

# STEELBEAST®

**JEI**  
Solutions  
Built for Industry

# PLATE AND PIPE BEVELLING SOLUTIONS



# WELD PREPARATION MADE EASY

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## BM2A

### HAND-HELD RADIUS AND DEBURRING TOOL



-  **Deburring**
-  **Bevel radius R1.5**
-  **Countersinking min. ID 6.8 mm**
-  **Deburring angle 45**
-  **Max deburr width 2 mm**



#### Features & benefits:




- Weighs only 400g
- 5 bar operation
- Milling head holds both radius and milling inserts
- Ideal for plates and inside edges
- Deburr internal holes from a minimum 6.8 mm diameter
- Deburr sharp edges or create a paint-ready radius edge

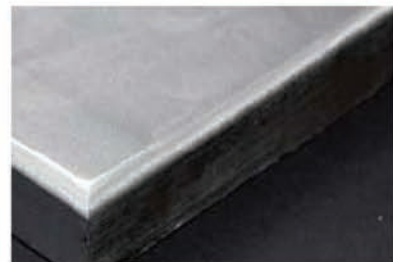


## BM5A

### PNEUMATIC BEVELLING AND RADIUS MACHINE

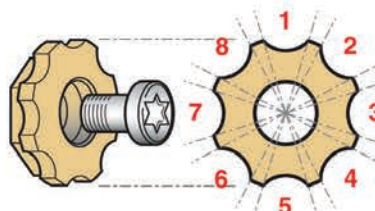


-  **Cuts inside circles with a 35mm diameter or more**
-  **Cuts materials with a minimum of 6mm thickness**
-  **Will make blind cuts with a minimum of 11 mm depth**












#### Features & benefits:

- Works great for all metal fabricating including shipyards.
- Cuts 2-3R radius chamfers.
- Cuts 2-3R straight chamfers.
- 3 bladed cutting head
- Patented 8 edged cutters
- 3.5R Chamfering capacity
- 7,000 rpm max speed
- Net weight 2.8 kg



## BM-18 MULTITASK PLATE AND PIPE BEVELLER



-  Max bevel width 18 mm
-  Rounding edges (option) R2, R3, R4 or R5
-  Top beveling
-  Bevel angles: 22.5°, 30°, 37.5°, 45°, 50°, 55°, 60°
-  Min plate thickness 2 mm
-  Arched edge beveling
-  Countersinking  
Min. ID 40 mm
-  Pipe OD beveling
-  Pipe ID beveling  
Min. ID 40 mm










### Features & benefits:

- Maximum 18 mm bevel width (more than one pass could be required)
- New more durable milling heads with hexagonal fixing for easy replacement
- Electronic speed control from 1800–5850 rpm for use on a variety of materials
- Continuous milling depth adjustment to fully control the beveling process
- Overload protection to prevent motor damage
- Rounding radius R2, R3, R4, R5 on both straight and curved edges
- Optional accessories expand the possible applications of the BM-18 to deal with pipes and small workpieces.



## BM-18A PNEUMATIC PLATE BEVELLER



-  Max. bevel width 18 mm
-  Rounding edges (option) R2, R3, R4 or R5
-  Top beveling
-  Bevel angles 22.5°, 30°, 37.5°, 45°, 50°, 55°, 60°
-  Min. plate thickness 2 mm
-  Arched edge beveling
-  Countersinking  
Min. ID 40 mm



### Features & benefits:







- Powerful Pneumatic motor
- Maximum 18 mm bevel width (more than one pass could be required)
- New: more durable milling heads with hexagonal fixing for easy placement
- Continuous milling depth adjustment to fully control the beveling process
- Rounding radius R2, R3, R4, R5 on both straight and curved edges



## BM-20 PLUS

### PORTABLE BEVELLER



-  Max bevel width 21 mm
-  Facing off (option)
-  Top bevelling
-  Bevel angles 15°-60° or 0° (option)
-  Round plate bevelling (option)
-  Pipe bevelling OD 150-300mm (option) OD 260-600mm (option)



#### Features & benefits:

- Maximum 21 mm bevel width
- Continuously adjustable bevel angle between 15° and 60°
- Fitted with two rotary milling heads for smooth and efficient operation
- Continuous milling depth adjustment to fully control the bevelling process
- Automatic motor overload protection to prevent motor damage
- Optional accessories extend the application possibilities of the BM-20 Plus for machining pipes, round plates and creating a flat surface at the of workpiece (facing off)

## BM-21

### INDUSTRIAL PLATE & PIPE BEVELLER



-  Max bevel width 21 mm
-  Facing off
-  Top bevelling
-  Bevel angles 0-60°
-  Pipe bevelling OD 150-300 mm OD 260-600 mm (option)



#### Features & benefits:






- Mono block milling head equipped with 10 square inserts to make machining process for more efficient and much less operator fatiguing
- Easy setting of bevel width up to 21 mm at 45°
- Continuous angle adjustment from 0 to 60 degrees
- Automatic motor overload protection to prevent motor damage
- Quick and simple replacement of cutting inserts
- One universal guide plate for bevelling both plates and pipes



## BM-21S

### STAINLESS STEEL PLATE & PIPE BEVELLER



-  Max bevel width 21 mm
-  Facing off
-  Top bevelling
-  Bevel angles 0-60°
-  Pipe bevelling  
OD 150-300 mm  
OD 260-600 mm (option)



#### Features & benefits:



- Guide plate with rolls made of stainless steel to protect the workpiece from contamination
- Mono block milling head equipped with 10 square inserts make machining process far more efficient with reduced operator fatigue
- Easy bevel width set up - 21 mm at 45°
- Continuous angle adjustment from 0 to 60 degrees
- Automatic motor overload protection to prevent motor damage
- Quick and simple replacement of cutting inserts
- One universal guide plate for bevelling both plates and pipes



## BM-25

### PLATE BEVELLING MACHINE

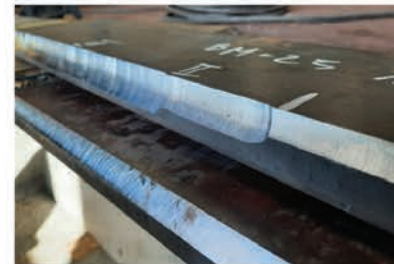


-  Max bevel width 25 mm
-  Min plate thickness 2 mm
-  Top bevelling
-  Bevel angles 0° - 90°  
15°-75° (recommended)



#### Features & benefits:

- Maximum 25 mm bevel width (more than one pass could be required)
- Continuously adjustable bevel angle between 0 and 90 degrees - only one milling head in use
- Powerful motor with electronic speed control 1800 - 5850 rpm works with various materials
- The face milling method works with a single head allowing less milling resistance and effort
- Overload protection to prevent motor damage
- Continuous milling depth adjustment to fully control the bevelling process
- Adjustable handle and grip for comfort and ergonomics



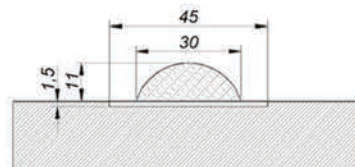
## BM-30 WM

### WELD MILLING MACHINE



#### Features & benefits:

- Removal of excess weld up to 11 mm high and 30 mm wide
- Possibility of undercutting to a depth of up to 1.5 mm



## SBM-500

### STATIONARY BEVELLING MACHINE



#### Features & benefits:

- Precise setting of bevel angle from 15 up to 60 degrees and bevel width up to 30 mm
- 3D contact wheel control ensures proper workpiece alignment in relation to high speed rotary milling head
- Variable auto-feed to bevel both ferrous and non-ferrous materials
- Cutting inserts dedicated for optimal performance on different materials
- Easy access to milling head and cutting inserts
- Overload protection to prevent motor Damage
- SBM-500 streamlines workflow to maximise your production efficiency



Bevel width up to 30 mm



Workpiece height from 3 mm up to 100 mm



Edge Beveling



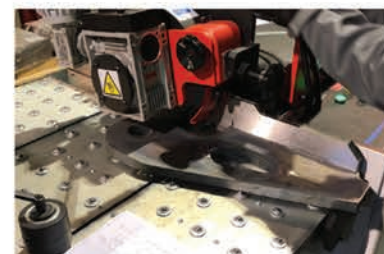
Bevel angles 15° - 60° continuous adjustment



Min. workpiece width 50 mm  
Min. workpiece length 150 mm



Pipe OD beveling from 50 mm up to 150 mm (option)

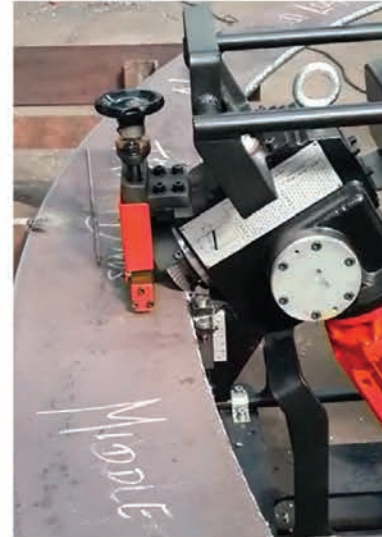


## ABM-14

### AUTO-FEED PLATE AND PIPE BEVELLER



-  Bevel width up to 14 mm
-  Facing off (option)
-  Min plate thickness 6 mm  
Max plate thickness 40 mm
-  Min plate width 55 mm
-  Top beveling
-  Bottom beveling
-  Bevel angles 30°, (option): 22.5°, 25°, 35°, 37.5°, 45°
-  Round plate beveling (option)
-  Pipe OD beveling  
Min. ID 100 mm (4")



#### Features & benefits:




- ABM-14 automatically runs along the edge of a long workpiece
- Two optional trolleys increase ergonomics, comfort and productivity
- Standard shearing cutter for machining stainless/alloved steel
- Two optional dedicated shearing cutters for carbon steel and aluminum
- Stationary operation is possible for machining small workpieces or pipes with ID > 100 mm (4")
- Additional vertical roller guide enables machining concave edges if curvature radius is 1500 mm or more
- ABM-14 is a low-noise machine



## ABM-28

### PORTABLE AUTO FEED MACHINE



-  Bevel width up to 35 mm
-  Facing off
-  Plate thickness max 35mm 36-70mm (option)
-  Bevel angle from 60 to minus 60°
-  Top beveling
-  Bottom beveling
-  Clad removal (option) depth up to 5 mm (0.2") width up to 25 mm (1")
-  J-groove beveling (option)



#### Features & benefits:

- Auto feed beveling on steel plates on top, face and bottom edges
- Continuously adjustable bevel angle between 60 and minus 60 degrees - no need to rotate or flip heavy material enhancing safety and reducing material handling time and expense
- Max. bevel width from 28 up to 35 mm depending on the bevelled angle
- Variable feed control for work on a variety of steel grades and thicknesses up to 35 mm as standard or optionally up to 70 mm thickness
- Motor overload protection to prevent motor damage
- Additional guide track are joinable to accomplish the required run length
- J-groove beveling available as option



## ABM-30

### AUTO TRAVEL TRACKLESS BEVELLER

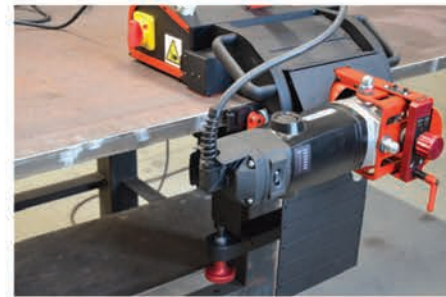


-  **Bevel width up to 30 mm**
-  **Facing off**
-  **Plate thickness max 60 mm**
-  **Bevel angle between -70 and 70°**
-  **Top bevelling**
-  **Bottom bevelling**



#### Features & benefits:






- 4-wheel drive eliminates a need for guide track
- Self-propelled machine for consistent bevel geometry from edge-to-edge
- Control panel indicates current work mode and gives safety and diagnostic information
- Capable of producing bevels up to 30 mm wide
- Infinitely adjustable bevel angle between -70 and +70 degrees
- Produces double-side bevels without having to flip the plate enhancing safety and reducing material handling time and expense
- Feedback-controlled overload system to prevent motor damage
- Semi-automatic drive stop at plate end

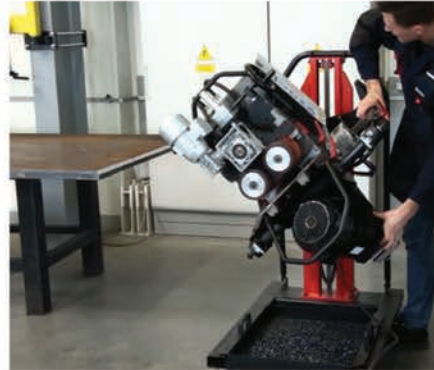


## ABM-50

### AUTO TRAVEL DOUBLE-SIDED BEVELLER

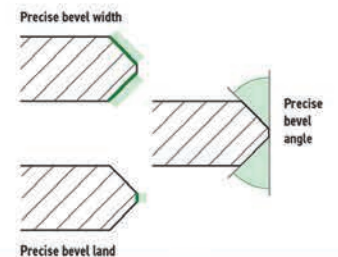
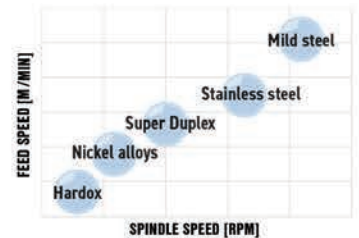


-  **Bevel width up to 50 mm / 45° up to 66 mm / 15°**
-  **Min plate thickness 8 mm Max plate thickness 80 mm**
-  **Bevel angles top 15° - 60°, bottom 15° - 60°**
-  **Top bevelling**
-  **Bottom bevelling**



#### Features & benefits:

- Auto-feed machining to increase ergonomics, comfort and productivity
- Bevel width up to 50 mm (2") at 45 degrees
- LCD display shows exact bevel geometry and cutting parameters in real time
- Precise adjustment of spindle speed and feed rate according to material grade, including stainless steel, duplex, aluminum, etc.
- 180° inversion allows for creation of a double-sided bevel – no need to rotate or flip heavy material reduces material handling time and expense
- Versatile and transportable on its own trolley
- Feedback-controlled overload system to prevent motor damage





## PB2 COMPACT PIPE BEVELLER



Pneumatic motor

Electric motor

Battery drive



Max wall thickness  
up to 8 mm



ID 19.5 - 38 mm  
ID 15.5 - 22 mm (option)  
ID 38 - 58 mm (option)



Facing off



Pipe OD beveling  
up to 48 mm  
up to 60.3 mm (option)

### Features & benefits:

- Machine covers a range of diameters from 15.5 mm ID up to 60.3 mm OD
- Self-centering expandable ID mounted mandrels provide quick and proper alignment to pipes or tubes prior to operation
- Innovative expansion sleeves reduce fitting time and improve work flow
- Standard and custom made tool bits available for creating various bevel angles
- Up to two tool bits can be mounted and work simultaneously to make weld prep operations fast and easy
- Can be operated with a high quality powerful pneumatic motor, top quality high torque electric motor or battery drive depending on site conditions and customer preference
- The end-user can choose from LIHD (High Density Lithium Ion) battery packs with capacities of 4.0 Ah, 5.5 Ah or 10.0 Ah, which have an extended lifespan, more power and longer operating time than standard lithium batteries



## PB5 PORTABLE PIPE BEVELLER



Pneumatic motor

Electric motor

Battery drive



Max wall thickness  
12 mm up to OD 114 mm



ID 32-107 mm  
25-32 mm (option)  
107-133 mm (option)



Facing off



Pipe OD beveling  
114 mm up to 140 mm (option)



J-groove beveling

### Features & benefits:

- Machine covers a range of diameters from 32mm ID up to 140 mm OD
- Self-centering expandable ID mounted mandrels provide quick and proper alignment to a pipe or a tube prior to use
- Up to three tool bits can be mounted to bevel, face and counter-bore simultaneously to make weld prep operations fast and easy
- Standard and custom made tool bits available for creating various bevel angles for V and J-groove preparation
- Optional small spindle disc and ratchet wrench enable pipe machining in difficult to access and space restricted areas
- Can be operated with a high quality Powerful pneumatic motor, top quality high torque electric motor or battery drive depending on site conditions and customer preference
- Choose from LIHD (High-Density Lithium Ion) battery packs with capacities of 4.0 Ah, 5.5 Ah or 10.0 Ah, which have an extended lifespan, more power and longer operating time than standard lithium batteries



## PB10

### PORTABLE PIPE BEVELLER



Pneumatic motor

Electric motor



Max. wall thickness 15 mm



ID 84-269 mm  
38-84 mm (option)  
or 270-349 mm (option)



Facing off



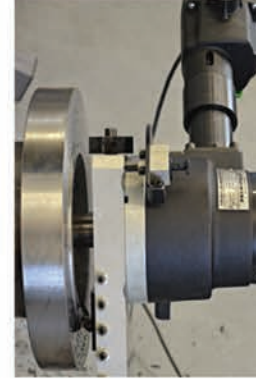
Pipe OD beveling



Pipe ID beveling



J-groove beveling (option)



#### Features & benefits:

- Heavy-duty, portable beveler designed to create a perfect weld prep edge prior to joining
- Bevel, face and counter-bore simultaneously
- Machine covers a range of diameters from 38 mm ID up to 355 mm OD
- Standard and custom made tool bits available for creating various bevel angles for V and J-groove preparation
- Up to three tool bits can be mounted to bevel, face and counter-bore simultaneously to make weld prep operations fast and easy
- Self-centering expandable ID mounted mandrels enables highly repeatable and consistent fit-up and can be rapidly deployed from one pipe to another to reduce cycle times and improve work flow
- It can be used efficiently by a single operator



## PB40 PBS

### STATIONARY PIPE BEVELLING MACHINE



Max bevel width 45 mm



Min. wall thickness 5 mm



Bevel angle from -60° to 60°



Pipe OD 200-1000 mm



Facing off



Pipe OD beveling



Pipe ID beveling



J-groove beveling



#### Features & benefits:

- 200 mm to 1000 mm diameter capacity to cover most of the common applications
- Continuously adjustable bevel angle between 0 and 60 degrees
- Able to bevel pipes made of carbon or stainless steel
- Optional oval pipe tracking attachment enables consistent land/root face thickness (available either with brand new machine or for retrofitting)
- Maximum allowed pipe weight up to 10,000 kg with optional steel rollers
- Overload protection to prevent motor damage
- PRO-40 PBS produces accurate bevels in a fraction of the time required by traditional single-point machining, saving time, money and improving accuracy

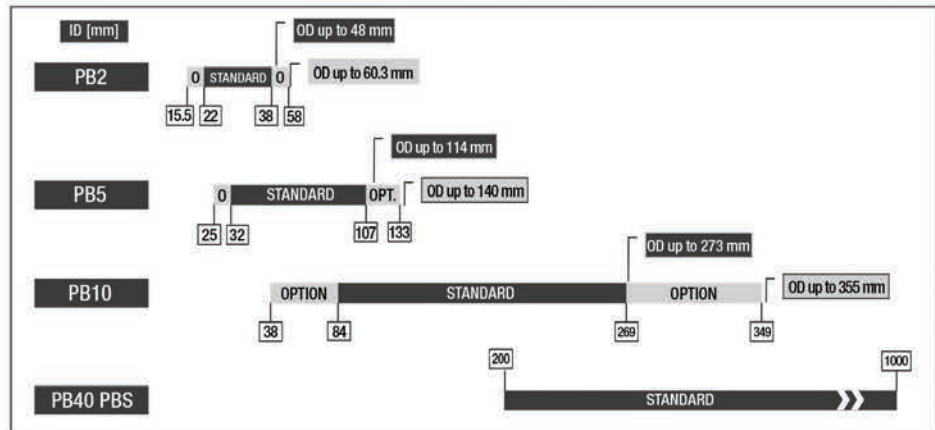


PLATE BEVELLERS FAMILY

	SINGLE	FACE-OFF	DOUBLE	J-GROOVE	RADIUS	ROUND	CLAD	OD	COUNTER SINKING
ABM-14	X		X					X	
ABM-28	X	X	X	X			X		
ABM-30	X	X	X						
ABM-50	X		X						
BM-18	X				X	X		X	X
BM-18A	X				X	X			X
BM-20 PLUS	X	X				X		X	
BM-21/21S	X	X						X	
BM-25	X	X					X		
SBM-500	X		X					X	

	BEVEL ANGLES	MAX BEVEL WIDTH	PLATE THICKNESS	MOTOR TYPE
ABM-14	22.5°, 25°, 30°, 35°, 37.5° or 45°	14 mm	From 6 mm up to 40 mm	Electric
ABM-28	- 60° to 0°; 0° to 60°	35 mm	Up to 35 mm (70 mm option)	Electric
ABM-30	- 70° to 0°; 0° to 70°	30 mm	From 8 mm up to 60 mm	Electric
ABM-50	- 60° to - 15°; 15° to 60°	50 mm	From 8 mm up to 80 mm	Electric
BM-18	22.5°, 30°, 37.5°, 45°, 55° or 60°	18 mm	Min. 2 mm	Electric
BM-18A	22.5°, 30°, 37.5°, 45°, 50°, 55° or 60°	18 mm	Min. 2 mm	Pneumatic
BM-20 PLUS	15° to 60° or 0° (option)	21 mm	Min. 2 mm	Electric
BM-21/21S	0° to 60°	21 mm	Min. 2 mm	Electric
BM-25	0°-90° (15°-75° recommended)	25 mm	Min. 2 mm	Electric
SBM-500	15° to 60°	30 mm	From 3 mm up to 100 mm	Electric

PIPE DIAMETER RANGE



PIPE BEVELLERS FAMILY

	OD BEVEL	FACE-OFF	ID BEVEL	J-GROOVE	FLANGE FACING
ABM-14	X	X			
ABM-28	X	X	X	X	
ABM-30	X	X	X	X	X
ABM-50	X	X	X	X	

	BEVEL ANGLES	PIPE WALL THICKNESS	MOTOR TYPE
ABM-14	F0°, B30°, B37.5°, B45°	Up to 8 mm	Electric, pneumatic, battery
ABM-28	F0°, J10°, IC15°, J15°, J20°, B30°, B37.5°, B45°	Up to 12 mm	Electric, pneumatic, battery
ABM-30	F0°, IC15°, J15°, J20°, B30°, IB30°, B37.5°, IB37.5°, B45°, IB45°	Up to 15 mm	Electric, pneumatic
ABM-50	0° to 60° or -60° to 0° (option)	Minimum 5 mm	Electric

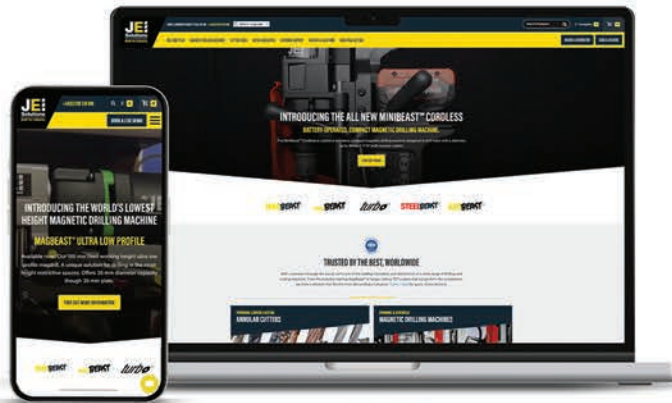
B - Bevel tool bit, F - facing tool bit, IB - internal beveling, IC - internal calibration tool bit, J - J-Groove tool bit

All information is subject to change without notice. 23.08

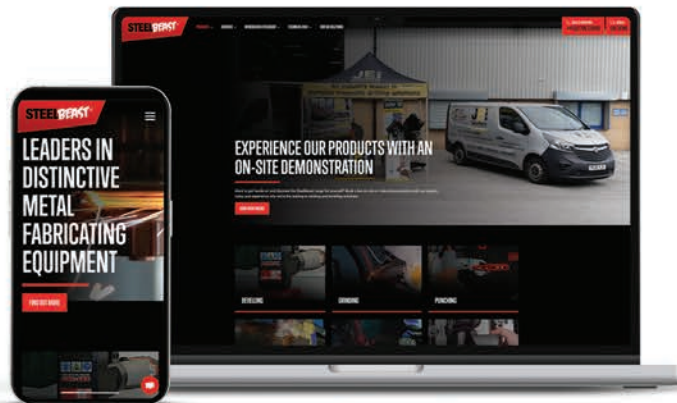


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