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smart tools
for heavy tasks

FM 37982

ABM-R5 | COMPACT AUTO FEED RADIUS BEVELLER FOR STEEL PLATES AND PROFILES

ABM R5 is a compact, self propelled auto feed beveler designed for precise edge rounding and bevelling on upper and bottom edges of steel plates and profiles.

The machine produces R2–R5 radius or straight bevels in a single pass on both upper and bottom edges, delivering consistent quality without thermal distortion or guide tracks.

TYPICAL APPLICATIONS:

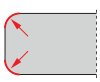
- Edge rounding for coating and safety requirements
- Structural steel fabrication
- Shipyard steel sections
- Weld preparation of plates and profiles
- Long I-shaped structural steel beams, "Wide Flange" or "Narrow Flange"

KEY CAPABILITIES:

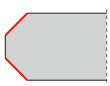
- Radius milling: **R2 / R3 / R4 / R5**
- Upper edge machining
- Bottom edge machining (option)
- Straight bevels up to 6 mm
- Auto feed magnetic drive
- Track free operation

FEATURES AND BENEFITS:

- **Auto feed 4 wheel magnetic drive** ensures stable, track free travel with a constant feed speed of up to 2.0 m/min, even on long steel plates and profiles
- **Single pass radius milling (R2, R3, R4 or R5)** on upper and bottom edges significantly reduces machining time compared to conventional grinding
- **Straight bevelling up to 6 mm** at 45° (standard) and 30° (option) provides flexibility for weld preparation and edge finishing on one compact machine
- **Bottom edge machining capability (option)** allows complete edge processing without re clamping or turning the material to the other side
- **High precision milling head adjustment (0.1 mm)** ensures accurate, repeatable radius and bevel geometry
- **Smart overload control system** dynamically adjusts feed speed under load, protecting cutting inserts and maintaining consistent surface quality
- **Automatic stop and tool retraction** at the end of the cut prevents insert damage and increases operator safety
- **No heat affected zone** thanks to cold milling technology, eliminating material distortion and post processing
- **Compact and lightweight industrial design (14 kg)** enables easy handling while maintaining production grade performance
- **Chip blowing system** clears chips from the machining path, improves surface quality and reduces wear of the guide wheels



Bevel radius R2, R3, R4 or R5



Bevel width up to 6 mm

Bevel angles
45°, 30° (option)

Min plate thickness
8 mm (5/16")

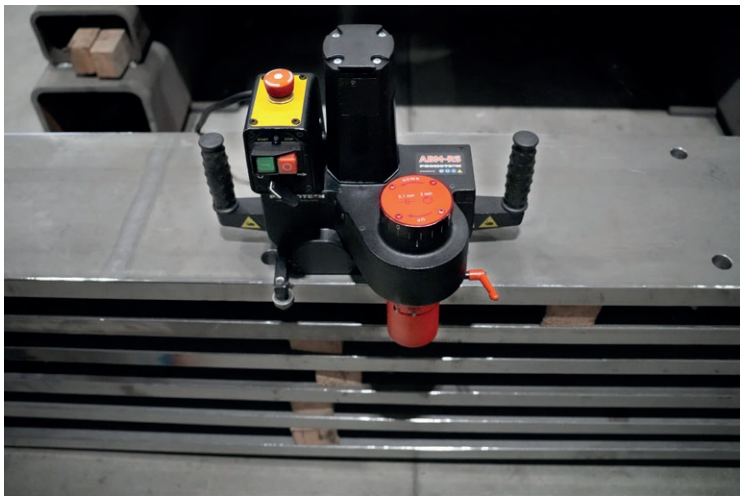
Feedback-controlled overload system

- ABM-R5 travels at a stable speed of up to 2.0 m/min.
- Smart overload system monitors the load and reduces the travel speed if necessary (e.g. due to blunt cutting inserts or hard material)

Applications:

I. Radius milling of UPPER EDGE

- ABM-R5 creates a uniform rounding (R2, R3, R4 or R5)
- Minimum workpiece width (such as I-Beam flange) is 150 mm
- Minimum workpiece thickness is 8 mm



II. Radius milling of BOTTOM EDGE

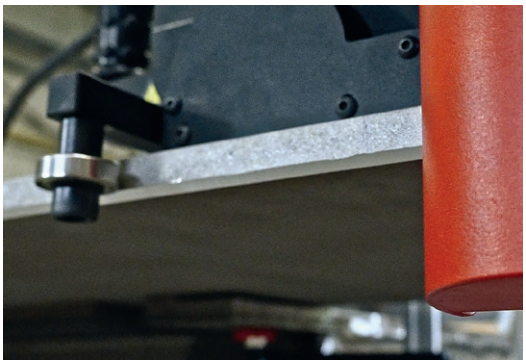
- ABM-R5 is capable of producing a bottom edge radius (R2, R3, R4 or R5) with an optional milling head GLW-0762-0075-00-0
- Minimum workpiece width (such as I-Beam flange) is 150 mm
- Maximum workpiece thickness in this case is 30 mm

III. Bevelling of UPPER EDGE

- ABM-R5 is capable of producing a bevel width of up to 6 mm at 45 degrees
- up to 6 mm bevels at 30 degrees are also possible with an optional milling head GLW-0540-09-00-00-0
- Minimum workpiece thickness is 8 mm

IV. Bevelling of BOTTOM EDGE (OPTION)

- ABM-R5 is capable of producing a bevel width of up to 6 mm at 45 degrees at the bottom edges with an optional milling head GLW-0762-0075-00-0



ABM-R5 TECHNICAL SPECIFICATION	
Voltage	1~ 220-240 V, 50-60 Hz 1~ 110-120 V, 50-60 Hz
Power	1080 W
Spindle speed (without load)	5900 rpm
Spindle speed (with load)	3950 rpm
Feed speed	2.0 m/min
Maximum bevel width (b)	6 mm (15/64"); Fig. 1
Bevel angle (ß) on the upper edge	45°; 30° (option); Fig. 1
Bevel angle (ß) on the bottom edge	45° only; Fig. 1
Minimum plate thickness	8 mm (5/16")
Maximum plate thickness (for the bottom edge bevelling)	30 mm (1 3/16")
Minimum workpiece width	150 mm (5 57/64")
Rounding edges (both upper and bottom edges)	R2, R3, R4, R5; 2 mm, 3 mm, 4 mm, 5 mm (5/64, 7/64, 5/32, 3/16"); Fig. 2
Dimensions (L x W x H)	408 x 235 x 355 mm
Weight	14.0 kg (31 lbs)
Product code 220-240 V, 50-60 Hz	UKS-0762-10-20-00-0
Product code 110-120 V, 50-60 Hz	UKS-0762-10-10-00-0

Fig. 1

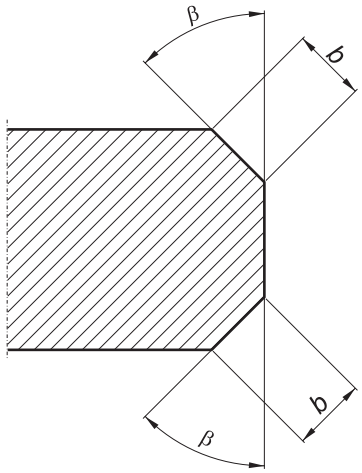
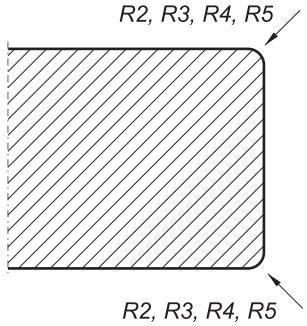


Fig. 2

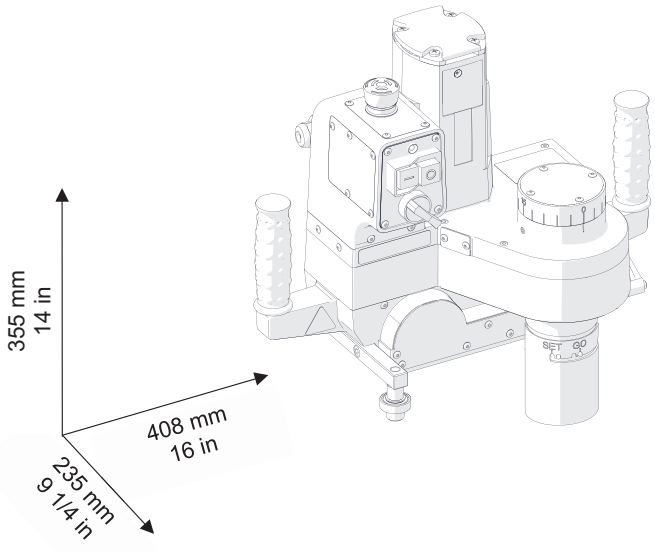


Optional and consumable accessories:

- GLW-0540-08-00-00-0 Milling head 45 deg for bevels and radii
- GLW-0762-0075-00-0 Milling head 45 deg for bevels and radii on the bottom edges
- GLW-0540-09-00-00-0 Milling head 30 deg
- RLK-0540-08-02-00-0 Guiding roller Ø 35 mm
- PLY-000737 Carbide cutting insert (SPEX-R2) for Mild steel (sold 10 pcs/box)
- PLY-000738 Carbide cutting insert (SPEX-R3) for Mild steel (sold 10 pcs/box)
- PLY-000739 Carbide cutting insert (SPEX-R4) for Mild steel (sold 10 pcs/box)
- PLY-000740 Carbide cutting insert (SPEX-R5) for Mild steel (sold 10 pcs/box)
- PLY-000391 Carbide cutting insert (SPEX) for Mild steel (sold 10 pcs/box)
- SRB-000289 Insert Screw
- SMR-000005 Screw grease (5 g, 0.17 oz)

Shipping set:

- Beveller (incl. milling head 45 deg for bevels and radii w/o cutting inserts)
- Chip removal tool
- Special flat wrench
- 22 mm combination wrench
- Grease Molykote 1000 (5 g/0.17 oz)
- T15 Torx screwdriver
- Plastic box
- Operator's manual



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