

# High precision lathe 225-CNC 0i-TF D1-3"

## Technical data 0225-002

### Machining capacity

#### D1-3"

Max. swing	270 [mm]
Max. permissible swing over carriage	115 [mm]
Max. permissible swing over bed	270 [mm]
Center height over carriage	60 [mm]
Center height over bed	125 [mm]
Distance between spindle nose and headstock cover	45 [mm]
distance between spindle nose face and turret/slide face	445 [mm]

### Spindle CAMLOCK D1-3"

Spindle for SCHAUBLIN collets	B32
Spindle speed	0 - 5'000 [min <sup>-1</sup> ]
Continuous torque spindle / intermittently	23 / 62 [Nm]
Power, continuous / intermittent	3,7 / 7.5 [kW]
Spindle ID (without chuck key)	28 [mm]
Max. bar capacity with W20 collet	14.5 [mm]
Max. bar capacity with W25 collet	19 [mm]
Max. bar capacity with W31.75 collet	26 [mm]
Max. bar capacity with B32 collet	24 [mm]
Recommended max. swing	150 [mm]

### Pneumatic clamping system

#### option

Adjustable axial clamping force, at 5 bar	1'150 [daN]
Max. spindle speed	Without limitation [min <sup>-1</sup> ]

### Lever-type quick-clamping system

#### option

Max. spindle speed	4'000 [min <sup>-1</sup> ]
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### Spindle interlock

Pneumatic spindle interlock, interlocking moment at 5 bar	50 [Nm]
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### C axis

Programmable increment	0.0001 [°]
Interpolation	X-Z

### Cross slide

Transverse stroke, X axis	136 [mm]
Programmable increment, X axis (on diameter)	0.0001 [mm]
AC motor drive	1,2 [kW]
Torque, continuous/intermittent	7 / 15 [Nm]
Ball screw, dia. x pitch	20 x 5 [mm]
Longitudinal stroke, Z axis	410 [mm]
Programmable increment, Z axis	0.0001 [mm]
AC motor drive	1,2 [kW]
Torque, continuous/intermittent	7 / 15 [Nm]
Ball screw, dia. x pitch	32 x 5 [mm]

### Feedrates

Cutting feedrate, X and Z axes, infinitely variable	0 - 5 [m/min]
Rapid feed, X- and Z-axes	10 [m/min]
Feed force, X and Z axes, continuous	500 [daN]

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### Tooling : Linear

Possible number of radial tool holders (according to Ø of the piece)	2
Possible number of front tool holders (according to Ø of the piece)	2 ⇄ 5
Max. cross section of tool shank (Multifix system)	16 x 16 [mm]
Max. cross section of tool shank (Tripan system)	16 x 16 [mm]
Tool clamping for collets	ESX 20
Bar holder dia.	Ø20 [mm]

### Screw-type tailstock

Internal taper of the sleeve	Mo 2
Spindle OD	35 [mm]
Spindle stroke	100 [mm]

### Coolant supply

Tank capacity	55 [l]
Pump performance	0,63 [kW]
Pump capacity	32 [l/min]
Pressure of pump	2 [bar]

### Pneumatic consumption

Min./max. pneumatic pressure	4 - 6 [bar]
Type of connection	1/4" [G]
Quality of the air	Clean and dry
average consumption	0.5 [m³/h]

### Electrical power supply

Voltage	400 [V]
Tolerated fluctuations	+/- 5 [%]
Other Voltage	option [V]
Frequency	50/60 [Hz]
Tolerated fluctuations	+/- 5 [%]
Rated current	12 [A]
Protection at mains end	25 [A]
Power consumption of the machine	8.3 [kW]

### Obstruction and weight

Overall dimensions: length x depth x height	1'660 x 1'200 x 1'630 [mm]
Approx. net weight of the machine (including oil)	1'200 [kg]
Floor load	1'750 [kg/m²]
Load per square meter for one machine (in the workshop with many machines)	415 [kg/m²]
Dimensions of the pallet	2'070 x 1'200 [mm]
weight of the pallet	130 [kg]
Center height over floor	1'200 [mm]

### Lubrication of slideways and ball screws

Kind of X slideways lubrication	Manual
Kind of Z slideways lubrication	Manual
Kind of grease or oil	Mobil Vactra Nr 2
Kind of X ball screws lubrication	Lifetime lubrication
Kind of Z ball screws lubrication	Manual
Kind of grease or oil	Klüber Isoflex Topas NB 52

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### Various

Workpiece collector	option
Color of the machine: SCHAUUBLIN standard color 2 colors, color 1 Grey	RAL 7015
Color of the machine: SCHAUUBLIN standard color 2 colors, color 2 White	RAL 9010
Noise level under load at the operator's station	75 [dB <sub>A</sub> ]
Operating temperature	+15 ⇨ +30 [°C]
Relative humidity	10 ⇨ 75 [%]

### Control unit

Type of control unit	Fanuc Oi-TF
Screen	10.4''
Manual Guide i	option
Memory	512 Kbyte ext. 2 Mb
Number of programs	400
Tool offsets	128 extensible à 200
Programmable increment	0.0001
Axis feedrate override	0-120 [%]
Spindle override	50-120 [%]
M codes in one block	3
Background editing	✓
Constant surface speed control	✓
Spindle positioning	✓
Rigid tapping (with Spindle)	✓
Multiple threading	✓
Taper thread cutting	✓
Continuous threading	✓
Variable lead threading	✓
Custom Macro B	✓
Polar coordinate interpolation	✓
Cylindrical interpolation	✓
Helical Interpolation	option
Polygon turning	✓
Inch/Metric	✓
Fanuc Picture (Personnal customer page)	✓

### Languages control unit

French, German, English, Italian, Spanish, Portuguese, Dutch, Swedish, Danish, Russian, Polish, Czech, Hungarian, Turkish, Japanese, Korean, Chinese, (simplified, characters), Chinese, (traditional, characters)

### Interface control unit

Interface RS232-C	option
Interface PCMCIA	✓
Interface Ethernet	option
Interface USB	✓
Data Server	option