

# PLATE BEVELING MACHINE FROM STEELMAX®

## ABM50 AUTO-FEED DOUBLE-SIDED BEVELER

### SELF-PROPELLED, INVERTIBLE BEVELING MACHINE REDUCES MATERIAL HANDLING

The **Steelmax ABM50** produces accurate, high-quality, machined bevels on plates from 5/16" to 3-1/8" (8-80 mm) thick using a high-speed rotary milling head with replaceable carbide inserts. The machine features an infinitely adjustable bevel angle between 15 and 60 degrees and is capable of producing bevels up to 2" (50 mm) wide. The **ABM50** incorporates onboard spindle speed adjustment to optimally bevel ferrous and non-ferrous materials and excels in beveling high tensile strength materials up to 450,000 PSI.

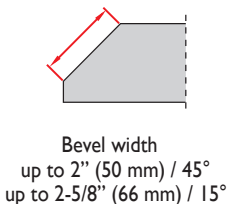
Root face dimensions remain accurate and repeatable from plate to plate, promoting better fit-up and consistent weld geometry. The milled finish is produced without thermal distortion and is ready to weld without additional grinding to remove dross, slag or heat affected zone (HAZ).

The **ABM50** employs a unique trolley system which allows the machine to quickly invert and bevel the bottom side of the plate – eliminating the need to flip the material – improving operational safety and increasing productivity. The trolley system also features vertical height adjustment and floating compensation for uneven floors.

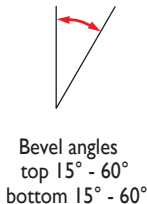
**A BREAKTHROUGH  
IN BEVELING!**

The operator can easily pre-set and adjust the following parameters:

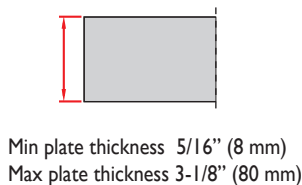
- bevel angle
- bevel width
- bevel depth
- optimal depth of cut for each pass
- spindle speed
- travel speed
- spindle load



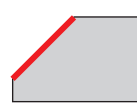
Bevel width  
up to 2" (50 mm) / 45°  
up to 2-5/8" (66 mm) / 15°



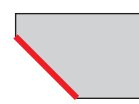
Bevel angles  
top 15° - 60°  
bottom 15° - 60°



Min plate thickness 5/16" (8 mm)  
Max plate thickness 3-1/8" (80 mm)



Top beveling



Bottom  
beveling

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The tools of innovation.

# ABM50

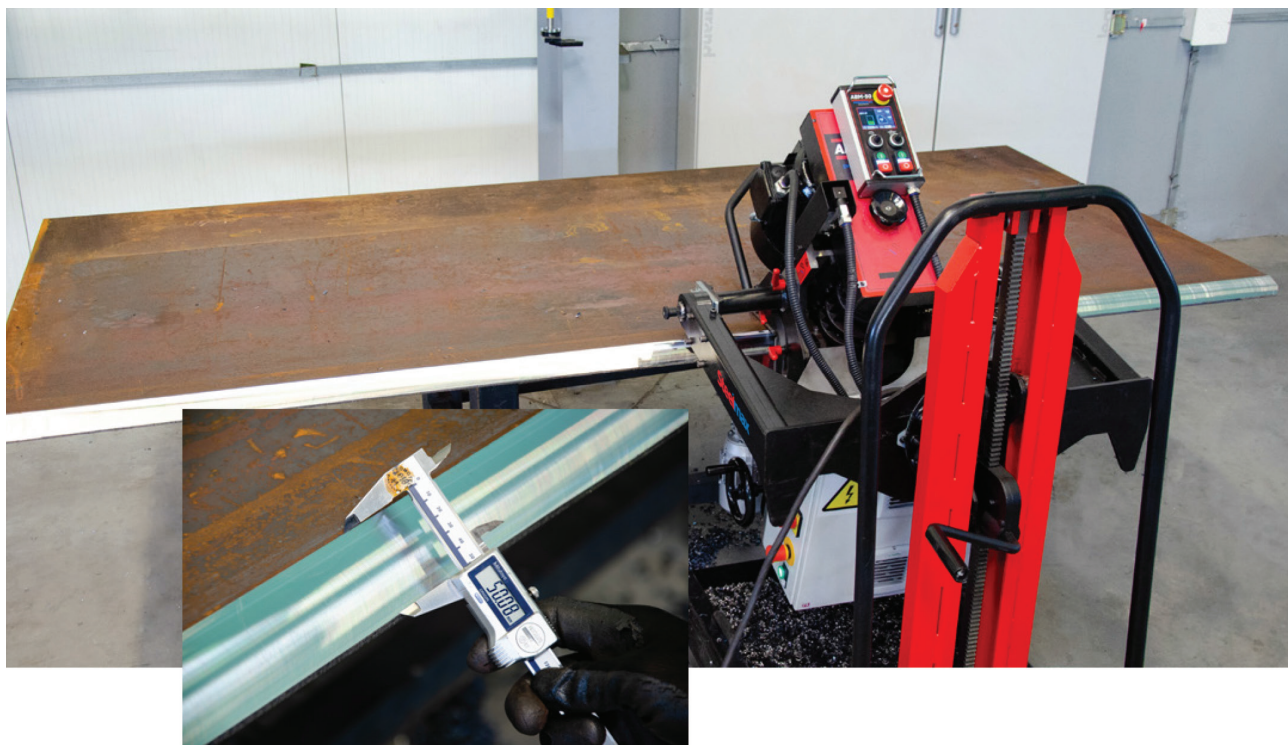
## FEATURES

- Self-feeding for consistent bevel geometry from end-to-end
- Real-time measurement and on-screen display of exact bevel geometry and milling parameters
- Variable spindle speed for milling ferrous and non-ferrous materials including high tensile strength materials
- 180° inversion allows for quick and easy creation of double-sided bevels.
- Rotary milling head with carbide inserts produces an accurate, high-quality finish without thermal distortion that is weld ready
- Built-in overload protection
- Floating trolley compensates for uneven floors
- Portable Machine that can easily be moved throughout the shop

The **ABM50** features a unique remote pendant control with LCD display showing the exact bevel geometry being produced.



The **ABM50** creates bevels with a maximum bevel width of 2" (50 mm) at 45 degrees.



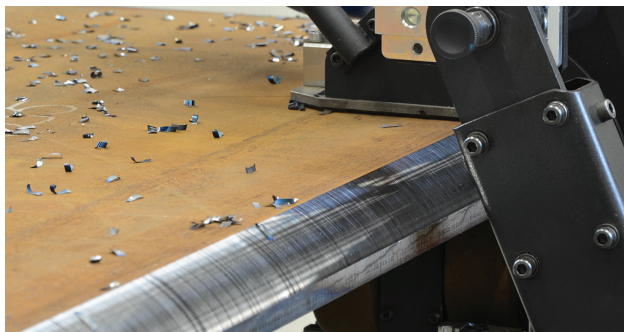


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The **ABM50** can create double-sided bevels eliminating the need to flip the material – improving safety and productivity.



The remote pendant allows the operator to optimally adjust spindle and travel speeds for beveling ferrous and non-ferrous materials – up to 450,00 psi tensile strength.



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## ABM50 Technical Specifications

Voltage	380 - 480V 3 Phase 50-60Hz Switchable Voltage
Power	8.7 HP (6.5 kW)
Spindle Speed (no load)	300-800 RPM
Feed Speed	0"-47" ipm
Bevel Angle ( $\beta$ , Fig. 1)	15°-60° infinitely variable
Maximum Bevel Width (b, Fig. 1)	Varies with angle setting 2-5/8" (66 mm) at 15° 2" (50 mm) at 45°
Maximum Depth of Cut per pass (d, Fig. 1)	1/4" (6 mm)
Plate Thickness Range	5/16" - 3-1/8" (8 - 80 mm)
Weight	700 Lbs (320 Kg)
Part Number	SM-ABM50

## ABM50 Bevel Capacities (Fig. 1)

$\beta$	b	# of passes
15°	2.60" (66 mm)	Recommended in 4 passes
20°	2.32" (59 mm)	Recommended in 4 passes
25°	2.16" (55 mm)	Recommended in 4 passes
30°	2.05" (52 mm)	Recommended in 5 passes
35°	2.00" (50 mm)	Recommended in 5 passes
40°	2.00" (50 mm)	Recommended in 5 passes
45°	2.00" (50 mm)	Recommended in 5 passes
50°	2.00" (50 mm)	Recommended in 5 passes
55°	2.00" (50 mm)	Recommended in 5 passes
60°	2.00" (50 mm)	Recommended in 5 passes

### Accessories:



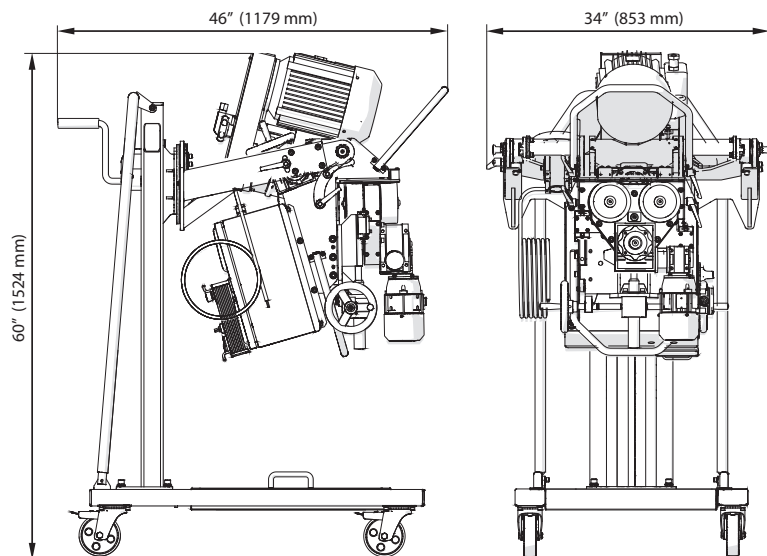
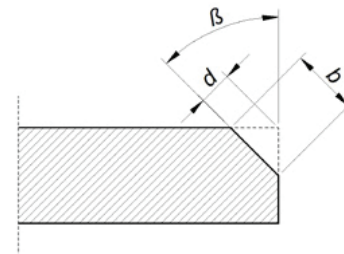
Cutting insert 1 piece  
(8 required, sold 10 per box)  
Item number: SM-PLY-000282

Milling head  
(8 cutting inserts required)  
Product code: SM-GLV-000033

### Standard kit includes:

- Beveling machine with milling head and 8 cutting inserts
- Wooden box with base and mounting brackets
- Special wrench
- 10 mm T-handle hex wrench with ball tip
- 3.5 mm hex wrench
- T15 torx screwdriver
- Grease for screws
- Operator's manual

Fig. 1



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For ordering and customer service, or to request detailed product information or demonstration videos, contact:

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