

## Drilling-milling machine

### OPTImill MH 20VL

Stable drilling-milling machines with electronically continuous variable drive. MH 20VL with larger travel in the X axis

#### Article number ▼

3338132

#### Brand ▼

Optimum

#### Availability ▼

In stock  
Immediate delivery

#### Catalog directory ▼

Metalworking machines » Milling machines  
conventional » OPTImill MH 20V / 20 VL /  
20 VLD

#### Purchase ▼

Minimum 1 pc(s).

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



#### Shipping informations ▼

Packaging Metrics		Weights		Delivery		Other	
Length	770 mm	Gross	117 kg	Delivery	Carrier	DualUse	✘
Width	714 mm	Net	90 kg	Content	1 pc(s).	SCIP	n/a
Height	917 mm					SVHC	No



## Description ▼

- Precisely built
- High concentricity due to tapered roller bearings  $\leq 0.015$  mm measured in the quill
- Motor with two-stage gear ratio for powerful transmission of motor power
- Manual quill feed with fine feed
- Powerful DC motor with permanent current monitoring
- Safety electronics in 24 Volt version
- Control electronics with integrated relay control
- Clear control panel with user-friendly membrane keyboard
- Easy-to-read digital display for speed and drilling depth
- Solid and large dimensioned cross table, precisely finished with T-slots and adjustable wedge strips
- Adjustable end stops
- Stable dovetail guide with adjustable wedge strips
- Emergency stop impact switch
- Drilling and milling head can be tilted by  $\pm 60^\circ$
- Fine milling feed
- Forward/reverse rotation
- Machine lamp
- Double-row angular contact ball bearings in the axes, adjustable without play
- Height-adjustable protective screen with microswitch, against flying chips and parts, for the greatest possible protection of the user
- X, Y and Z axes with prepared groove for the subsequent assembly of magnetic tapes

## Delivery content ▼

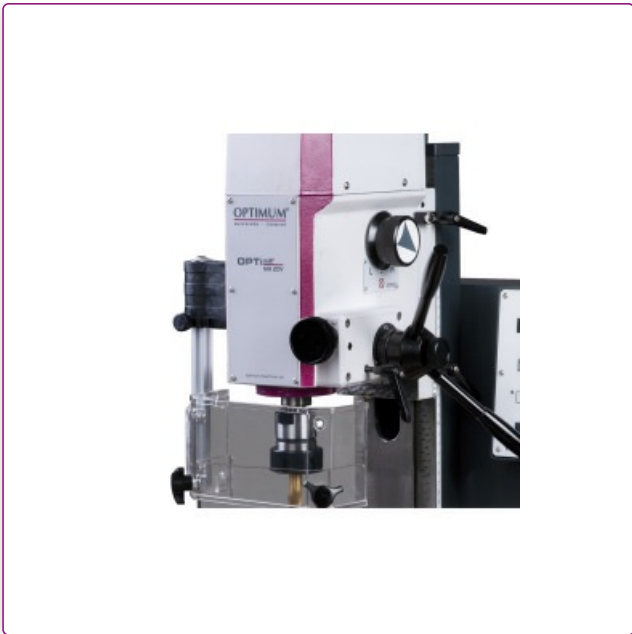
- operating tool

## Media informations ▼



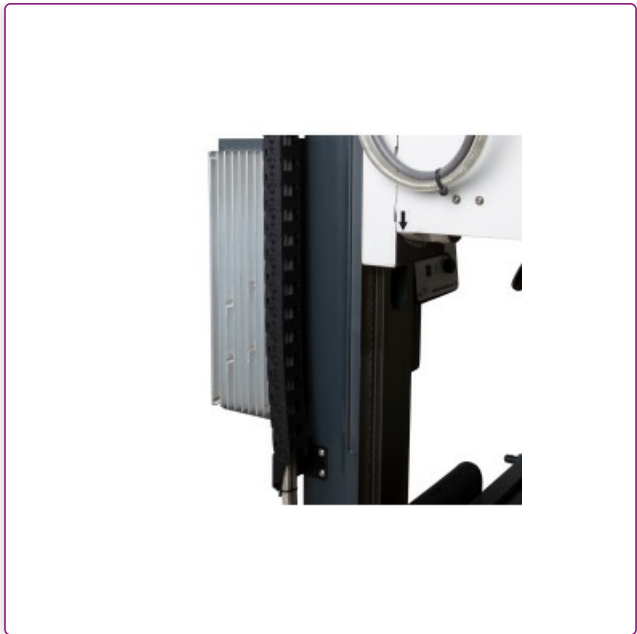
**Energy chain**

- Gentle cable routing



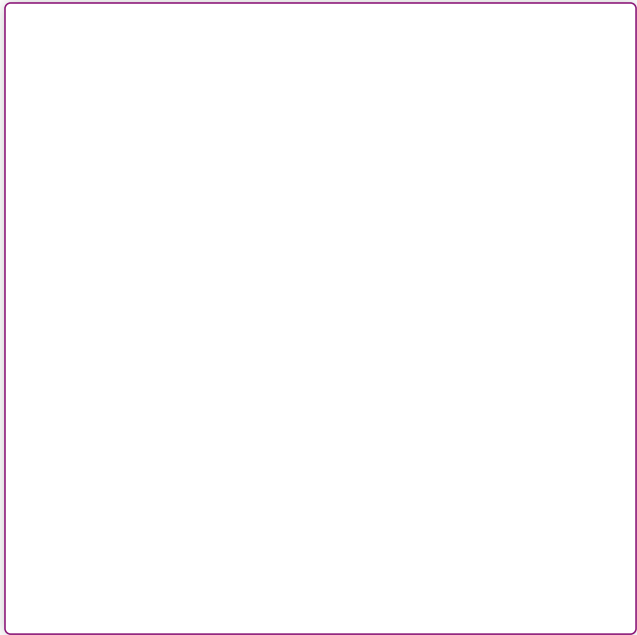
**Feed**

- Manual fine feed



**Heat sink**

- For cooling the electronics
- Good thermal conductivity



**Technical data** ▼

Dimensions and weights			
Length (product) approx.	770 mm	Width/depth (product) approx.	714 mm
Height (product) approx.	917 mm	Net weight approx.	99 kg
Drilling/milling head			
Mill head swivel range	± 60 °		
Drilling/milling output			
Drilling performance steel (S235JR)	16 mm	Max. size milling head	52 mm
Max. size shaft milling cutter	20 mm	Continuous drilling performance steel (S235JR)	12 mm
Electrical Data			
Supply voltage	230 V	Mains frequency	50 Hz

Milling table horizontal			
Horizontal milling table length	700 mm	Horizontal milling table width	180 mm
Horizontal milling table T-groove size	12 mm	Horizontal milling table T-groove number	3
Horizontal milling table T-groove spacing	63 mm	Horizontal milling table max. load bearing capacity	50 kg
Cross table			
Clearance vertical spindle - cross table	255 mm		
Standards and certifications			
Standard	DIN EN 55011	EMC level	C1
Travel			
Travel X axis manual	480 mm	Travel Y axis manual	175 mm
Travel Z axis manual	210 mm		
Vertical spindle			
Vertical spindle reach	170 mm	Vertical spindle spindle chuck	MK 2
Vertical spindle speed range	100 – 3000 min <sup>-1</sup>	Vertical spindle number of gears	2
Vertical spindle speed control	electronically adjustable	Vertical spindle quill diameter	60 mm
Vertical spindle quill stroke	50 mm	Vertical spindle drive motor output S6-30 % operation	0,75 kW

## Accessories ▼



### Keyless drill chuck DKC13 1-13 mm

Article number ▼  
3050632

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### Collet set MK 2 direct clamping / M 10

Article number ▼  
3351980

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### End mill set HSS, 12-piece

Article number ▼  
3352250

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**End mill set**  
HSS, 20-piece

Article number ▼  
3352255

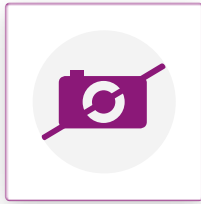
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**Collet set**  
ER 25, Ø 1-16 mm

Article number ▼  
3441109

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MASCHINEN - GERMANY



**Mounting kit**  
for DRO5 on MH20V/MH22V

Article number ▼  
3383990

**OPTIMUM®**  
MASCHINEN - GERMANY



**Universal base**  
MSM 1 340 x 420 x 800 mm

Article number ▼  
3353000

**OPTIMUM®**  
MASCHINEN - GERMANY



**Chip tray**  
720 x 470 x 30 mm

Article number ▼  
3352999

**OPTIMUM®**  
MASCHINEN - GERMANY



**Precision machine vice**  
FMS 100

Article number ▼  
3354100

**OPTIMUM®**  
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**Precision machine vice**  
FMSN 100

Article number ▼  
3354110

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### Milling machine vise

**VMQ 80**

Robust design for milling, drilling and grinding

**Article number** ▼

3354180

**OPTIMUM®**  
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### Milling machine vise

**VMQ 100**

Robust design for milling, drilling and grinding

**Article number** ▼

3354181

**OPTIMUM®**  
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### Three axis vise

**MV3-75**

Horizontal swivel movement up to 90 °

**Article number** ▼

3354175

**OPTIMUM®**  
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### Two axis vise

**ZAS 50**

**Article number** ▼

3354170

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### Twist Drill Set

**25 pieces, 1 - 13 mm**

**Article number** ▼

3201010

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**Twist Drill Set**  
41-piece, 6 - 10 mm (0.1 mm rising)

Article number ▼  
3201021

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**Milling set**  
carbide, 18-piece

Article number ▼  
3352118

**OPTIMUM®**  
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**Milling set**  
radius, 9-piece

Article number ▼  
3352116

**OPTIMUM®**  
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**Clamping tool kit**  
SPW 10

Article number ▼  
3352016

**OPTIMUM®**  
MASCHINEN - GERMANY



**Edge finder**  
Diameter 10 mm

Article number ▼  
3351171

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**Precision quick-action drill chuck**  
1-10 mm, B16

**Article number** ▼  
3050610

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**Keyless drill chuck**  
DKC16 1-16 mm

**Article number** ▼  
3050633

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**Mandrel for drill chuck**  
Cone outside MK 2 / M10 / B16

**Article number** ▼  
3050670

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**Holder for cutterhead**  
MT 2

**Article number** ▼  
3352102

**OPTIMUM**<sup>®</sup>  
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**Copy and face cutter head**  
Shank MK 2 / M10

**Article number** ▼  
3350212

**OPTIMUM**<sup>®</sup>  
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**Collet chuck set**  
MK 2 / ER 25 - M10

**Article number** ▼  
3352052

**OPTIMUM**<sup>®</sup>  
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**Collet chuck set**  
MK 2 / ER 32 - M10

**Article number** ▼  
3352053

**OPTIMUM**<sup>®</sup>  
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**Collet set**  
ER 32, Ø 1 - 16 mm

**Article number** ▼  
3441122

**OPTIMUM®**  
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**Prism**  
WP 30

**Article number** ▼  
3352195

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**Tapping attachment**  
M5 - M12 / B16

Built-in fast reverse, immediately effective when changing the feed direction

**Article number** ▼  
3352042

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**Workpiece support**  
WPS-1

Adjustment range 40 - 50 mm

**Article number** ▼  
3354261

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**Workpiece support**  
WPS-2

Adjustment range 65 - 90 mm

**Article number** ▼  
3354262

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**T-nut**  
M 10/12 mm

**Article number** ▼  
3353022

**OPTIMUM®**  
MASCHINEN - GERMANY



### Parallel spacer kit

20 parts

Article number ▼

3354001

**OPTIMUM®**  
MASCHINEN - GERMANY



### Coolant hoses with magnetic base

KMS 2

Article number ▼

3356660

**OPTIMUM®**  
MASCHINEN - GERMANY



### Cooling lubricant nebulizer

MMC1

Article number ▼

3356663

**OPTIMUM®**  
MASCHINEN - GERMANY



### Vibration damper machine foot

SE 55

Article number ▼

3352981

**OPTIMUM®**  
MASCHINEN - GERMANY



### Leveling plate

SE 1

Article number ▼

3381012

**OPTIMUM®**  
MASCHINEN - GERMANY