

US80 Pipe Beveling Machine

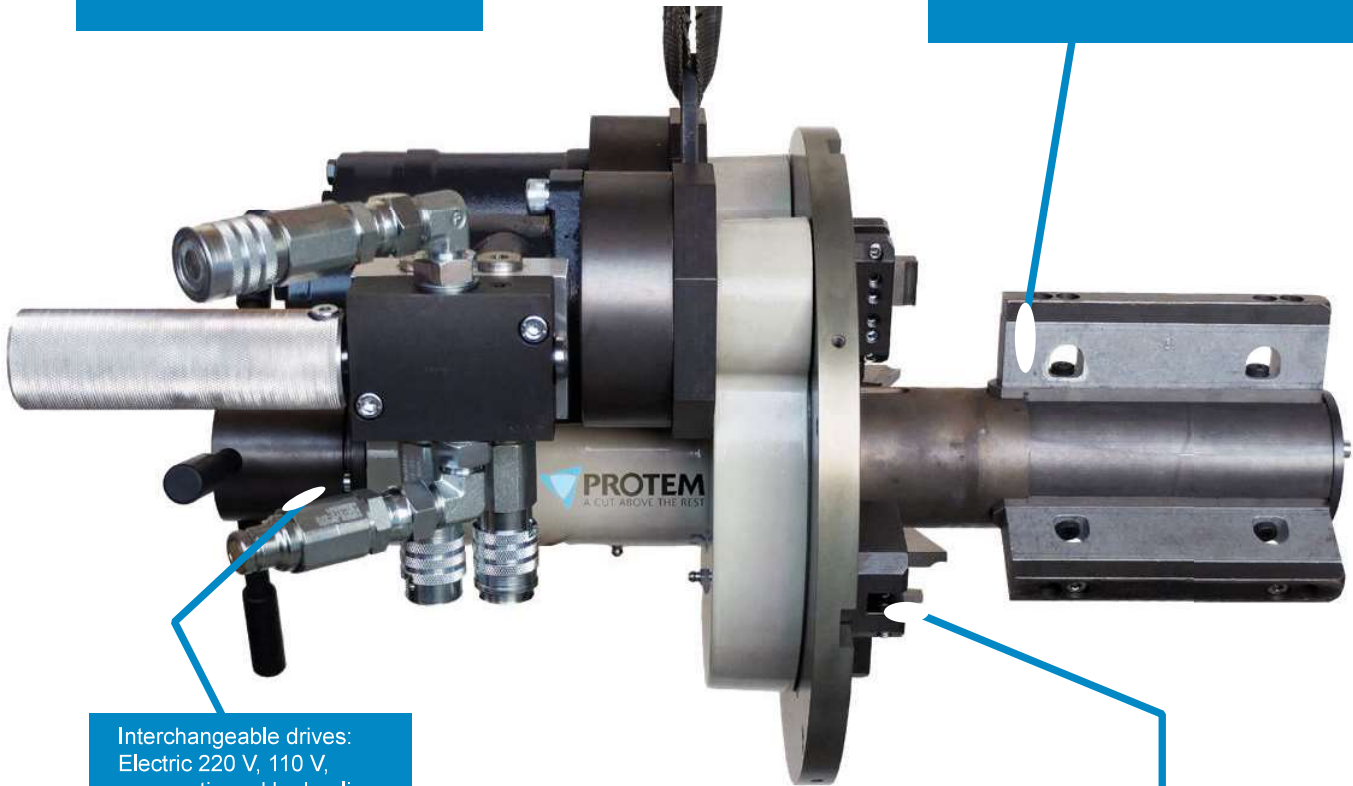
Rugged, dependable,
versatile

Different configurations are possible to
suit different types of applications.

Clamping jaws are available in several
different configurations.

Additional clamping jaws extend the
capacity of the machine.

Several clamping options are available
for specific applications. For example,
the clamping can be done automatically.



Interchangeable drives:
Electric 220 V, 110 V,
pneumatic and hydraulic

The PROTEM US-SERIES will
perform repeatable high quality
weld preparations on all types of
materials including mild, chrome,
stainless steel, duplex, super
duplex, copper-nickel alloy steel,
inconel, P91, aluminium, copper
exotic alloys..

Up to four tool-bits can be
mounted so that machining
operations, such as facing,
beveling and counterboring can
be carried out simultaneously.

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US80 Pipe Beveling Machine

Standard Capacity: 80mm - 355mm (3.149" - 13.976")

Extended Capacity: 80mm - 406.4mm (3.149" - 16")



US80 with hydraulic drive

The US80 portable tube and pipe heavy duty beveler combines durability, reliability, efficiency and versatility in one machine, providing a safe and easy use for all operators. The standard tool-plate will accept multiple tool-bits, allowing up to four simultaneous machining operations. Such operations may include 30°, 37°30, 45° bevels with or without land, J-bevels, compound bevels, facing, counterboring operations, etc.

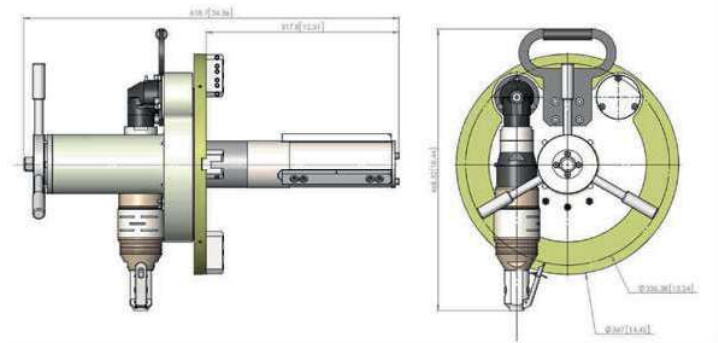
The US80 heavy duty beveler will perform repeatable high quality weld preparations on all types of materials including mild steel, chrome, stainless steel, duplex, super duplex, copper-nickel alloy steel, inconel, P91, aluminium, copper and exotic alloys. It can be either pneumatically, electrically or hydraulically driven. The tool-bits can be changed and adjusted very quickly. Carbide tool inserts may also be used.

| Beveling | Squaring | Counterboring | Cut to length | Weld Joint Removal | Coating Removal | Saddles | Surfacing |
|----------|----------|---------------|---------------|--------------------|-----------------|---------|-----------|
| ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ |

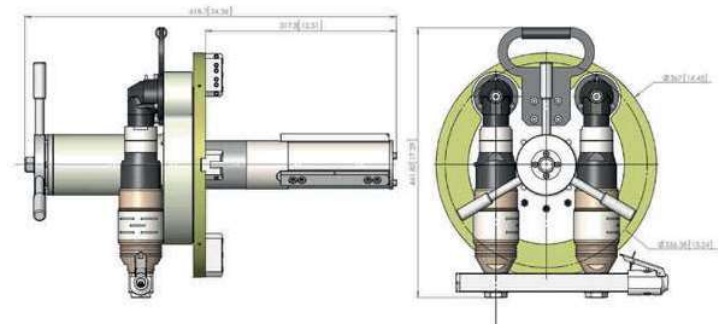
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Advantages:

- Transportable
- Powerful Machining Equipment
- Easy and Safe use for the Operators
- No Heat Affected Zone
- High Accuracy
- Fast and easy mounting
- The tool-bits can be changed and adjusted very quickly
- Adapted for works in tight spaces
- The machine can be used in all positions: vertical, horizontal, over head
- Versatile Cutting Head: the tool-holder plate can accept up to 4 tool-bits for simultaneous machining operations (land, bevel, counterboring, j prep)
- Smooth and Burr-Free Surface Finish
- No vibration during the machining process



Dimensions single pneumatic drive



Dimensions dual pneumatic drive

US80 Pipe Beveling Machine

Technical Features:

| | |
|---|---|
| Specific shapes & angles | Facing 90°, bevel 30°, 37°30, 45°, counterbore, J-bevel, other on request |
| Clamping | Manual with a key |
| Feed stroke | 60 mm (2.362") |
| Expansion | 25 mm (0.984") |
| Cutting head gear drive | 16 rpm off-load speed 11 rpm nominal speed. Approximate rotation speed according to air pressure and air flow |
| Single pneumatic drive | 1,47 kW, 6 bar (87 psi), 1800 l/min (63 cfm) |
| Double pneumatic drive | 2 x 1,47 kW, 6 bar (87 psi), 2 x 1800 l/min (2 X 63 cfm) |
| Electric drive | 220 V (2200 W) 110 V (1800 W) |
| Pneumatically driven machines have to be used with a lubricating filter. Recommended option: regulation valve. | |

| Order No. | Description |
|--------------|--|
| US80-1000 | Heavy Duty Pipe Facing Machine with dual pneumatic drive, for Ø 3.149" - 13.976" (80mm - 355mm) |
| US80-1002 | Heavy Duty Pipe Facing Machine with pneumatic drive, for Ø 3.149" - 13.976" (80mm - 355mm) |
| US80-1020 | Heavy Duty Pipe Facing Machine with electric drive 220V, for Ø 3.149" - 13.976" (80mm - 355mm) |
| US80-1060 | Heavy Duty Pipe Facing Machine with dual hydraulic drive and regulation valve, for Ø 3.149" - 13.976" (80mm - 355mm) |
| US80-1062 | Heavy Duty Pipe Facing Machine with hydraulic drive, for Ø 3.149" - 13.976" (80mm - 355mm) |
| US80-1064 | Heavy Duty Pipe Facing Machine with single hydraulic drive and regulation valve, for Ø 3.149" - 13.976" (80mm - 355mm) |
| US80-1066 | Heavy Duty Pipe Facing Machine with single hydraulic drive, for Ø 3.149" - 13.976" (80mm - 355mm) |
| US80-1080 | Heavy Duty Pipe Facing Machine with brushless electric drive --Three-Phase Motorization-- Please indicate the required voltage and frequency for your application, For Ø 3.149" - 13.976" (80mm - 355mm) |
| US80DSB-1000 | Heavy Duty Pipe Facing Machine with dual pneumatic drive, regulation valve and dual bearing (higher accuracy) for Ø 3.149" - 13.976" (80mm - 355mm) |
| US80DSB-1060 | Heavy Duty Pipe Facing Machine with dual hydraulic drive, regulation valve and dual bearing (higher accuracy) for Ø 3.149" - 13.976" (80mm - 355mm) |

Applications:



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Use On-Site or in Workshop:



US80 Crates:

| Order No. | Description |
|--------------|---|
| US80-K01 | Transport crate for US80 pneumatic / hydraulic |
| US80-K02 | Transport crate for US80 pneumatic / hydraulic + cover |
| US80-K03 | Transport crate for US80E |
| US80-K04 | Transport crate for US80E-BRUSHLESS |
| US80-K05 | Transport crate for US80 in stainless steel for pneumatic / hydraulic |
| US80-K06 | Transport crate for US80-ASB |
| US80-K07 | Transport crate for copying carriage for US80 |
| US80PR/C-K01 | Transport box for US80-EMA-NG N°1 |

US80 Elbow Mandrels:

| Order No. | Description |
|---------------|--|
| US80PR/C-1001 | Elbow mandrel assembly EMA for US80 for Ø 3.149" - 6.224" (80mm - 158,1mm) |
| US80PR/C-1002 | Elbow mandrel assembly EMA for US80 for Ø 5.905" - 10.465" (150mm - 265,8mm) |



US80 Further Options:

| Order No. | Description |
|-----------|---|
| US80-2400 | Flange resurfacing module for flanges from 3,9" to 24" OD. Implementation of a flange facing attachment on a US80 to resurface damaged flat and raised faced flanges in-place. Single Point Machining |
| US80-2700 | Bench mounting device for US80 |
| US80-2800 | ID Tracker for US80 for Ø 4.724" - 8.622" (120mm - 219mm) |
| US80-3000 | Copying carriage for US80 Stroke 2.952" (75mm) |
| US80-3100 | Electric motorisation brushless, Three phase motorisation, please indicate the required voltage and frequency |
| US80-3200 | Tool-holder for diameter up to 406,4 mm (16") |



US80-2400 Flange Facing Attachment

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Tool-Bits

| Order No. | Description | Picture |
|--------------------|-----------------------------|---|
| O-US-PP30-9-14026 | Insert-holder 30° |  |
| O-US-PP375-9-14007 | Insert-holder 37,5° |  |
| O-US-PP45-9-14008 | Insert-holder 45° |  |
| O-US-PP90-9-11066 | Insert-holder 90° |  |
| O-VIS-V5 | Screw for tool insert P2 |  |
| O-US-P1-6-H-T | Tool-insert for US80-TIH-30 |  |
| O-US-P2-6-H-T | Tool-insert for US80-TIH-90 |  |
| O-US-P1-DUPLEX-30 | Tool-insert for US80-TIH-30 |  |
| O-US-P2-DUPLEX-0 | Tool-insert for US80-TIH-90 |  |

| Order No. | Description | Picture |
|-----------------|---|---|
| O-US-A1-9-H-27 | Tool-bit 90° |  |
| O-US-A2-9-H-26 | Tool-bit for 30° bevel |  |
| O-US-A3-9-H-28 | Tool-bit for 37°30 bevel |  |
| O-US-A4-9-H-25 | Tool-bit for counterboring 15° |  |
| O-US-A5-9-H-85 | Tool-bit for 45° bevel |  |
| O-US-B6-9-H-54 | Tool-bit 90°, with disalignment |  |
| O-US-B7-9-H-56 | Tool-bit 30°, with disalignment |  |
| O-US-B8-9-H-59 | Tool-bit 37°30, with disalignment |  |
| O-US-B9-9-H-61 | Tool-bit for counterboring 15°, with disalignment |  |
| O-US-B11-9-H-15 | Tool-bit for counterboring and squaring |  |
| O-US-C5-9-H-63 | Tool-bit for 7° R6 j-bevels |  |
| O-US-C6-9-H-65 | Tool-bit for 12,5° R6 j-bevels |  |
| O-US-C7-9-H-67 | Tool-bit for 7° R6 j-bevels, with disalignment |  |
| O-US-C8-9-H-69 | Tool-bit for 12,5° R6 j-bevels, with disalignment |  |
| O-US-C9-9-H-29 | Tool-bit for 10° R1,5 j-bevels |  |
| O-US-C10-9-H-70 | Tool-bit for 20° j-bevels |  |

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