



SYGMATM

PORTABLE MACHINES & BOLTING SOLUTIONS

ALPHA
- SERIES -

ALPHA-1 12-60

CUTTING FEED RATES
POSITION
1 0.16mm
2 0.25mm
3 0.46mm
4 0.84mm

IN-OUT-N

SPARE
BREAK PIN
INSIDE

1-2-3-4-N

ION 4-1-10

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GAMECHANGERS IN FLANGE FACING INDUSTRY

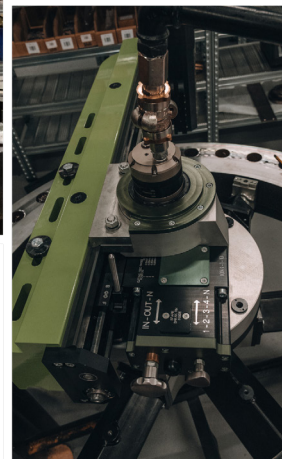
Alpha-I 12-60 revolutionizes flange facing with its innovative features including an automatic toolpost, stroke limiter and ION-4 gearbox enabling easy setup and operation for achieving multiple surface finishes with precision.

ION-4 gearbox

The heavy duty Ion-4 gearbox is a new innovation on the market with 4 different axial feed options resulting in different surface finishes. With an incorporated spare part kit in the design, an operator has every tool available to quickly repair in the gearbox if required. The Ion-4 gearbox system allows the cutting tool travel in both directions providing an in & out feed.



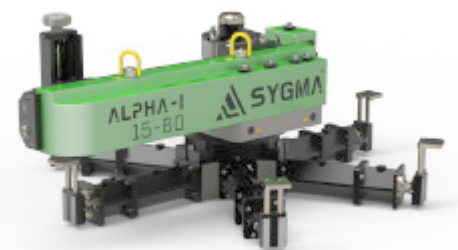
- MULTIPLE SURFACE FINISHES
- EASY SETUP & OPERATION
- ION-4 GEARBOX
- AUTOMATIC TOOLPOST
- NO-ROW CLAMPING FEEDS
- EASY LEVELLING



SPECIFICATIONS

Operational Data	Min	Max
Clamping capacity	Ø 300 mm	Ø 1358 mm
	Ø 12"	Ø 54"
Machining capacity	Ø 300 mm	Ø 1514 mm
	* Ø 12"	* Ø 60"

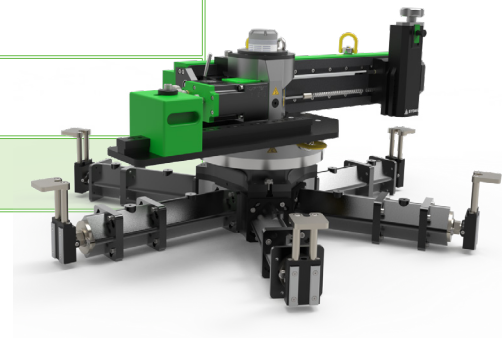
* based on neutral cutting tool



Dimensional Data			
Case dimensions	Total case weight	Overall weight machine without base	Overall height machine
1200 x 840 x 840 mm	+/- 410 kg	296 kg	545 mm (21.46")



Motor Data	
Pneumatic	
Motor Power	2715 W (3,64 HP)
Air Consumption	2800 l / min
Air Supply Pressure	6,2 Bar
Electric	
Motor Power	1,5 kW
Voltage	230 V
Frequency	50 Hz
Hydraulic	
To be confirmed	



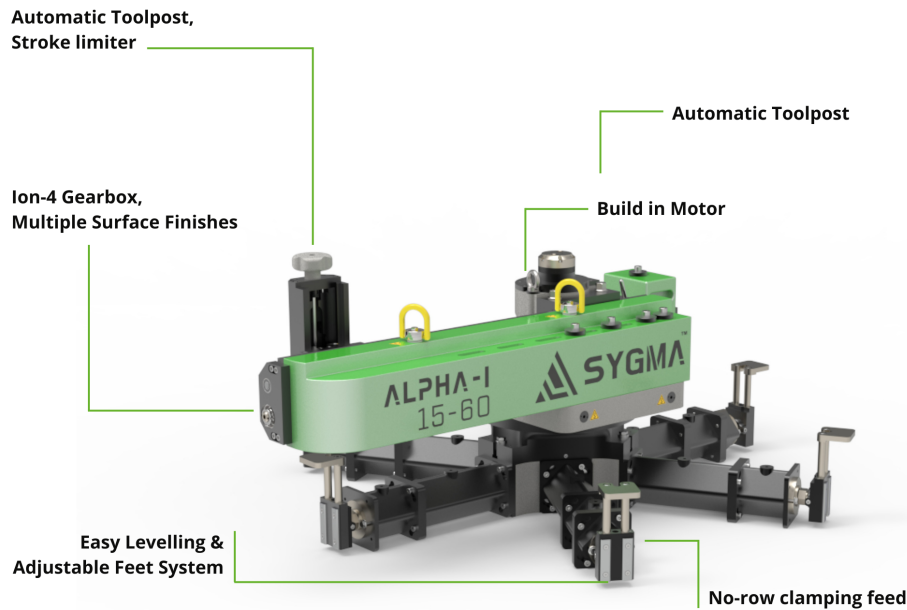
OPTIONS

Manual Toolpost
Automatic Toolpost

ACCESSORIES

Tubesheet Mounting Kit
Tubesheet Backfacing Kit
Tubesheet Welding Kit





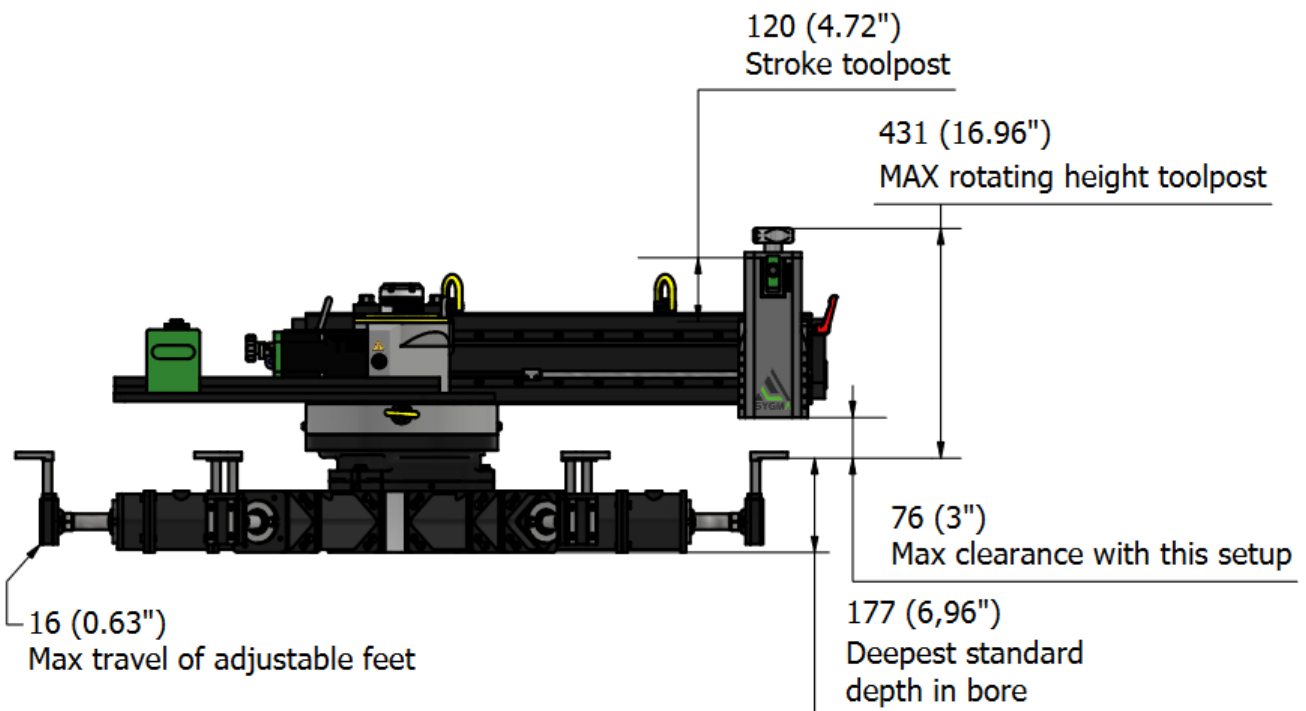
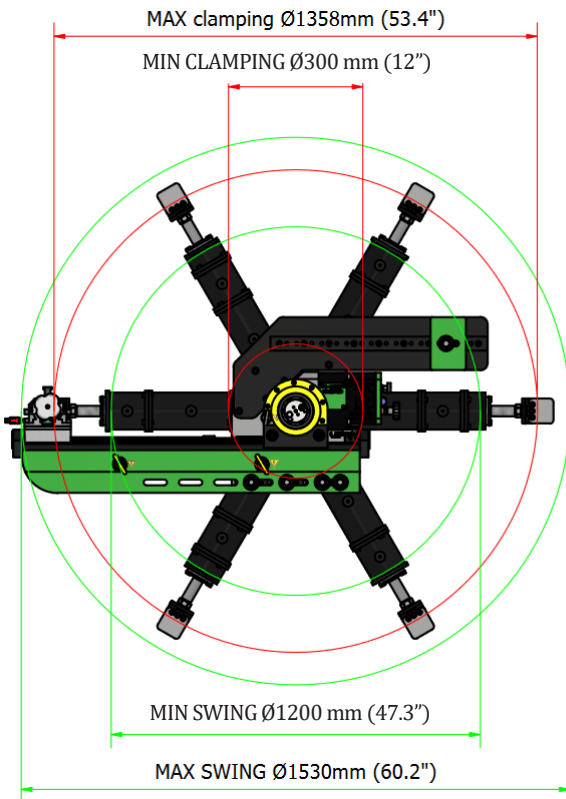

APPLICATIONS

The Alpha-I 12-60 flange facer is versatile and suitable for a variety of positions:

- **Horizontal Flange Facing:** For precise machining of horizontal flanges in pipelines and tank outlets. This tool can also be used for machining flanges in an inverted position.
- **Vertical Flange Facing:** Ideal for vertical flanges, such as those found in standing tanks and piping systems.
- **Inclined Flange Facing:** Suitable for flanges in inclined positions, often encountered in specific constructions and equipment.

Industry-Specific Applications:

- **Oil and Gas:** Efficient for maintenance of pipelines and drilling rigs.
- **Petrochemical:** Essential for repairs and maintenance of process equipment.
- **Power and Utilities:** Suitable for turbines and other energy-related equipment.
- **Shipbuilding:** For machining flanges in ship engines and piping systems.
- **Food and Beverage:** Ideal for stainless steel flanges in hygienic processes.
- **Water Treatment:** For flanges in water purification plants.



THE NEXT GENERATION OF ON-SITE MACHINING AND BOLTING SOLUTIONS

Sygma™ stands out for its unwavering focus on **precision** and **reliability**, even in demanding environments. Our products are meticulously crafted for industrial use, exceeding industry standards. Built on the philosophy of modularity, they offer maximum adaptability and durability. Backed by industry-leading Belgian engineering, Sygma™ empowers you to achieve your goals confidently and effortlessly.

Sygma™ Custom Product Development Services

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