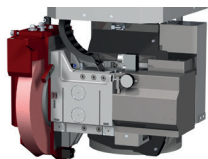


# A-AXIS

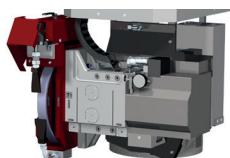
For absolute precision in thread grinding



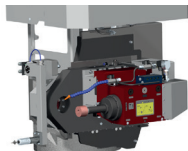
## Conventional external grinding



## HSG external grinding



## Internal grinding

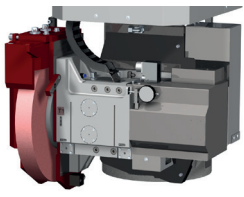
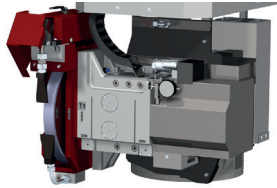
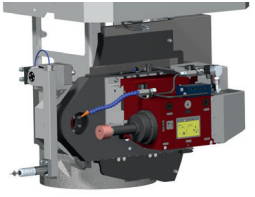


To technologically demanding threads or keyways in difficult machining materials, special grinding machines used to be the first choice. This will now change with the introduction of an A-axis on the STUDER S41 and S22 cylindrical grinding machines. Thanks to the A-axis the S41 and the S22 transform into perfect all-rounders. STUDER's standard range now includes the grinding of recirculating ball screws, thread gauges or threaded bushings with internal screw threads. This is a big step towards efficient finish machining in a single clamping.

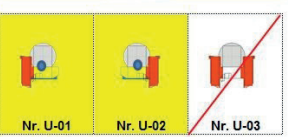
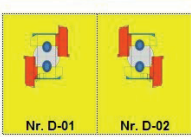
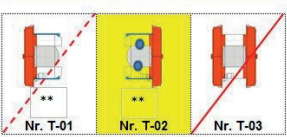

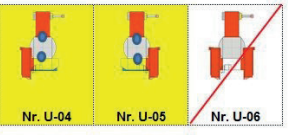
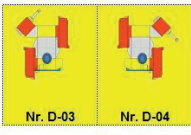
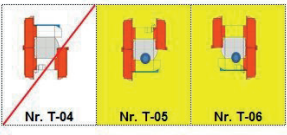

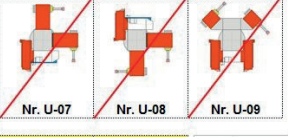
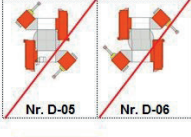
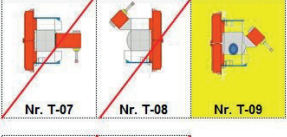
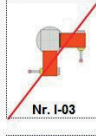
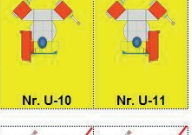

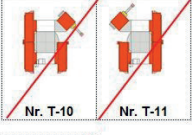
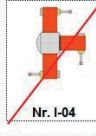
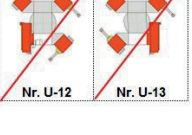
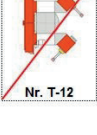
Machine types:

S41 universal cylindrical grinding machine

Production cylindrical grinding machine S22

	Conventional external grinding	HSG external grinding	Internal grinding
			
Number of A-axes on wheelhead	S41: 2x S22: 1x		
Height of centers	S41: 225/275 mm S22: 225 mm		
Swivel angle*	S41: +/-15° S22: -11° / +15°	S41: +/-15° S22: -11° / +15°	-4° / +15°
Grinding wheel Ø	500 mm...400 mm	400 mm...380 mm	80 mm
Width	63mmF1 (A-axis) 80 mm F5 (0)°	40 mm	
Arbor length			50...260 mm
Spindle	Motor spindle 15 kW	Motor spindle 30 kW GMN	MFM 100/120 mm
Longitudinal positioning of spindle	+/-5 mm	+/-5 mm	+/-105 mm
Swiveling time	approx. 2.5 s (max. swiveling range)		
Resolution	0.0001°		
Repetition accuracy	<1 arc second (move in from below)		
Interpolating axis	No		

\* Each specification has its own limitation on the swing angle. Together with the established StuderThread software package, it is also possible for the purposes of thread grinding, to realize thread pitches that go beyond the mechanical swivel angle.

Universal	Diagonal	Tandem	Innen
 Nr. U-01 Nr. U-02 <del>Nr. U-03</del>	 Nr. D-01 Nr. D-02	 <del>Nr. T-01</del> Nr. T-02 <del>Nr. T-03</del>	 Nr. I-01
 Nr. U-04 Nr. U-05 <del>Nr. U-06</del>	 Nr. D-03 Nr. D-04	 <del>Nr. T-04</del> Nr. T-05 <del>Nr. T-06</del>	 Nr. I-02
 <del>Nr. U-07</del> <del>Nr. U-08</del> <del>Nr. U-09</del>	 <del>Nr. D-05</del> <del>Nr. D-06</del>	 <del>Nr. T-07</del> <del>Nr. T-08</del> Nr. T-09	 <del>Nr. I-03</del>
 Nr. U-10 Nr. U-11	 ● A-Achsen	 <del>Nr. T-10</del> <del>Nr. T-11</del>	 <del>Nr. I-04</del>
 <del>Nr. U-12</del> <del>Nr. U-13</del>		<p><b>S41</b></p>	 <del>Nr. T-12</del>

A-Achsen auf T3 und T4 nicht nötig -> Nr. U-01 und Nr. U-02 decken alles ab

Nr. T-01 nicht nötig -> Nr. T-02 deckt alles ab



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