



ABENE VHF-320TI



Note ! The machine in the picture is equipped with options



ABENE VHF-320 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....

ABENE VHF-320 TI



View from right side



View from left side



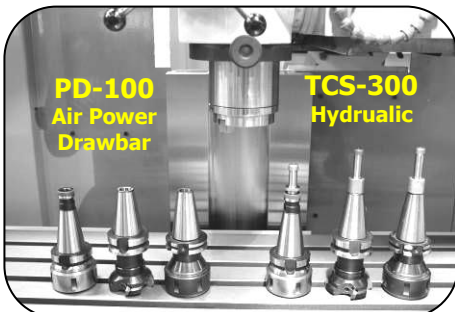
Heidenhain TNC-620
Connections: RS232, RJ45
2 pcs USB ports



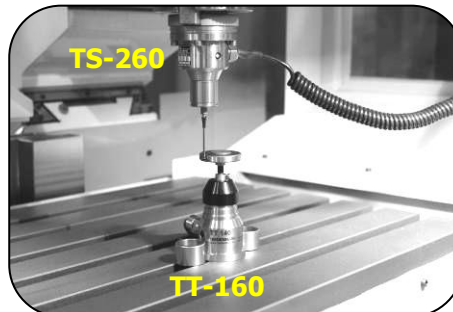
Standard equipment

- Hardened and grinded 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 & electrical handwheel
- Open-door Manual machining
- ABENE pre-programmed Easy-Cycles
- Complete coolant system
- CE-guarding, table-mounted
- Machine lamp 24V LED
- Automatic central lubrication system
- Keys and manuals
- Spare parts book and Accuracy report
- 2-step automatic gearbox, frequency controlled spindle speeds
- Control Heidenhain TNC-620

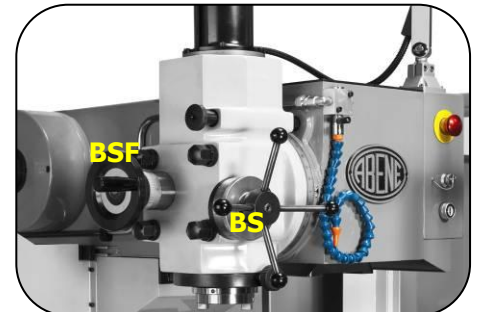
OPTIONS



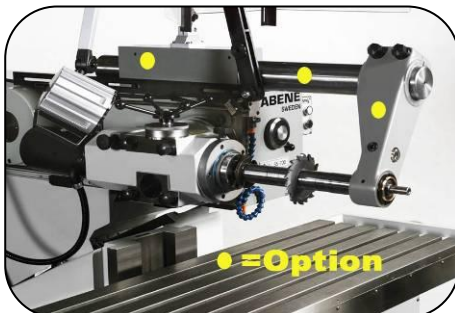
TOOL CLAMPING
PD-100 : Air Power Drawbar
TCS-300: Hydraulic clamping universal with pull studs for: DIN 2080/69871 & BT40.



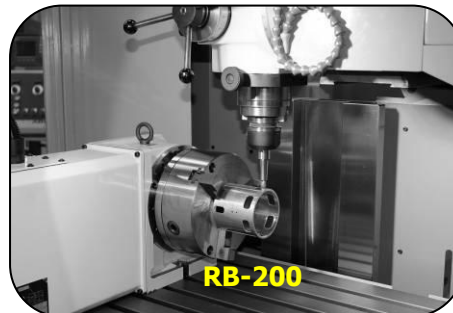
MEASURING DEVICES
TS-260: Touchprobe for workpiece measurements.
TT-160: Probe for tool measuring.



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.

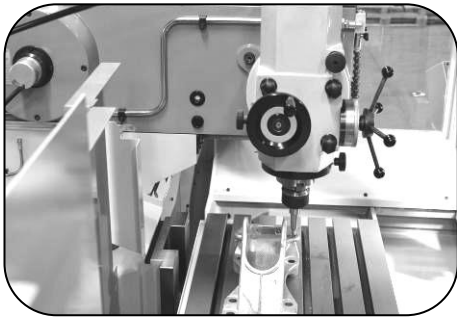


ADDITIONAL MACHINING AXIS
RB-200: Full axis CNC rotary table, to be used as A, B or C axis.
Tail-stock and chuck.

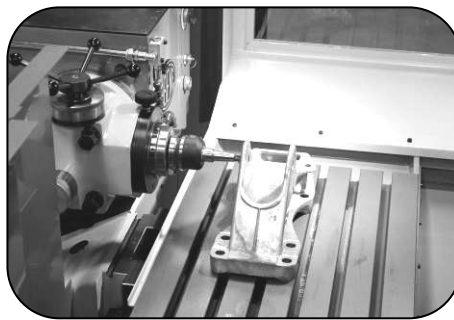


OTHER EXTRAS
Pads: Adjustable M16, 120 mm/diam.
Machine vices: Different sizes, to be advised.

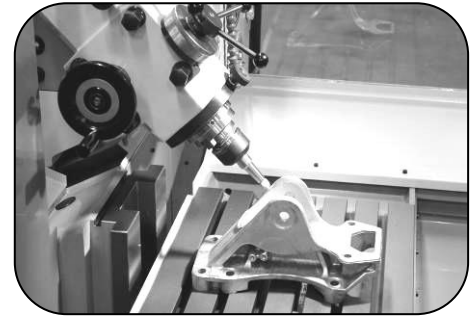
MILLING PERFORMANCE



VERTICAL POSITION (FIXED)
 Spindle head locked with a precision index-pin, and head stock/overarm in upper position.
 Spindle-table surface: 45-495 mm



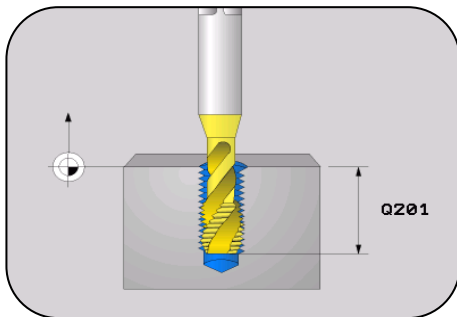
HORIZONTAL POSITION (FIXED)
 Spindle head locked with a precision index-pin, and head stock/overarm in lower position.
 Spindle-table surface: 90-540 mm



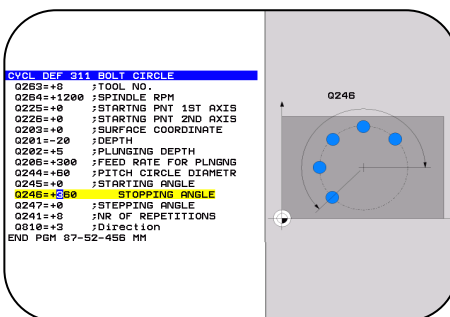
ANY POSITION (STEPLLESS)
 The spindle head is possible to lock in any position inside 140° and mill/drill in any angle.

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** allows the **ABENE VHF-320 TI** to let you decide how to best turn your idea into a presentable product with maximum economy and efficiency.

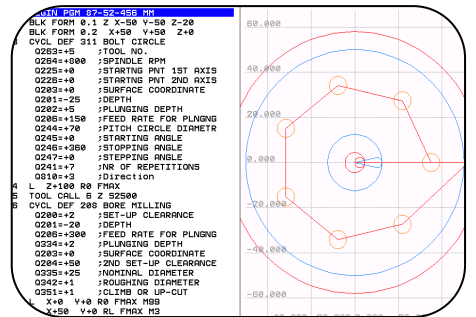
SOFTWARE PERFORMANCE (TNC320)



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



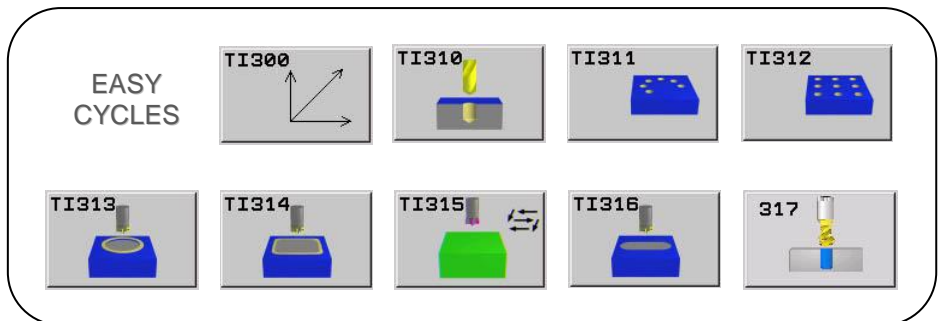
All-in-one
 With ABENE Cycles, where you choose what to do, which tool to use and where to do it. The machine does the rest.



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

Available ABENE Cycles

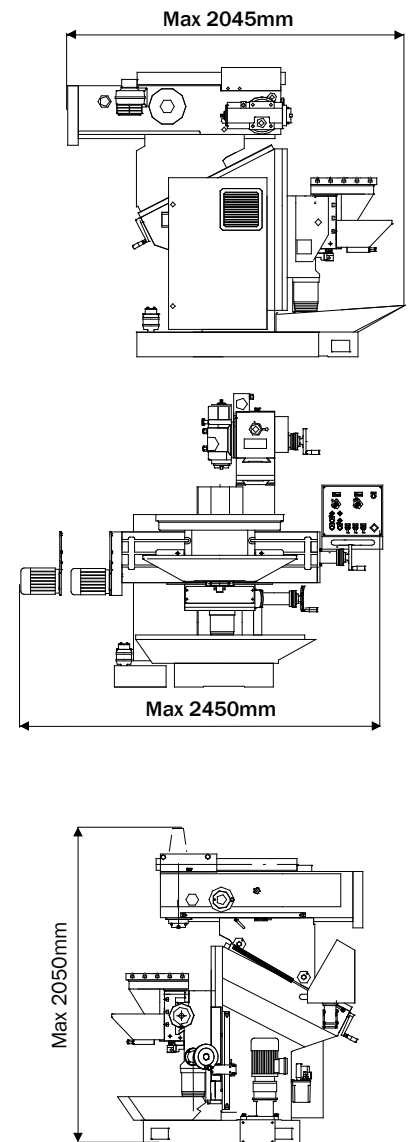
- Pre positioning
- Drilling
- Drilling – Circular pattern
- Drilling – Linear pattern
- Circular pocket
- Rectangular pocket
- Face milling
- Slot milling
- Tapping



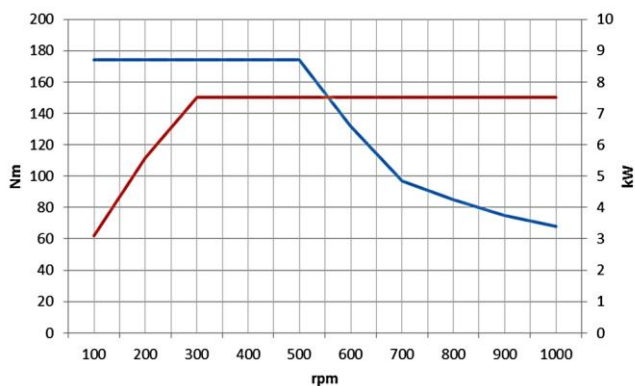
TECHNICAL DATA

TECHNICAL DATA	VHF-320	VHF-320 /BS	UNIT
TABLE			
Table surface Hor.	800 x 400	800 x 400	mm
Table surface Vert.	1225 x 320	1225 x 320	mm
T-slots (Vertical)	5 x 14 (3 x 14)	5 x 14 (3 x 14)	mm
Max Load	250	250	Kg
MOVEMENT			
Longitudinal	600	600	mm
Cross	500	500	mm
Vertical	450	450	mm
Feeds n:o	Stepless	Stepless	
Rapid feed X,Y	3000	3000	mm/min
Rapid feed Z	1500	1500	mm/min
Feed motor AC (Z)	3,4 (11)	3,4 (11)	Nm
ACCURACY			
Positioning	+/- 0,001	+/- 0,001	mm
Repeability	+/- 0,005	+/- 0,005	mm
SPINDLE			
Spindle speed	55-4000	55-4000	Rpm
Spindle	ISO40 / DIN2080	ISO40 / DIN2080	
Spindle speeds n:o	Automatic	Automatic	2 Step
Spindle Power	7,5	7,5	kW
Spindle head swivel	0-140	0-140	Degrees
Spindle quill	-	75	mm
Hand wheel fine feed	-	3 (option)	mm/rev.
INSTALLATION/TRANSPORT DATA			
Power requirement	25/20	25/20	A/kVA
Air (If Tool clamping)	6	6	Bar
Dimensioner LxBxH	2045x2450x2050	2045x2450x2050	mm
Gross weight	2650	2650	kg
Net weight	2450	2450	kg

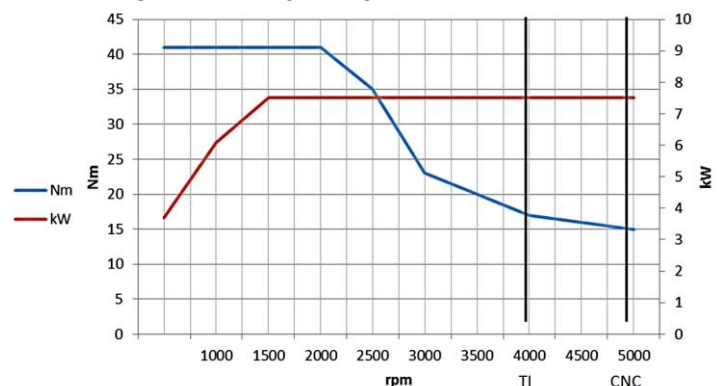
DIMENSIONS



SPINDLE DIAGRAM STEP 1



SPINDLE DIAGRAM STEP 2



ABENE Machine AB

Box 147, 615 23 Valdemarsvik, Sverige

Tel: +46 123 51175

Fax: +46 123 51567

E-mail: sales@abene.se

www.abene.se