ABENE VHF-360





Available with Fanuc 0iMB and Heidenhain TNC-640

Note! The machine in the picture is equipped with options

ABENE VHF-360 TI

Vertical/Horizontal Milling Machine Unique design for optimal flexibility.

- Simple manual machining
- Combined manual/CNC with easy pre-programmed cycles.
- Full CNC machining 3-axis

All in one....



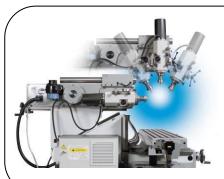
View from right side



View from left side



Heidenhain TNC-620 Electronic handwheel HR410 Connections: RS232, RJ45 2 pcs USB ports



Standard equipment

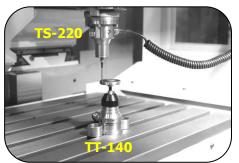
- Hardened and ground guide ways in all axes
- Heidenhain optical scales in 3 axes
- High precision ballscrews in X Y Z
- High torque spindle motor 7,5 kW
- Stepless feed rate manual & CNC
- Mechanical & electronical handwheel
- **Open-door Manual machining**
- **ABENE pre-programmed Easy-Cycles**
- Complete coolant system
- CE-guarding, table-mounted
- Machine lamp 24V Halogen
- **Automatic central lubrication system**
- Keys and manuals
- Spare parts book and Accuracy report
- 2-step automatic gearbox, digitally controlled spindle speeds
- Control Heidenhain TNC-620

OPTIONS



TOOL CLAMPING

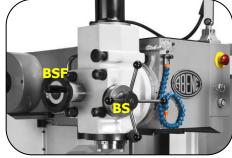
PD-100 : Air Power Drawbar TCS-300: Hydraulic clamping universal with pull studs for: DIN 2080/69871 & BT40.



MEASURING DEVICES

TS-220: Touchprobe for workpiece measurements.

TT-140: Probe for tool measuring.



SPINDLE HEAD TYPES

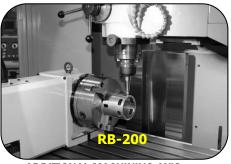
BS: Boring spindle, pinole movement 75 mm.

BSF: Extra handwheel for fine executions, 1 turn / 3 mm.



HORIZONTAL MACHINING

Arbor Support: to support horizontal machining with long arbors.



ADDITIONAL MACHINING AXIS

RB-200: Full axis CNC rotary table, to be used as A, B or C axis.

Tail-stock and chuck.



OTHER EXTRAS

Pads: Adjustable M16, 120 mm/diam.

Machine vices: Different sizes, to be advised.

MILLING PERFORMANCE



VERTICAL POSITION (FIXED)
Spindle head locked with a precision index-pin, and head stock/overarm in upper position.
Spindle-table surface: 20-495 mm



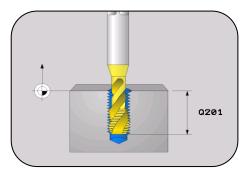
HORIZONTAL POSITION (FIXED)
Spindle head locked with a precision index-pin, and head stock/overarm in lower position.
Spindle-table surface: 65-540 mm



ANY POSITION (STEPLESS)
The spindle head is possible to lock in any position inside 140° and mill/drill in any angle.

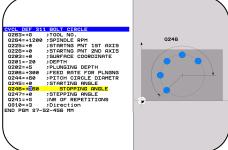
The machine is built according to the unique ABENE "angular frame plane" design concept, which has the spindle head sideways mounted. This radical (World Exclusive) feature allows rapid and precisely uniform changing from Vertical to Horizontal mode. The ergonomically positioned handles, along with the benefits of Heidenhain control *TNC-620* (also available with TNC-640 & Fanuc 0iMB) allows the *ABENE VHF-360 TI* to let you decide how to best turn your idea into a presentable product with maximum economy and efficiency.

SOFTWARE PERFORMANCE (TNC620)



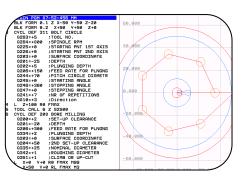
ABENE Cycles

Easy to use all-in-one cycles for most operations, developed in cooperation with Heidenhain.



All-in-one

With ABENE Cycles, where you choose what to do, which tool to use and where to do it. The machine does the rest.

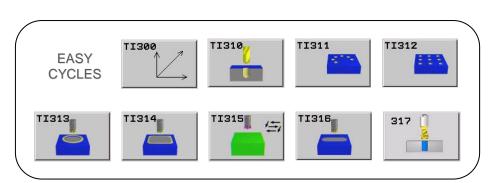


Flexibility

Combine ABENE Cycles freely with conventional Heidenhain programming and cycles or just use one cycle alone, as a complete program.

Available ABENE Cycles

- Pre positioning
- Drilling
- Drilling Circular pattern
- Drilling Linear pattern
- Circular pocket
- Rectangular pocket
- Face milling
- Slot milling
- Tapping

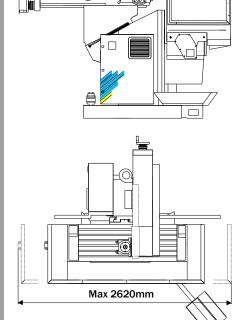


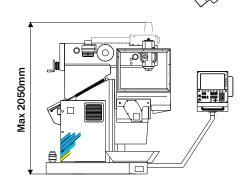
TECHNICAL INFO

TECHNICAL DATA	VHF-360	VHF-360 /BS	UNIT
TABLE			
Table surface	1530 x 450	1530 x 450	mm
T-slot	6 x 18 H7	6 x 18 H7	mm
Max Load	400	400	Kg
MOVEMENT			
Longitudinal	650	650	mm
Cross	500	500	mm
Vertical	475	475	mm
Feeds n:o	Stepless	Stepless	
Rapid feed X,Y	4000	4000	mm/min
Rapid feed Z	1500	1500	mm/min
Feed.motor AC (Z)	4,2 (13)	4,2 (13)	Nm
ACCURACY			
Positioning	+/- 0,001	+/- 0,001	mm
Repeability	+/- 0,005	+/- 0,005	mm
SPINDLE			
Spindle speed	55-4000	55-4000	rpm
Spindle	IS040 / DIN2080	IS040 / DIN2080	
Spindle speeds n:o	Automatic	Automatic	2 Steps
Spindle Power	7,5	7,5	kW
Spindle head swivel	0-140	0-140	degrees
Spindle quill	-	75	mm
Hand wheel	-	3 (option)	mm/rev.
INSTALLATION DATA			
Power requirement	25/20	25/20	A/kVA
Air (if tool clamping)	6	6	Bar
Dimensions LxWxH	2200x1800x2000	2200x1800x2000	mm
Gross weight	2400	2400	kg
Net weight	2200	2200	kg

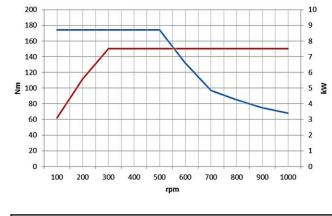
GENERAL DIMENSIONS

Max 2380mm

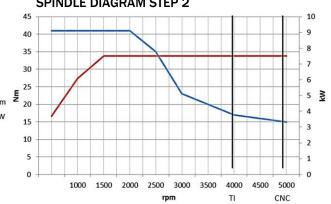




SPINDLE DIAGRAM STEP 1



SPINDLE DIAGRAM STEP 2



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