



ABENE Deutschland

Conventional and
CNC Controlled Milling Machines

www.abene-deutschland.de

Abene is a Swedish machine manufacturer of conventional and CNC milling machines with an unbeatable design that has stood the test of time for decades.

Experience the advantages of the unique inclined bed concept with machines for toolmaking, repair departments, one-off and small batch production as well as training and further education.

Due to the lateral attachment of the spindle head, the inclined bed concept enables a quick changeover from vertical to horizontal machining. Optimize your processes and increase efficiency with the state-of-the-art machines.

The ABENE Universal Milling and Drilling Machine is the ideal choice for efficient training in CNC machining. Thanks to its universal capabilities, the machine can mill both vertically and horizontally and at any angle in between.

The machine can be operated both manually and CNC and has hand wheels in all axes for easy handling.

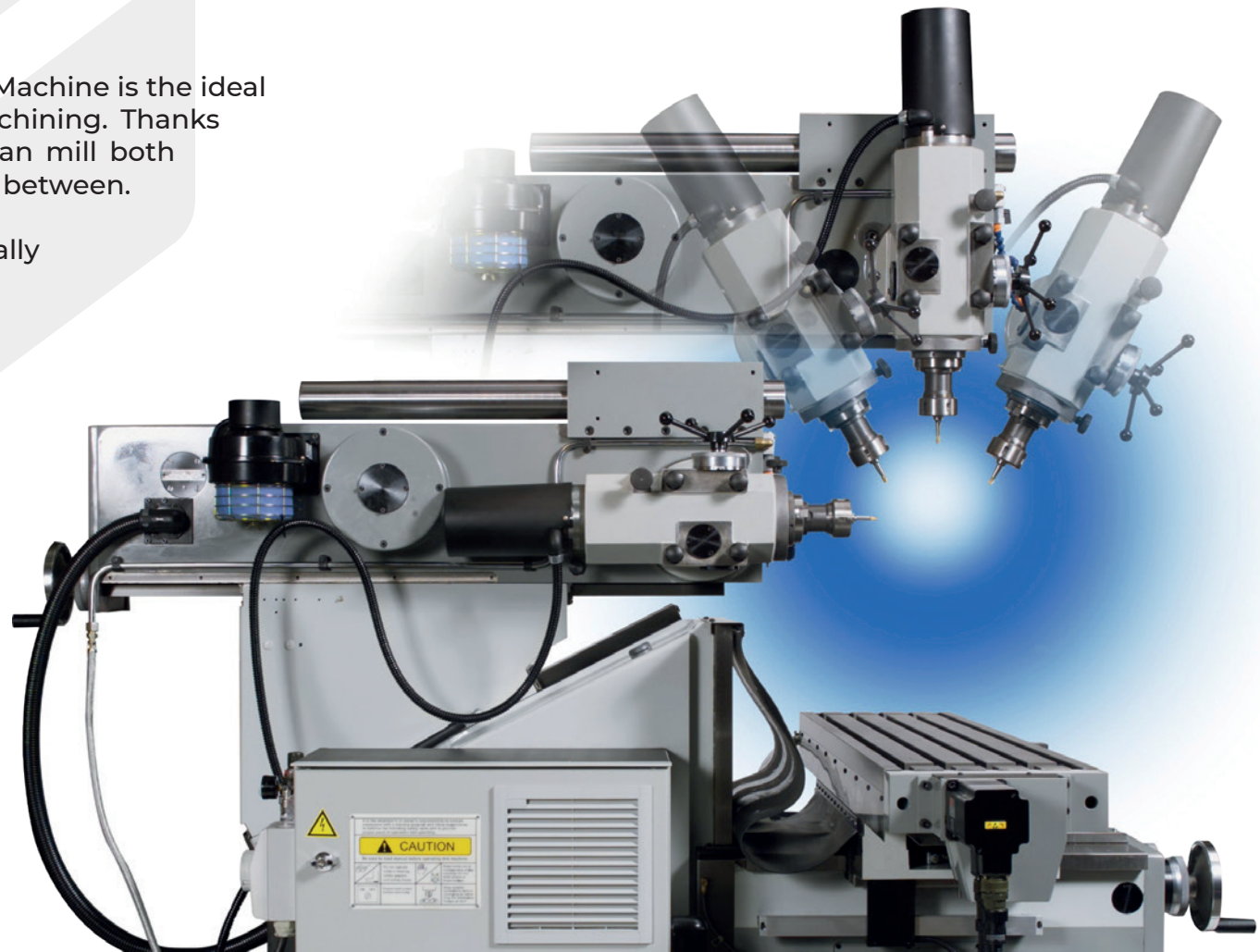


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ABENE VHF 330

conventional



Digital Displays

- Heidenhain ND 5023
- Heidenhain ND 7013

Technical Data

Table

Table size	800 x 400	mm
T-slots	5 x 14 (1 x H7)	mm
Max. Table load	400	kg
Travel in X	600	mm
Travel in Y	500	mm
Travel in Z	450	mm

Feeds/Rapid Traverse

Longitudinal feed X-axis	10 - 3.000	mm/min.
Crossfeed Y-axis	10 - 3.000	mm/min.
Vertical feed Z-axis	10 - 1.500	mm/min.

Milling Spindle

Spindle cone/ tools	SK 40 (DIN 2080, DIN 69871, DIN 7388)
Speed range	55 - 4.000 rpm
Head swivel	0 - 140°

Drill Sleeve (option)

Quill stroke	75	mm
Drilling spindle fine feed	3	mm/revolution

Motors

Spindle motor, 1400 rpm.	7,5	kW
Power consumption	ca. 20	kVA

Dimensions

Wide	1.810	mm
Depth	1.750	mm
Height	2.150	mm

Weight

Installation weight	approx. 2.350 kg
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ABENE VHF 330

conventional

- 2-stage gearbox with frequency-controlled spindle motor 55 - 4.000 rpm.
- 1 LED machine light 24 V / 70 W
- Complete electrical equipment for 400 V 3 phases 50 Hz.
- Transformer for 24 V control voltage
- All fuses in the electrical cabinet are automats
- Mechanical longitudinal, transverse and vertical feed
- AC motor spindle, 7.5 kW
- Spindle for Z-axis, Ø 40 mm, ball screw
- Spindle for the X and Y axis with backlash-free ball screw Ø 32 mm
- Mechanical handwheels in all axes
- All guides are hardened and ground
- An automatic central lubrication system lubricates all guides and ball screws.
- Chip tray, extendable
- Collision protection monitoring in all axes by electronic threshold value monitoring
- Key, operating instructions, spare parts catalog and acceptance protocol

OPTIONS

Digital displays

- HEIDENHAIN ND 5023
- HEIDENHAIN ND 7013



Full enclosure with sliding door



Control panel on the upper arm, swiveling



Drilling spindle

Stroke 75 mm



Fine feed for BSF drilling spindle

One revolution corresponds to 3 mm feed



Counterholder for long cutter arbors

D = 48 mm



ABENE hydraulic tool clamping TCS-300

DIN (2080 / 69871 / 7388)



ABENE VHF 330

conventional



ABENE VHF 330

CNC controlled



Control Options

- Heidenhain TNC 620
- Heidenhain TNC 7
- Siemens Sinumerik ONE

Technical Data

Table

Table size	800 x 400	mm
T-slots	5 x 14 (1 x H7)	mm
Max. Table load	400	kg
Travel in X	600	mm
Travel in Y	500	mm
Travel in Z	450	mm

Feeds/Rapid Traverse

Longitudinal feed X-axis	10 - 5.000	mm/min.
Crossfeed Y-axis	10 - 5.000	mm/min.
Vertical feed Z-axis	10 - 2.000	mm/min.

Milling Spindle

Spindle cone/tools	SK 40 (DIN 2080, DIN 69871, DIN 7388)	
Speed range	55 - 4.000	rpm
	5.000	rpm (option)
Head swivel	0 - 140°	

Drill Sleeve (option)

Quill stroke	75	mm
Drilling spindle fine feed	3	mm/revolution

Motors

Spindle motor, 1400 rpm.	7,5	kW
Power consumption	ca. 18	kVA

Dimensions

Wide	1.810	mm
Depth	1.710	mm
Height	2.045	mm

Weight

Installation weight	approx. 2.450 kg
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ABENE VHF 330

CNC controlled

- Heidenhain or Siemens control with software for easy operation of pre-programmed cycles
- 2-stage gearbox with frequency-controlled spindle motor 55 - 4.000 rpm. (Optional 5.000)
- 1 LED machine light 24 V / 70 W
- Electronic handwheel for the X, Y and Z axis
- Complete electrical equipment for 400 V 3 phases 50 Hz
- Transformer for 24 V control voltage
- All fuses in the electrical cabinet are automats
- Mechanical longitudinal, transverse and vertical feed
- AC motor spindle, 7.5 kW
- Spindle for Z-axis, Ø 40 mm, ball screw
- Spindle for the X and Y axis with backlash-free ball screw Ø 32 mm
- All guides are hardened and ground
- An automatic central lubrication system lubricates all guides and ball screws
- AC servo motors with stepless control
- Chip tray, extendable
- Collision protection monitoring in all axes by electronic threshold value monitoring
- Key, operating instructions, spare parts catalog and acceptance protocol
- Mechanical handwheels in all axes (option)
- Table housing

ABENE VHF 360

CNC controlled



Control Options

- Heidenhain TNC 620
- Heidenhain TNC 7
- Siemens Sinumerik ONE

Technical Data

Table

Table size	1.530 x 450	mm
T-slots	6 x 18 (1 x H7)	mm
Max. Table load	400	kg
Travel in X	600 (800)	mm
Travel in Y	500	mm
Travel in Z	475	mm

Feeds/Rapid Traverse

Longitudinal feed X-axis	10 - 6.000	mm/min.
Crossfeed Y-axis	10 - 6.000	mm/min.
Vertical feed Z-axis	10 - 3.000	mm/min.

Milling Spindle

Spindle cone/tools	SK 40 (DIN 2080, DIN 69871, DIN 7388)	
Speed range	55 - 4.000	rpm
	5.000	rpm (option)
Head swivel	0 - 140°	

Drill Sleeve (option)

Quill stroke	75	mm
Drilling spindle fine feed	3	mm/revolution

Motors

Spindle motor, 1400 rpm.	7,5	kW
Power consumption	ca. 18	kVA

Dimensions

Wide	2.300	mm
Depth	2.550	mm
Height	2.200	mm

Weight

Installation weight	approx. 2.650 kg
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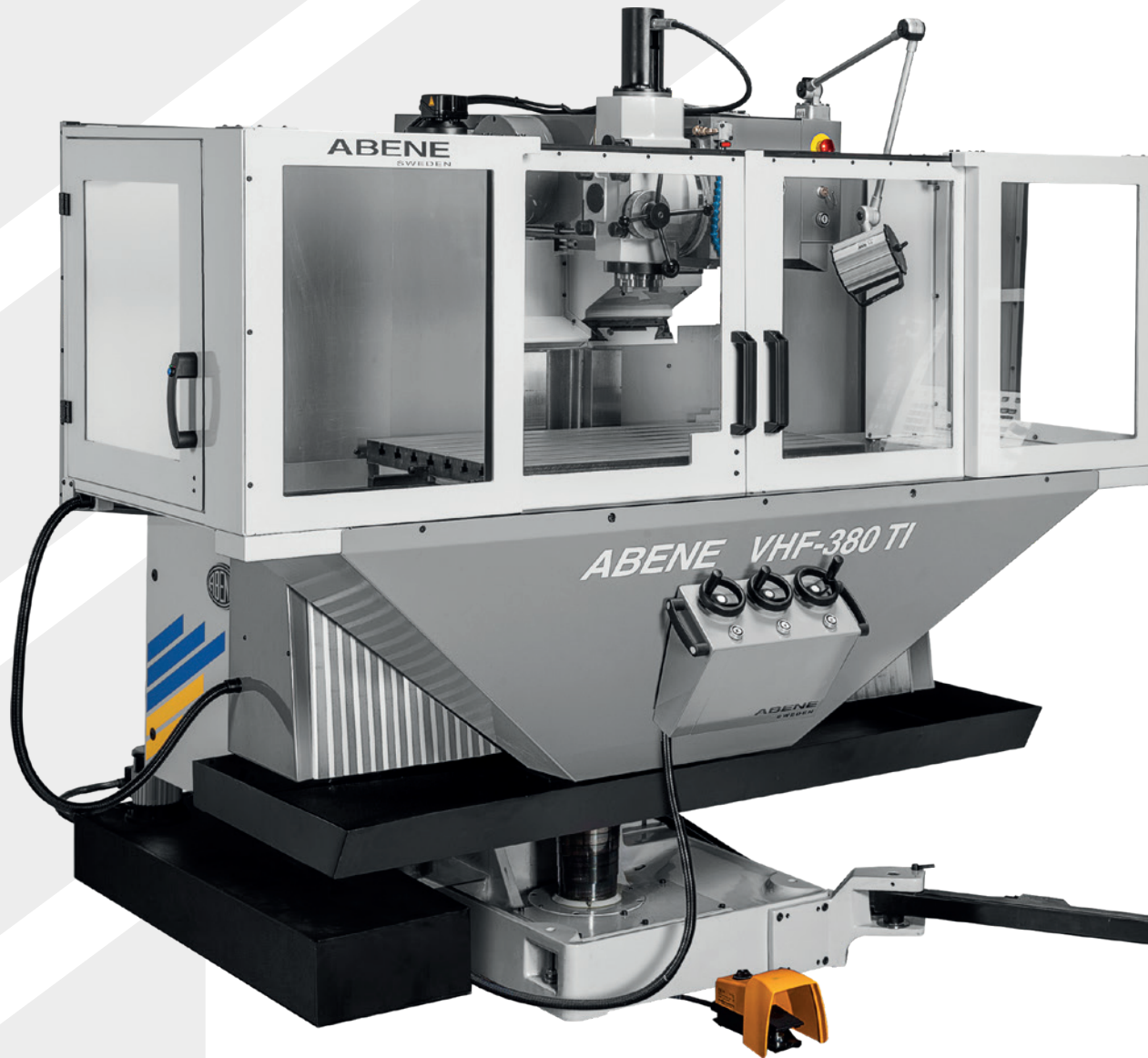
ABENE VHF 360

CNC controlled

- Heidenhain or Siemens control with software for easy operation of pre-programmed cycles
- 2-stage gearbox with frequency-controlled spindle motor 55 - 4.000 rpm. (Optional 5.000)
- 1 LED machine light 24 V / 70 W
- Complete electrical equipment for 400 V 3 phases 50 Hz
- Transformer for 24 V control voltage
- All fuses in the electrical cabinet are automats
- Mechanical longitudinal, transverse and vertical feed
- AC motor spindle, 7.5 kW
- Spindle for Z-axis, Ø 40 mm, ball screw
- Spindle for the X and Y axis with backlash-free ball screw Ø 32 mm
- Electronic handwheel for the X, Y and Z axis
- All guides are hardened and ground
- An automatic central lubrication system lubricates all guides and ball screws
- AC servo motors with stepless control
- Chip tray, extendable
- Collision protection monitoring in all axes by electronic threshold value monitoring
- Key, operating instructions, spare parts catalog and acceptance protocol
- Table housing

ABENE VHF 380

CNC controlled



Control Options

- Heidenhain TNC 620
- Heidenhain TNC 7
- Siemens Sinumerik ONE



Technical Data

Table

Table size	900 x 500	mm
T-slots	7 x 14 (1 x H7)	mm
Max. Table load	400	kg
Travel in X	800	mm
Travel in Y	500	mm
Travel in Z	475	mm

Feeds/Rapid Traverse

Longitudinal feed X-axis	10 - 6.000	mm/min.
Crossfeed Y-axis	10 - 6.000	mm/min.
Vertical feed Z-axis	10 - 3.000	mm/min.

Milling Spindle

Spindle cone/tools	SK 40 (DIN 2080, DIN 69871, DIN 7388)	
Speed range	55 - 4.000	rpm
	5.000	rpm (option)
Head swivel	0 - 140°	

Drill Sleeve (option)

Quill stroke	75	mm
Drilling spindle fine feed	3	mm/revolution

Motors

Spindle motor, 1400 rpm.	7,5	kW
Power consumption	ca. 18	kVA

Dimensions

Wide	2.300	mm
Depth	2.450	mm
Height	2.200	mm

Weight

Installation weight	approx. 2.650 kg
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ABENE VHF 380

CNC controlled

- Heidenhain or Siemens control with software for easy operation of pre-programmed cycles
- 2-stage gearbox with frequency-controlled spindle motor 55 - 4.000 rpm. (Optional 5.000)
- 1 LED machine light 24 V / 70 W
- Complete electrical equipment for 400 V 3 phases 50 Hz
- Transformer for 24 V control voltage
- All fuses in the electrical cabinet are automats
- Mechanical longitudinal, transverse and vertical feed
- AC motor spindle, 7.5 kW
- Spindle for Z-axis, Ø 40 mm, ball screw
- Spindle for the X and Y axis with backlash-free ball screw Ø 32 mm
- Electronic handwheel for the X, Y and Z axis
- All guides are hardened and ground
- An automatic central lubrication system lubricates all guides and ball screws
- AC servo motors with stepless control
- Chip tray
- Collision protection monitoring in all axes by electronic threshold value monitoring
- Key, operating instructions, spare parts catalog and acceptance protocol
- Table housing

OPTIONS

Electronic handwheel for the respective control type

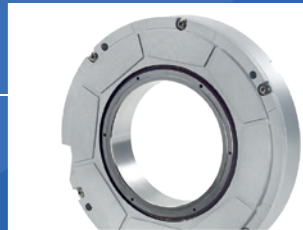


Spindle speed increase to 5.000 rpm



Electronic angle encoder

Digital display of the angles for the milling head via the X axis.



Linear scale on inclined bed

To calculate the zero point shift in Y and Z when adjusting the inclined bed

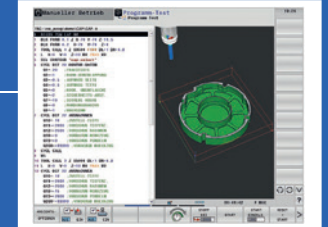


Software package for drilling and Milling in various angles



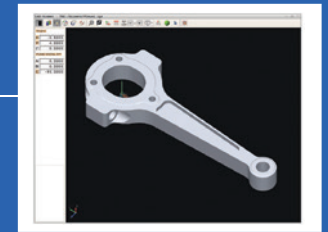
CAD Import - DXF Converter

Contours and machining positions from Transfer DXF files



CAD Import

Import contours from 3D models



Drilling spindle

Stroke 75 mm



Fine feed for BSF drilling spindle

One revolution corresponds to 3 mm feed



ABENE VHF 330 - 360 - 380

CNC controlled

Linear scale on the drilling spindle sleeve

75 mm - for digital display of the infeed depth



Counterholder for long cutter arbors

D = 48 mm



Heidenhain touch probe

TS-260 / TS-460



TNC 620 key switch

Reduces the function of the CNC control to the manual operating mode



Heidenhain tool - measurement

TT 140 / TT 160



ABENE hydraulic tool clamping TCS-300

DIN (69871 / 7388 / 2080)



Walter NC dividing head (4th axis)

TANiH 125/160 Evolution ready to plug in



Additional door

On the right or left side of the table enclosure with safety switch





ABENE Deutschland

Mühleweg 11
D-72800 Eningen
Germany

T: +49 (0) 7121 9835-31
F: +49 (0) 7121 9835-10

info@abene-deutschland.de

www.abene-deutschland.de