



Fabryka Obrabiarek Precyzyjnych AVIA S.A.



QUALITY

DRIVES

PROFITS

WERKZEUGMASCHINEN / MACHINE TOOLS | WERKZEUGTECHNIK / TOOL TECHNOLOGY | INGENIEURLEISTUNGEN / ENGINEERING

PRODUCT  
GUIDE



**E-turn**

MANUAL - CYCLES - CNC LATHES



## E-turn HIGHLIGHTS

- » Machining possible in 3 operating modes:
  - » **MANUAL OPERATION** with open car doors. Operation via support, as with a conventional lathe. In this operating mode, the operation of the machine corresponds to the safety standards for conventional machines.
  - » **CYCLE OPERATION** with teach-in function. Programming using the standard cycles and the Teach-In function. Programming possible with open cabin doors.
  - » **CNC AUTOMATIC OPERATION** with closed cabin doors. In this operating mode, the operation of the machine corresponds to the safety standards for CNC machines.
- » 330 mm wide cast bed with hardened and coated guideways guarantees maximum stability.
- » Chip tray in front with separate coolant tank.
- » Spindle nose DIN 55027, stepless spindle revolutions 3,500 rpm, spindle bore 66 mm.
- » Ground ball screws in X and Z axis.
- » Manual tailstock with quill  $\varnothing$  65 mm, inner taper MT4 and travel 120 mm.
- » Tool holder MULTIFIX as standard and optional PARAT or PRAGATI Revolver.
- » Automatic central lubrication.
- » Double cabin doors.
- » CE Declaration of Conformity.

Manual - Cycles - CNC lathes  
for daily use

## STANDARD EQUIPMENT

- » Heidenhain TNC620 Manual Plus digital control with 19" touchscreen.
- » Digital servo drives and motors for axis and spindle drive.
- » Sliding guides.
- » AVIA ball screws.
- » Automatic oil lubrication of guides and ball screws.
- » Spindle C6 according to DIN 55027 with variable speed in the range of 50 – 3.500 rpm.
- » 3-jaw chuck Ø 250 mm.
- » Manual tailstock with retractable quill.
- » Center for hand tailstock MT4.
- » MULTIFIX quick-change tool post type B with starter set holder.
- » Coolant nozzle routed through the center of the post.
- » Reducing sleeve MT5.
- » Manual control panel with electric wheels for X and Z axis.
- » Coolant supply system with tank and electric pump.
- » Chip tray from the front, extendable.
- » Cabine with locked front door.
- » LED lighting system.
- » Standard paint finish RAL 7024/7035.
- » Operating and Programming Manual.
- » CE Declaration of Conformity.
- » Installation elements.

## SPECIAL ACCESSORIES a.o.

- » Turning length 1500 mm.
- » D1-6 CAMLOCK spindle nose according to DIN 55029 instead of DIN 55027, spindle bore max. 62 mm.
- » Steady rest, roller type for shafts Ø 6-182mm.
- » Following rest, roller type for shaft Ø10-74mm.
- » Chain chip conveyor at rear.
- » PARAT 4-fold indexing quick-change turret + basic tool holder set instead of MULTIFIX.
- » PRAGATI revolver BTP63 with 8 positions instead of MULTIFIX.
- » MULTIFIX or PARAT tool holders upon request.
- » PRAGATI BTP63 tool holders upon request.
- » Collet chuck Hainbuch TOROK RD 65 hand-activated with back plate.
- » Changing device and collet heads upon request.



▲ HEADSTOCK



▲ MANUAL CONTROLLER



▲ CNC CONTROLLER



▲ QUICK-CHANGE TOOL POST



▲ REVOLVER 8 POSITIONS



▲ AILSTOCK

**TECHNICAL DATA**
**E-turn 40**
**CAPACITY**

Distance between spindle center and guides	mm	220
Swing over bed	mm	440
Swing over support	mm	230
Max turning diameter over bed	mm	400
Max turning length between centers	mm	1.000 / 1.500
Bed width	mm	330

**HEADSTOCK**

Distance spindle center - bed	mm	220
Spindle nose according to the DIN 55027 standard	Type	C6
Spindle bore according to DIN 55027	mm	66
Max spindle speed	rpm	3.500
3-jaw chuck diameter	mm	250
3-jaw chuck bore	mm	76
Power S1 100% / S6 40% / S6 25%	kW	10 / 14 / 17
Torque S1 100% / S6 40% / S6 25%	Nm	159 / 224 / 272

**SUPPORT**

X axis travel	mm	235
Z axis travel	mm	1.000 / 1.500
Rapid X axis	m/min	6
Rapid Z axis	m/min	8

**TOOL POST**

Standard	Type	MULTIFIX B
Tool cross-section max.	mm	32 x 32
Boring bar diameter max.	m/min	40

**TAILSTOCK**

Quill travel	mm	2860 x 1660 x 2120
Quill diameter	mm	3900
Eilgang X-Achse	m/min	8

**REITSTOCK**

Pinolenverfahrweg	mm	120
Pinolendurchmesser	mm	65
Inner cone	MT	4

**CONTROL**

Standard	Type	HEIDENHAIN TNC 620 MANUAL PLUS
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**ACCURACY**

Positioning accuracy	mm	+/- 0,010 on 1.000
Repeatability	mm	0,010 on 1.000
Dimensions: L x W x H	mm	2.500 x 1.600 x 1.800
Weight	kg	2.500
Max installed power	kVa	16
Power supply		3 x 400 V / 50Hz



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