

Drilling-milling machines

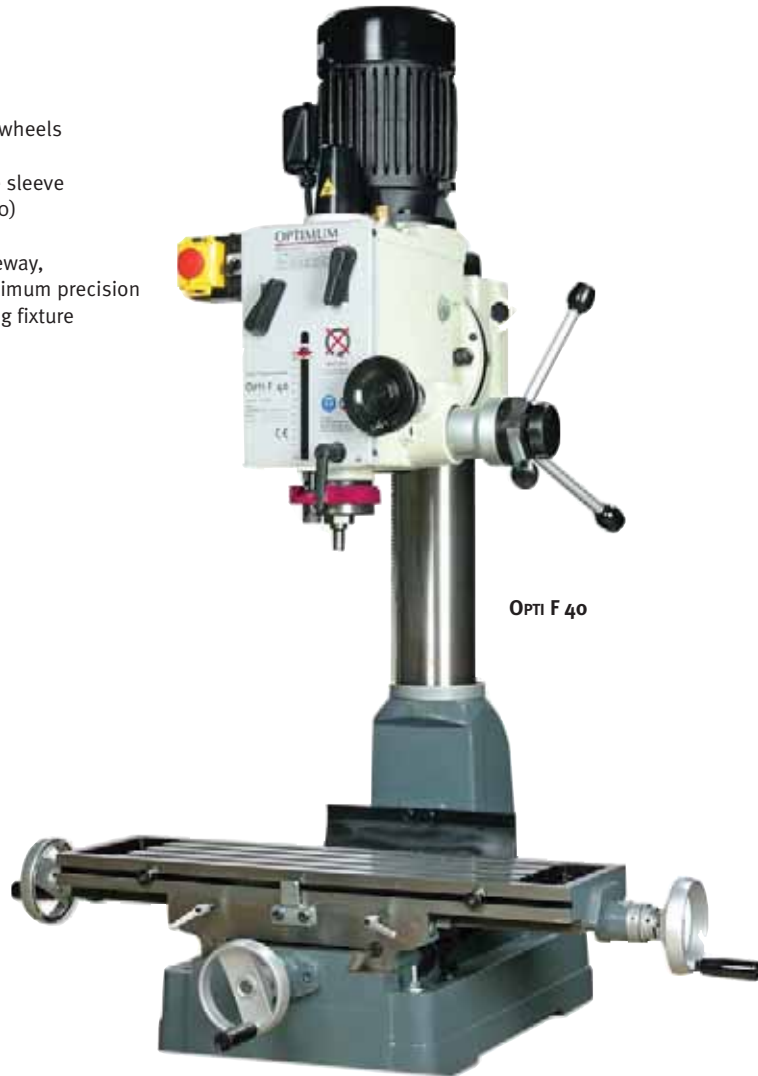
OPTI F 40 / OPTI F 45

Universal precision drilling-milling machines with change speed gear and 12 speeds.

OPTI F 45 additional with solid dovetail slideway

Convincing arguments: quality, efficiency and price.

- Heavy-duty, solid cast-iron construction
- Solid, precise cross table, precision-ground
- Adjustable tapered gibs
- Very wide speed range
- Very smooth running due to ground oil-quenched gearwheels
- High concentricity precision due to taper roller bearings, less than 0.015 mm measured in the spindle sleeve
- Drill head rotatability 360° and swivel of 180° (OPTI F 40)
- Drill head swivel of 180° (Opti F 45)
- Opti F 45 additional, gearhead with solid dovetail slideway, hand-scraped, responsible for highest solidity and optimum precision
- M 12 draw-in rod for clamping the milling cutter holding fixture
- Solid grey cast iron pedestal provides stability and absorbs vibrations
- Economically-priced and stable value



OPTI F 40

Model	OPTI F 40	OPTI F 45
Item No.	333 2500	333 2600
€ (VAT excl.)	2,590.00	2,990.00

Technical data		
Drilling capacity in cast iron (max.)	40 mm	40 mm
Drilling capacity in steel (max.)	32 mm	32 mm
Milling cap.inserted-tooth cutter (max.)	100 mm	100 mm
Milling cap. of end mill cutter (max.)	32 mm	32 mm
Working range	265 mm	265 mm
Spindle holding fixture	MT 3	MT 3
Spindle speeds, 2 x 6 steps	50 - 2,500 rpm	50 - 2,560 rpm
Sleeve travel	130 mm	130 mm
Head swivel	180°	180°
Cross table size (L x W)	730 x 210 mm	820 x 240 mm
T-slot size	16 mm	16 mm
Z-axis travel ^{*)}	480 mm	510 mm
Y-axis travel ^{*)}	230 mm	210 mm
X-axis travel ^{*)}	430 mm	520 mm
Motor power, two-step / 50 Hz	550 W / 1.1 kW / 400 V	550 W / 1.1 kW / 400 V
Dimensions (L x W x H)	800 x 1,110 x 1,400 mm	785 x 1,185 x 1,450 mm
Net weight	270 kg	330 kg



Extent of supply:

- Cutter head with holding taper MT 3
- Draw-in rod M 12
- Morse taper MT 3, B 16
- Operating tools



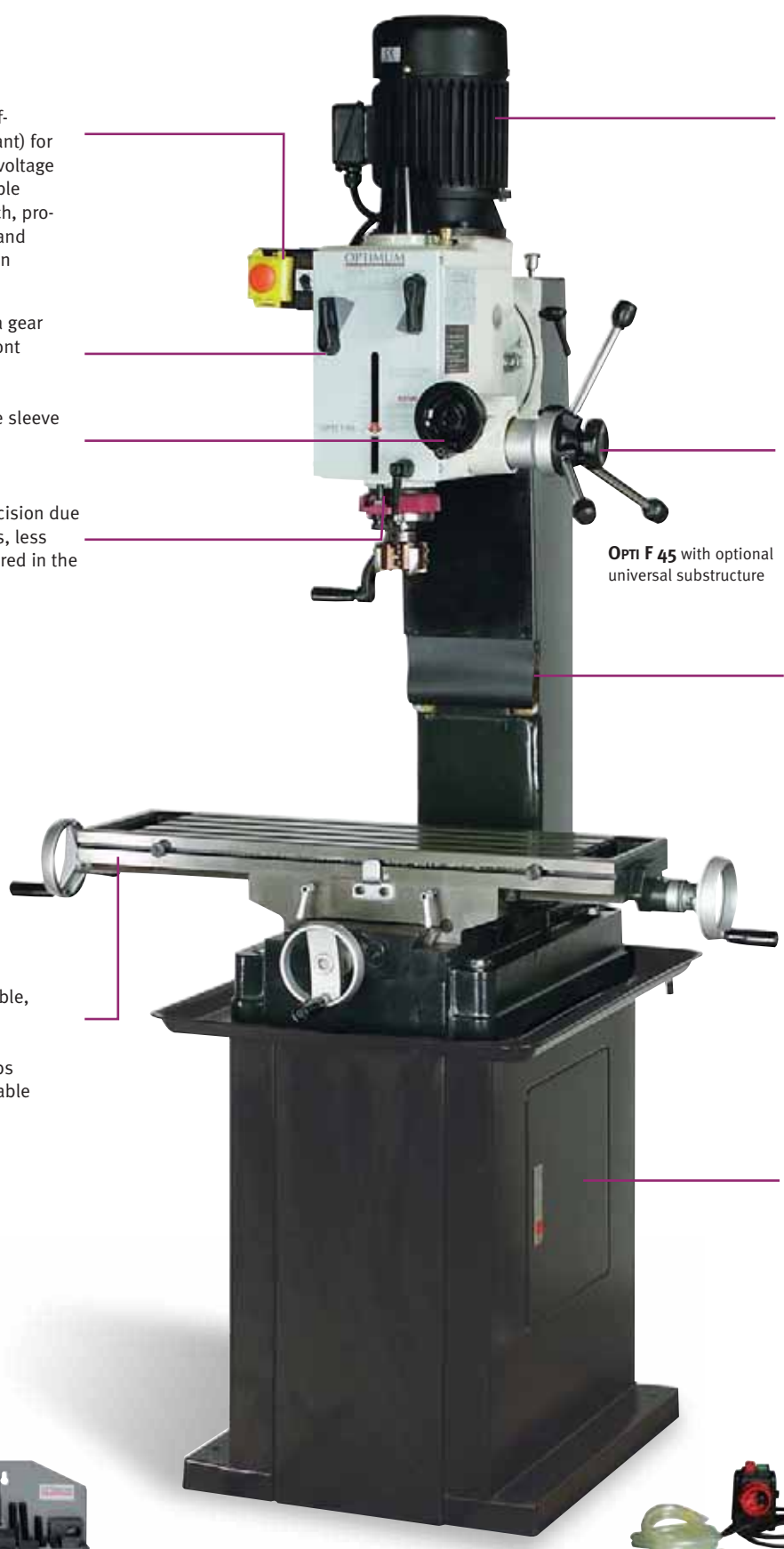
FMS 125

End mill cutter kit HSS

^{*)}travels are reduced by using of measuring gibs for digital displays

- German automatic off-switch (IP 54 compliant) for easy operation, with voltage circuit breaker, lockable emergency stop switch, protective motor switch and right- lefthand rotation
- Easy speed change via gear shifting lever at the front
- Handwheel for spindle sleeve fine feed
- High concentricity precision due to taper roller bearings, less than 0.015 mm measured in the spindle sleeve

- Powerful 2-level power with 12 speeds of 50 - 2,560 rpm or 50 - 2,500 rpm (OPTI F 40)



- Spindle sleeve carriage by machine knob (drill)
- Coupling to change from rough forward feed by hand to fine forward feed by hand

- OPTI F 45 with solid dovetail slideway, hand-scraped, responsible for highest solidity and optimum precision
- OPTI F 40 with high dimensions, thick-walled, rounded cast-iron upright (Ø 115 mm), with gear-head height-adjustable via rack

- Solid, precise cross table, precision-ground
- With T-slots
- Adjustable tapered gibs
- Adjustable by 3 pluggable handwheels

- Optional accessories:**
- **Universal substructure milling**
L x W x H 790 x 590 x 720 mm;
Item No 335 3001;
€ 199.- VAT excl.



SPW 14



Coolant system

Accessories	Item No.	€ (VAT excl.)
■ Vice FMS 125	335 4125	149.00
■ Hydraulic machine vice HMS 125	335 5127	599.00
■ Parallel spacer kit 18 pcs.	335 4000	169.00
■ Universal-Coolant system 400 V	335 2001	189.00
■ Clamping tool kit SPW 14	335 2018	89.00

Accessories	Item No.	€ (VAT excl.)
■ Collet chucks kit 6 pcs. MT3 (M12)	335 2014	89.00
■ Draw-in collet chuck kit 8 pcs. MT3 (M12)	335 2050	189.00
■ End mill cutter kit HSS 20 pcs.	338 6200	95.00
■ Horizontal-vertical index head RT 150	335 6150	199.00
■ Height-adjustable tailstock RST 1	335 6155	89.00

More accessories from page 27 onwards