PLATE EDGE MILLING MACHINES
EM90 / EM60

PRODUCT BROCHURE

www.CLIMAXPORTABLE.com

CLIMAX
Portable Machining & Welding Systems
AN SPX GROUP BRAND

*The **Specialized Fabrication Equipment Group** (in short: **S.F.E. Group**) was founded in 2019 after the merger of three world leading OEM's in the field of pipe fabrication tooling and machinery: B&B Pipe and Industrial Tools LLC (USA), Mathey Dearman Inc. (USA) and TAG Pipe Equipment Specialists (UK). In a time span of 5 years, another 4 renowned and market leading companies were acquired and added to the **S.F.E. Group** portfolio: Axxair (France, 2022), Magnatech (USA, 2023), Climax (USA, 2023) and Sumner (USA, 2025).*

*The vision and philosophy of the **S.F.E. Group** is to offer globally a comprehensive innovative and cost-effective range of specialized fabrication, welding and machining equipment and derived rental solutions, for a wide range of applications within all critical industries, while optimizing performance, efficiency and safety.*

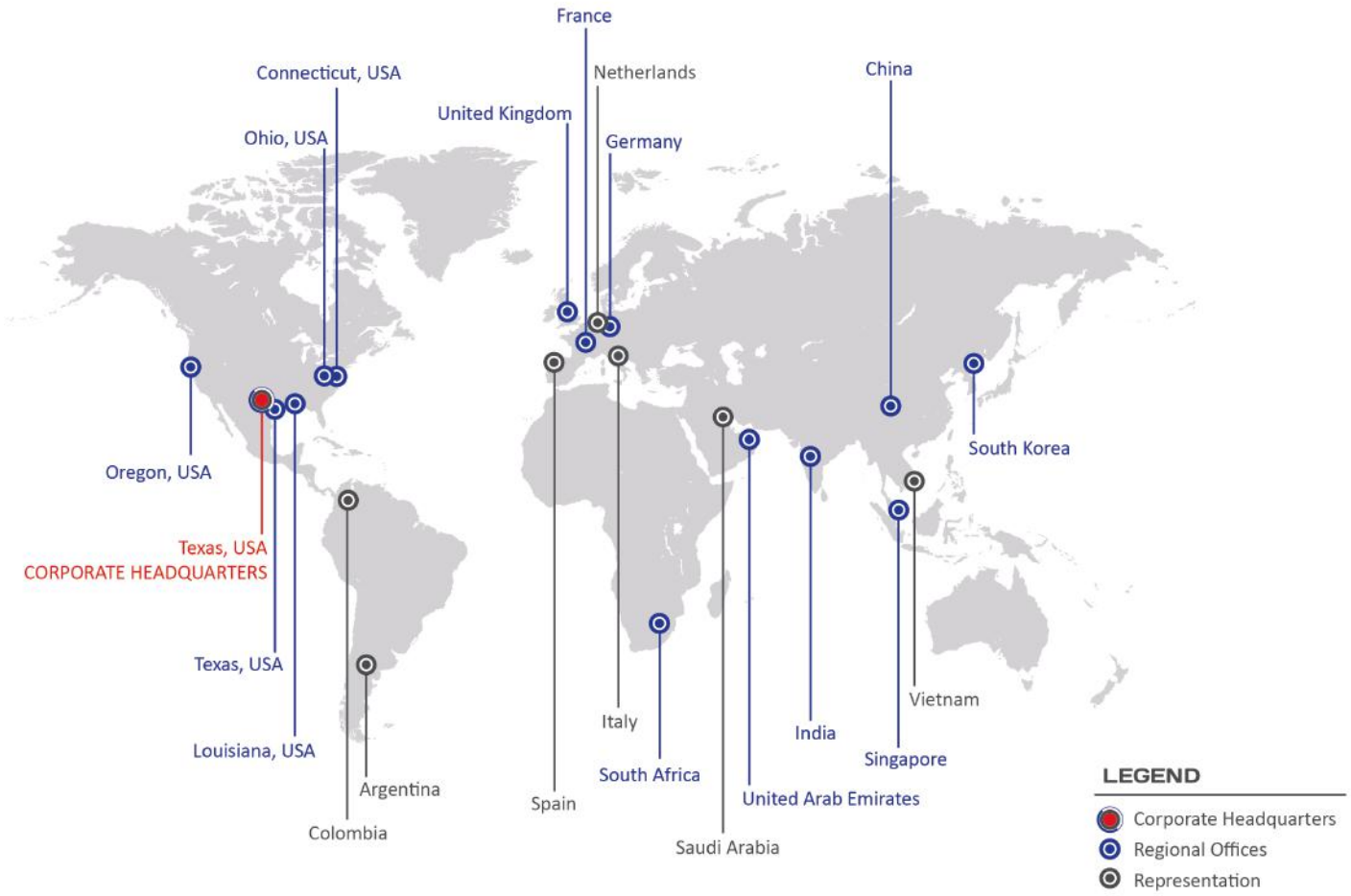
*Leveraging over 200 years of combined experience in engineering, manufacturing, and field applications, the **S.F.E. Group** is committed to driving innovation. Through continuous product development and strategic acquisitions, the **S.F.E. Group** is actively growing its portfolio and expanding its global presence to meet the demands of industries around the world. Currently, the **S.F.E. Group** consists of 12 complimentary brands, each supporting the others in delivering cutting-edge solutions.*

*With offices and warehousing on 5 continents, 400+ employees and more than 500 partnerships and distributors worldwide, **S.F.E. Group** prides itself on consistently offering the highest standards of both product quality and service locally to all its customers.*

S.F.E. Group looks forward to welcoming you into its global network as a partner, distributor or end user customer and remains at your disposal at any time.

Contact Americas: sales@sfe-brands.com
Contact International: sales-int@sfe-brands.com

S.F.E. GROUP GLOBAL PRESENCE



INTRODUCING CLIMAX

*The S.F.E. Group's brand **CLIMAX** has been the pioneer and foremost global manufacturer of portable machine tools since 1966, setting the standard with innovative, mission-critical solutions for nearly 60 years. As the original technology leader in portable machining, **CLIMAX** offers an unmatched range of equipment, including line boring, bore welding, flange facing, portable milling, plate bevelling and lathes. With this unrivalled suite of equipment and end-to-end solutions for mission-critical manufacturing and repair work, **CLIMAX** empowers solutions for a wide variety of industries such as Oil & Gas, Mining, Power Generation, Nuclear, Renewable Energy, Transport, Maritime, Aerospace, and Defense.*

*Embedded within and supported by the strength of 11 complementary brands, S.F.E. Group's global reach, innovative product portfolio, and over 200 years of combined expertise, **CLIMAX** continues to advance the portable machine tool industry with cutting-edge solutions. As the only global OEM that never competes with its customers, **CLIMAX** remains committed to offering the best value while upholding the highest standards of safety and quality. **CLIMAX** is driving innovation, ensuring its continued future global leadership in portable machining.*

*Known for delivering the highest quality tools and an exceptional customer experience, **CLIMAX** is always nearby and offered via the global S.F.E. Group network with offices and warehousing on five continents and a network of over 350 sales locations and distributors worldwide. The complete **CLIMAX** portfolio can be consulted on the dedicated website: **www.CLIMAXPORTABLE.com**.*

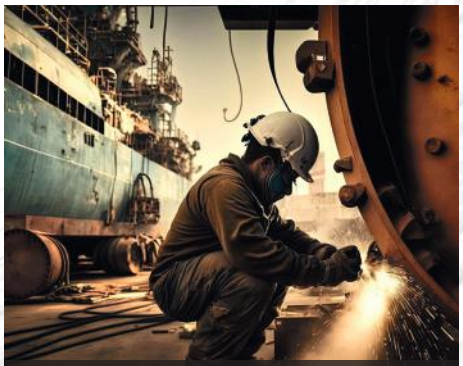
INDUSTRIES SERVED

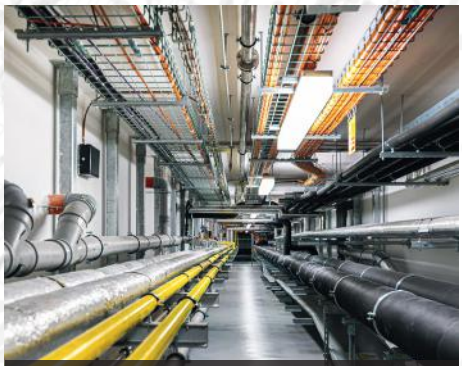
CHEMISTRY

INFRASTRUCTURE

MANUFACTURING & FABRICATION

OIL & GAS


MARITIME


UTILITIES

OUR BRANDS

CLIMAX · TAG PIPE EQUIPMENT SPECIALISTS · H&S TOOL · MATHEY DEARMAN · AXXAIR · MAGNATECH · B&B SUMNER · CALDER · BORTECH · PPM PIPE PURGE MASTERS · FIT-UP PRO By Mathey Dearman · SUMNER MATERIAL LIFTS & CARTS

Our group policy is one of continuous improvements and acquisitions. Products and data tables are subject to change and may vary from those illustrated. Copyright © 2025 Specialized Fabrication Equipment Group, All rights reserved.

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EM90 PLATE EDGE MILLING MACHINE

0.236 - 2.362" / 6 - 60 mm plate thickness

CLIMAX
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EM90 PLATE EDGE MILLING MACHINE

0.236 - 2.362" / 6 - 60 mm plate thickness

- **Functions:** Plate edge milling 0 - 90º (V and Y bevel), plate inconel clad removal (max 3" / 75 mm)
- **Materials:** Any kind of steel and exotic alloy, aluminum products, aluminum alloy and copper
- **Power:** Electric (400 v or 480 v)

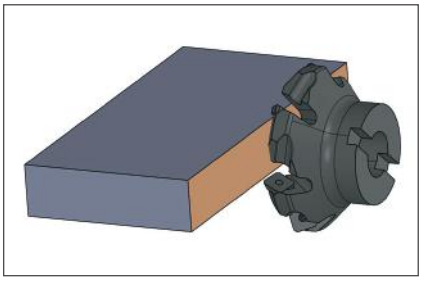
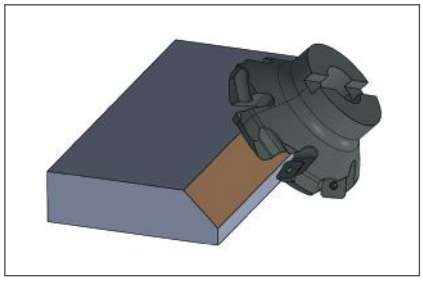
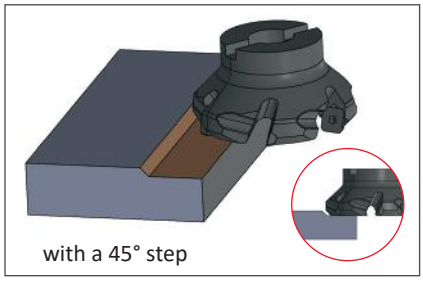
CLIMAX' automatic plate edge milling machine offers high efficiency and precision, making it the ideal solution for a variety of industries. Designed for cold milling, the machine ensures a non-oxidized surface, meeting the stringent requirements of the welding industry. Its milling cutter delivers an exceptional surface finish, perfect for preparing welding edges.

Easy to operate and environmentally friendly, the machine processes a wide range of materials, including iron, chromium iron, fine-grained steel, aluminum, copper, and aluminum alloys.

This versatile machine is widely used in engineering machinery, steel structures, pressure vessels, shipbuilding, and the aerospace industry, delivering unmatched quality and efficiency.

MACHINE BEVEL TYPES

With its adjustable angle ranging from 0 to 90 degrees, the machine is versatile and suitable for various applications.

FACING	V AND Y BEVELLING	CLAD REMOVAL *
		 with a 45° step

*** For a 90° clad removal with or without radius, a special milling head and inserts are required (available as an accessory).**

FEATURES

EASY SET-UP

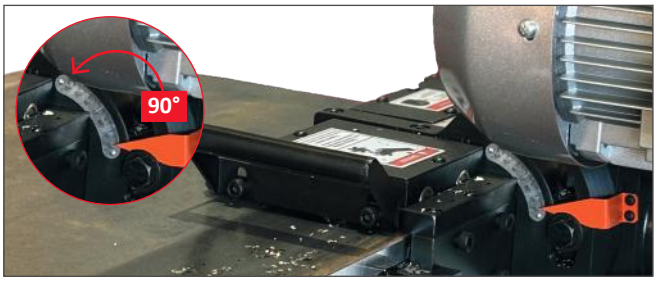
The machine height can be easily adjusted to match the height of the plate using a convenient manual handle, ensuring optimal alignment for precise bevelling.

Additionally, the electrical clamping securely clamps the machine onto the plate, providing a stable and reliable setup for efficient operation.

AUTOMATIC FEED

The automatic feed feature enables precise, hands-free bevelling at speeds up to 1500 mm/min, with real-time adjustment to feed and cutting speeds displayed on the machine's screen for optimal performance and flexibility.

EASY ANGLE ADJUSTMENT



The integrated angle ruler allows an easy angle adjustment, ranging from 0 to 90°. This feature allows operators to quickly and accurately set the desired bevel angle, ensuring precision and repeatability in edge preparation.

METAL SWIVEL CASTORS

The machine base is fitted with four metal swivel castors. The metal housings and wheels assure smooth travelling along the plate during bevelling, as the wheels are melt free.

STANDARD TRANSPORTATION BOX

As standard the machine is delivered in a protective custom built wooden box.

OPTIONAL TRANSPORTATION BOX

The machine can also be delivered in a protective custom built wooden box with a ramp. This facilitates easy loading and unloading of the machine.

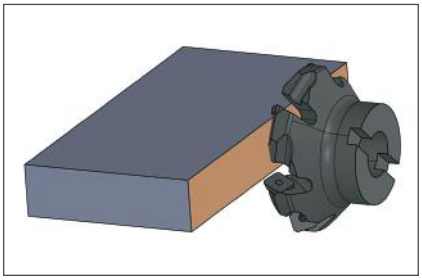
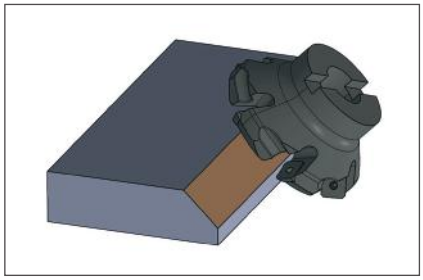
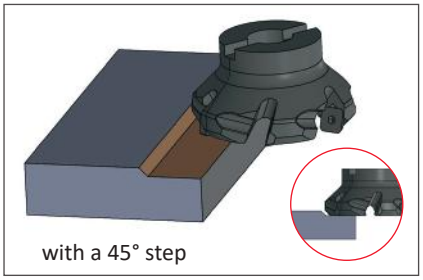
PART NO. EM90RB

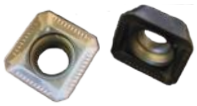
STANDARD HIGH SPEED MILLING HEAD

The machine is standard equipped with a high speed milling head with 6 cutting inserts fixed with screws. Depending on the plate material, the milling head can be fitted with different insert types.

The standard milling head is used for facing, bevelling, clad removal with 45° step.

PART NO. CL60B06R

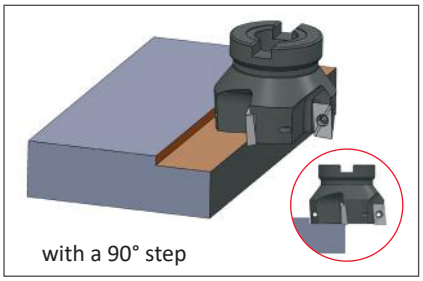
FACING	V AND Y BEVELLING	CLAD REMOVAL *
		 with a 45° step

TOOLS			
INSERTS FOR FACING - BEVELLING - CLAD REMOVAL 45° STEP			
	Inserts for carbon steel (box of 10) **PART NO. CTI1204**		Inserts for stainless steel (box of 10) **PART NO. CTI1205**

OPTIONAL 90° CLAD REMOVAL MILLING HEAD

As an accessory, the 90° clad removal milling head can be fitted on the machine. This milling head has 5 inserts fixed with screws. Depending on the clad material, the milling head can be fitted with different insert types

PART NO. CL400R-63

CLAD REMOVAL *
 with a 90° step

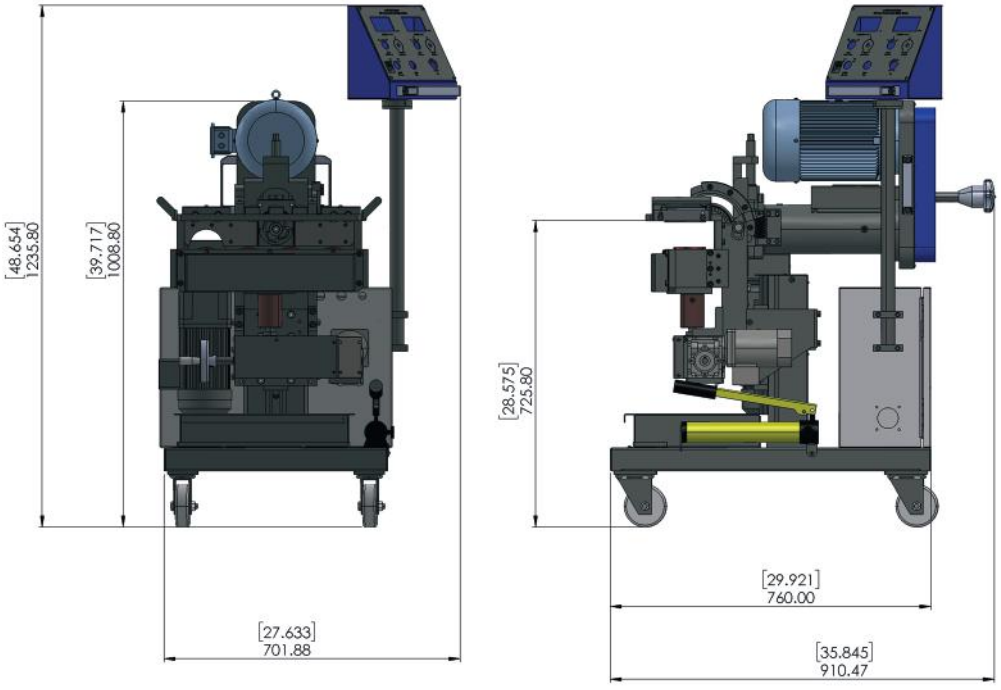
TOOLS			
SPECIAL INSERTS FOR 90° CLAD REMOVAL			
	Inserts for carbon and stainless steel (box of 10) **PART NO. CTI1904**		Inserts for inconel (box of 10) **PART NO. CTI1905**

*** For a 90° clad removal with or without radius, a special milling head and inserts are required (available as an accessory).**

TECHNICAL SPECIFICATIONS

DESCRIPTION	MEASUREMENT	ELECTRIC 400V	ELECTRIC 480V
Part number	n/a	EM90400	EM90480
Locking plate range	inch / mm	0.236 - 2.362" / 6 - 60 mm	0.236 - 2.362" / 6 - 60 mm
Max bevel width	inch / mm	1.77" / 45	1.77" / 45
Min plate width	inch / mm	7.87" / 200	7.87" / 200
Bevel angle	degree	0 - 90	0 - 90
Idle speed	rpm	525 - 1050	525 - 1050
Torque	Nm	35	35
Feed speed	ft/min / mm /min	0 - 59 / 0 - 1500	0 - 59 / 0 - 1500
Max operating temperature	°C	55	55
Max acoustic radiation	dB	75	75
Electric motor power	kW	4	4
Voltage	V	400 V 3 phase	480 V 3 phase
Electric frequency	Hz	50 / 60	50 / 60
Net weight	lbs / kg	578 / 262	578 / 262
Packaging dimensions (standard box)	inch / mm	40 x 31 x 53.1 / 1,000 x 800 x 1,350	40 x 31 x 53.1 / 1,000 x 800 x 1,350
Packing weight (standard box)	lbs / kg	873 / 396	873 / 396
Packaging dimensions (box with ramp)	inch / mm	44 x 45 x 64 / 1,140 x 1,150 x 1,620	44 x 45 x 64 / 1,140 x 1,150 x 1,620
Packing weight (box with ramp)	lbs / kg	873 / 396	873 / 396

DIMENSIONS



- All complete machines are supplied with: machine, milling head with 6 inserts, a box with tools, metal wheels
- A protective custom built wooden box is supplied
- Drawings, instruction manual and warranty certificate are also supplied as standard

EM60 PLATE EDGE MILLING MACHINE

0.236 - 3.150" / 6 - 80 mm plate thickness

CLIMAX
Portable Machining & Welding Systems
AN SPE GROUP BRAND

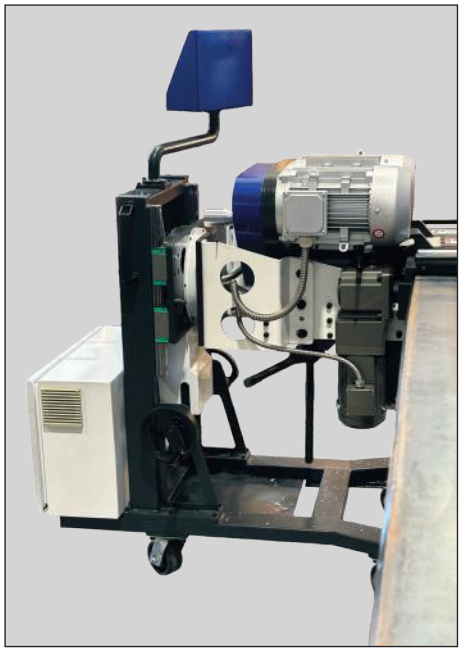
EM60 PLATE EDGE MILLING MACHINE

0.236 - 3.150" / 6 - 80 mm plate thickness

- **Functions:** Plate edge milling 0 - 60º (V, Y, K and X bevel)
- **Materials:** Any kind of steel and exotic alloy, aluminum products, aluminum alloy and copper
- **Power:** Electric (400v or 480v)

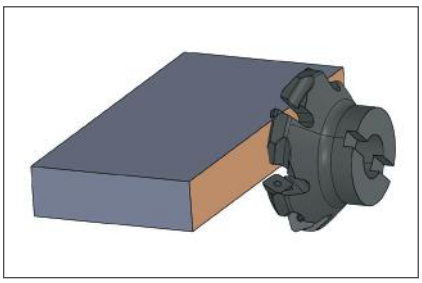
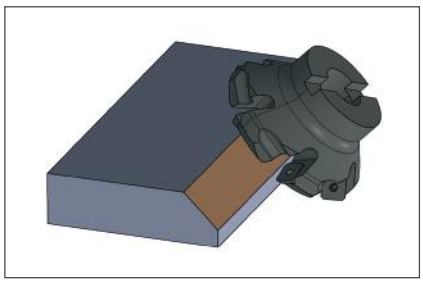
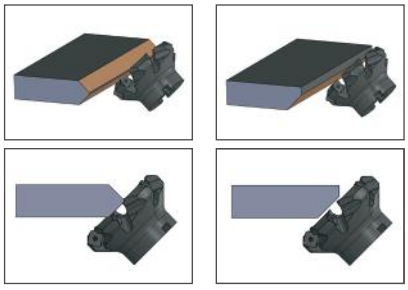
CLIMAX' automatic plate edge milling machine offers high efficiency and precision, making it the ideal solution for a variety of industries. Designed for cold milling, the machine ensures a non-oxidized surface, meeting the stringent requirements of the welding industry. Its milling cutter delivers an exceptional surface finish, perfect for preparing welding edges. This advanced machine can bevel on both sides of the plate thanks to the milling head's ability to rotate 180° and the ability to travel in both directions along side the plate.

This versatile machine is widely used in engineering machinery, steel structures, pressure vessels, shipbuilding, and the aerospace industry, delivering unmatched quality and efficiency.



MACHINE BEVEL TYPES

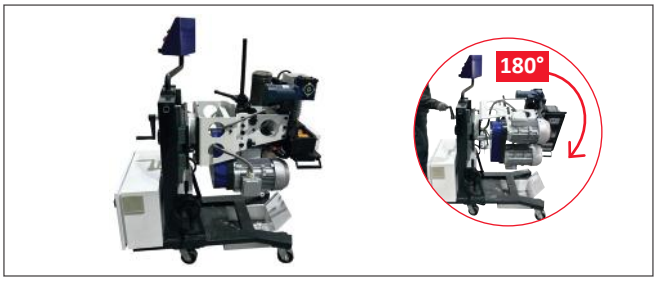
With its adjustable angle ranging from 0 to 60 degrees and the reversible feature, the machine is versatile and suitable for various applications.

FACING	V AND Y BEVELLING	X AND K BEVELLING
		

*** For a 90° clad removal with or without radius, a special milling head and inserts are required (available as an accessory).**

FEATURES

REVERSIBLE



With a fast operation that allows the machine to turn through 180°, it can bevel both sides of a plate, significantly boosting productivity. It can then create all kind of bevels : V, Y X, and K shaped bevels, without manipulating the plate. The machine is able to travel in both directions along side the plate, offering higher efficiency and reducing set up time.

EASY SET-UP

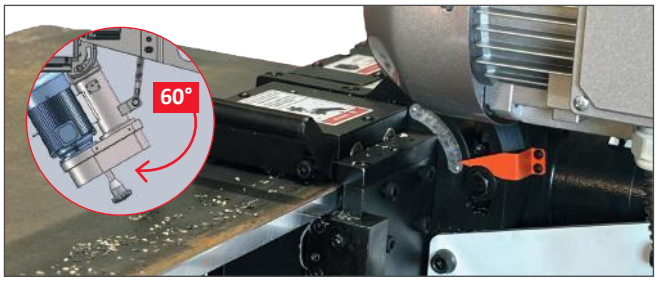
The machine height can be easily adjusted to match the height of the plate using a convenient handle, ensuring optimal alignment for precise beveling.

Additionally, the electrical clamping securely clamps the machine onto the plate, providing a stable and reliable setup for efficient operation.

AUTOMATIC FEED

The automatic feeding system enables precise, hands-free bevelling at speeds up to 1500 mm/min, with real-time adjustments to feed and cutting speeds displayed on the machine's screen for optimal performance and flexibility.

EASY ANGLE ADJUSTMENT

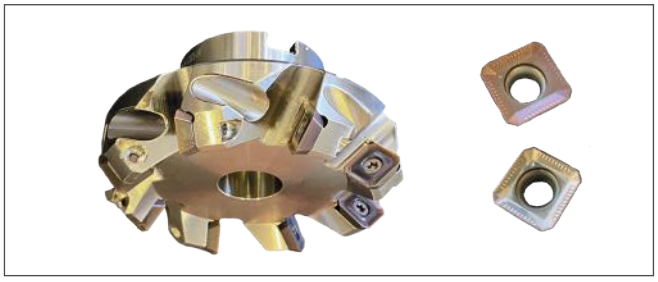


The integrated angle ruler allows an easy angle adjustment, ranging from 0 to 60°. This feature allows operators to quickly and accurately set the desired bevel angle, ensuring precision and repeatability in edge preparation.

METAL SWIVEL CASTORS

The machine base is fitted with four metal swivel castors. The metal housings and wheels assure smooth travelling along the plate during bevelling, as the wheels are melt free.

HIGH SPEED MILLING HEAD

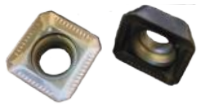


The machine is equipped with a high speed milling head with 8 cutting inserts fixed with screws. Depending on the plate material, the milling head can be fitted with different insert types.

PART NO. CL80B06R

TOOLS

INSERTS FOR FACING - BEVELLING - CLAD REMOVAL 45° STEP

	Inserts for carbon steel (box of 10) **PART NO. CTI1204**		Inserts for stainless steel (box of 10) **PART NO. CTI1205**

STANDARD TRANSPORTATION BOX

As standard the machine is delivered in a protective custom built wooden box.

OPTIONAL TRANSPORTATION BOX

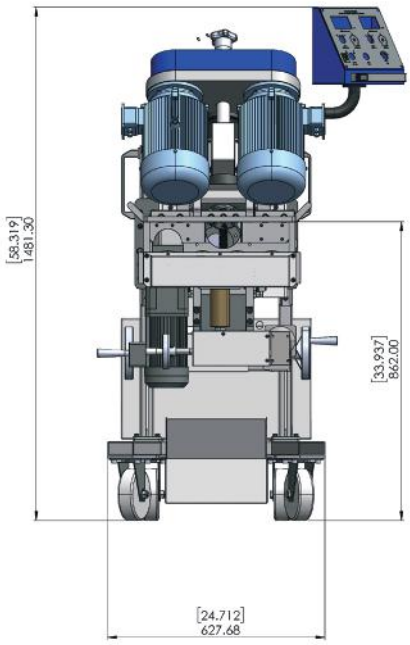
The machine can also be delivered in a protective custom built wooden box with a ramp. This facilitates easy loading and unloading of the machine.

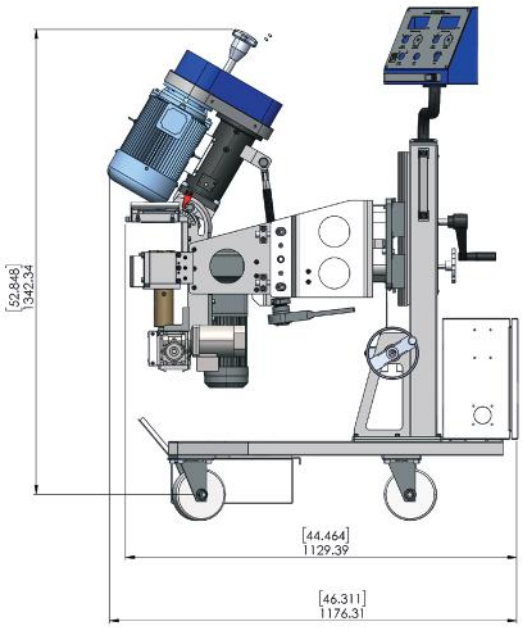
PART NO. EM60RB

TECHNICAL SPECIFICATIONS

DESCRIPTION	MEASUREMENT	ELECTRIC 400V	ELECTRIC 480V
Part number	n/a	EM60400	EM60480
Locking plate range	inch / mm	0.236 - 3.150" / 6 - 80 mm	0.236 - 3.150" / 6 - 80 mm
Max bevel width	inch / mm	1.77" / 45	1.77" / 45
Min plate width	inch / mm	7.87" / 200	7.87" / 200
Bevel angle	degree	0 - 60	0 - 60
Idle speed	rpm	525 - 1050	525 - 1050
Torque	Nm	35	35
Feed speed	ft/min / mm /min	0 - 59 / 0 - 1500	0 - 59 / 0 - 1500
Max operating temperature	°C	55	55
Max acoustic radiation	dB	75	75
Electric motor power	kW	6	6
Voltage	V	400 V 3 phase	480 V 3 phase
Electric frequency	Hz	50 / 60	50 / 60
Net weight	lbs / kg	773 / 351	773 / 351
Packaging dimensions (standard box)	inch / mm	49.2 x 31 x 58.3 / 1,250 x 800 x 1,480	49.2 x 31 x 58.3 / 1,250 x 800 x 1,480
Packing weight (standard box)	lbs / kg	1,137 / 516	1,137 / 516
Packaging dimensions (box with ramp)	inch / mm	53 x 44 x 68 / 1,350 x 1,130 x 1,720	53 x 44 x 68 / 1,350 x 1,130 x 1,720
Packing weight (box with ramp)	lbs / kg	1,137 / 516	1,137 / 516

DIMENSIONS





- All complete machines are supplied with: machine, milling head with 8 inserts, box with tools, metal wheels
- A protective custom built wooden box is supplied
- Drawings, instruction manual and warranty certificate are also supplied as standard

GLOBAL LEADER IN SPECIALIZED MACHINING, WELDING AND FABRICATION EQUIPMENT

SPECIALIZED FABRICATION EQUIPMENT GROUP

Contact Americas
sales@sfe-brands.com

Contact International
sales-int@sfe-brands.com

CLIMAX · TAG PIPE EQUIPMENT SPECIALISTS · H&S TOOL · MATHEY DEARMAN · AXXAIR · MAGNATECH · B&B SUMNER · CALDER · BORTECH · PPM PIPE PURGE MASTERS · FIT-UP PRO By Mathey Dearman · SUMNER MATERIAL LIFTS & CARTS

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