

03

Technical data . C 400



# 03.1

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|   |   |   |                                |
|---|---|---|--------------------------------|
| <b>Working area</b>   | Traverse  | X axis  | 850 mm                         |
|   | Traverse  | Y axis  | 700 mm                         |
|   | Traverse  | Z axis  | 500 mm                         |
|   | Rapid linear traverses  | X-Y-Z   | 35 - 35 - 35 m/min             |
|   | Linear acceleration   | X-Y-Z   | 6 m/s <sup>2</sup>             |
|   | Linear feed force   | X-Y-Z   | 7000 N                         |
|   | Max. vertical table clearance                                       |   | 625 mm                         |
|   | Max. workpiece diameter   |   | Ø 650 mm                       |
|   | Max. workpiece height   |   | 500 mm                         |
|   | Collision circle (A axis) in 0° position                            |   | Ø 885 mm                       |
| <b>Main spindle drive</b>   | Speed   | 15000 rpm   | SK 40 / HSK A 63               |
|   | Main power/Torque   | 20% c.d.f.  | 20 kW / 173 Nm ●               |
|   | Speed   | 18000 rpm   | HSK A 63                       |
|   | Main power/Torque   | 20% c.d.f.  | 20 kW / 173 Nm ○               |
| <b>Control unit</b>   | Heidenhain  |   | TNC 640 / TNC7 ●               |
| <b>Tool changer (pick-up)</b>   | Interface   |   | SK 40 / HSK A 63 ●             |
|   | Magazine pockets  |   | 38 items                       |
|   | Chip-to-chip time   |   | approx. 6 s                    |
|   | Maximum tool length   |   | 300 mm                         |
|   | Max. tool diameter<br>with corresponding adjacent pocket allocation |   | Ø 80 mm<br>Ø 125 mm            |
|   | Max. tool weight  |   | 8 kg                           |
|   | Max. magazine load  |   | 152 kg                         |
|   | <b>Extension of tool storage capacity</b>                           | Additional tool magazine ZM 50 (SK 40 / HSK A 63) |                                |
| Additional tool magazine ZM 88 k (SK 40 / HSK A 63)   |   |   | additional 88 pockets ○        |
| Additional tool magazine single ZM 216 (HSK A 63)   |   |   | additional up to 216 pockets ○ |
| Max. tool diameter<br>with corresponding adjacent pocket allocation in additional tool magazine |   |   | Ø 80 mm<br>Ø 125 mm            |
| Max. tool weight  |   |   | 8 kg                           |
| <b>Chip drawer</b>  | Removable chip drawer   |   | ●                              |
| <b>Chip conveyor</b>  | Scraper belt  |   | ○                              |
|   | Ejection height   |   | at least 940 mm                |
|   | Chip cart   |   | 450 l ○                        |

|   |  |  |                |                      |
|---|--|--|----------------|----------------------|
| <b>External cooling lubricant supply</b>                        | Capacity of standard tank  | 350 l ●  |                |                      |
| <b>Internal cooling lubricant supply with paper band filter</b> | Capacity of standard tank  | 122 l ○  |                |                      |
|   | Capacity of cooling lubricant tank   | 700 l with 80 bar / 570 l with 40 bar  |                |                      |
|   | Pressure (adjustable up to)  | max. 80/40 bar / 11/27 l/min ○   |                |                      |
|   | Mains connection (ICS)   | 400 V / 50/60 Hz   |                |                      |
|   | Power consumption (ICS)  | up to 20 kVA   |                |                      |
| <b>Table variants</b>   | Swivelling rotary table  | Ø 440  | Ø 650 x 540    | Rigid clamping table |
|   | Clamping surface   | Ø 440 mm   | Ø 650 x 540 mm | 1070 x 700 mm        |
|   | Swivelling range   | +91° / -139°   | +91° / -139°   | -                    |
|   | C axis drive mode  | Worm   | Worm           | -                    |
|   | Swivelling axis A speed:   |  |                |                      |
|   | One-sided drive  | 25 rpm   | 25 rpm         | -                    |
|   | Speed rotary axis C:   | 30 rpm   | 30 rpm         | -                    |
|   | Max. table load  | -  | -              | 2000 kg              |
|   | One-sided drive  | 450 kg   | 600 kg         | -                    |
|   | T grooves parallel   | 5 / 14 H7  | 7 / 14 H7      | 10 / 14 H7           |
|   | Secondary clamping plates  | 920 x 490 mm   | -              | -                    |
|   | T grooves parallel   | 7 / 14 H7  | -              | -                    |
|   | <b>Positioning uncertainty</b>   | A in X-Y-Z axes according to VDI/DGQ 3441<br>(calculated at a constant ambient temperature of 20 °C +/-1 °C.<br>Our products are subject to the German Export Law and require authorization since the attainable precision may be less/greater than 6 µm.) |                | ≤ 0.006 mm ●         |
| <b>Hydraulics</b>   | Operating pressure   | 120 bar ●  |                |                      |
| <b>Central lubrication</b>                                      | Minimum grease lubrication quantity  | ●  |                |                      |
| <b>Connected loads (machine)</b>                                | Mains connection   | 400 V / 50/60 Hz   |                |                      |
|   | Power consumption  | up to 30 kVA   |                |                      |
|   | Compressed air   | 6 bar  |                |                      |
| <b>Weight</b>   | (standard version without optional extras, attachments, work-pieces and cooling lubricant) | approx. 9.5 t  |                |                      |

● Included in standard delivery  
○ Available upon request