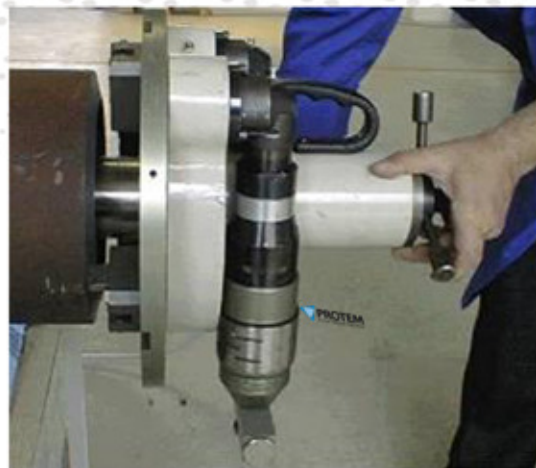


## Tube and pipe bevelling machine type PROTEM® US80

### Technical Features

Machining capacity	80 mm ID – 360 mm OD 3" ID – 14.1" OD
Clamping capacity	80 mm ID – 355 mm OD 3" ID – 14.1" OD
Bevel forms	I, V, U or any other special form Facing, 30 and 37°30 bevel, J-bevel, compound bevels, others on request
Clamping	Manual with key
Expansion	25 mm (0.9")
Fed stroke	60 mm (2.3")
Cutting drive	16 rpm off-load speed 11 rpm nominal speed



*No heat affected zone!*

The **PROTEM US 80** portable pipe bevelling tool is the most powerful, robust, reliable and versatile bevelling and facing machine in the world. The US 80 covers ranges of diameters ranging from 3" to 14" ID (80 up to 355 mm). The standard tool plate will accept multiple tool bits, allowing up to four simultaneous machining operations. Such operations may include bevelling, facing, counterboring, compound bevelling, OD chamfering, removal of weld joints on tube sheets, lengthening of tubes on tube sheets. The US80 features a self-accepting torque system and an integral drive motor.

#### Machine is delivered with:

- 1 tool holder plate
- 4 tool bit holders
- Sets of clamping blades for above mentioned diameters
- 1 tool bit 90°, 1 tool bit 30°
- Key and screws
- Operating manual

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## References




<b>Order no.</b>	<b>Article</b>	<b>Weight</b>
<b>US80</b>	US80 with pneumatic drive 1,47 kW	~ 30 kg
<b>US80D</b>	US80 with dual pneumatic drive	~ 40 kg
<b>US80HY</b>	US80 with dual hydraulic drive (without control valve)	~ 40 kg
<b>US80HY-DV</b>	US80 with dual hydraulic drive (with control valve)	~ 40 kg
<b>US80HY-SD</b>	US80 with single hydraulic drive (without control valve)	~ 40 kg
<b>US80HY-SDV</b>	US80 with single hydraulic drive (with control valve)	~ 40 kg
<b>US80-K01</b>	Crate for US80	



## Options

Order no.	Article	
<b>US80-ASB</b>	Flange facing attachment, capable of resurfacing worn or damaged "weld neck" type flanges with diameter 100 mm ID up to 610 mm OD (3.9" ID – 24" OD)	
<b>US80-BOGEspe</b>	US40CA with pneumatic drive and automatic clamping system	
<b>US80-ASB-EMA1</b>	Spider type elbow mandrel kit for easy installation into the flange or tube. Capacity: 100 to 180 mm ID (3.9"– 7" ID)	
<b>US80-ASB-EMA2</b>	Spider type elbow mandrel kit for easy installation into the flange or tube. Capacity: 170 to 356 mm ID (6.7 – 14" ID)	
<b>US80-IDT</b>	ID-Tracker: enables the US80 to maintain a consistent root land thickness independently of the pipe ovality or wall thickness variations.	
<b>US80-KS75</b>	Copying carriage feed 75 mm (2.9")	
<b>US80-KS.S</b>	Cam for compound bevel	
<b>US80-OPT.5</b>	Bench support for US80	
<b>HY-HPP 050</b>	Hydraulic Power Pack ( 5,5 kW)	
<b>FRL200</b>	Lubricating unit with pressure adjustment for pneumatically operated machines	
<b>FRL300</b>	Maintenance unit for pneumatically operated machines with dual motor pack	

## Options

Order no.	Article	
<b>KIT02</b>	Flexible tubing set for pneumatically operated machine	
<b>F-Lub-0,5-L</b>	Oil for lubricating filters bottle of 0,5 liter	
<b>F-lub-1-L</b>	Oil for lubricating filters bottle of 1 liter	
<b>F-Lub-5-L</b>	Oil for lubricating filters bottle of 5 liter	
<b>OPT-RP</b>	Pneumatic valve for flow regulation	
<b>OPT-SPH</b>	Chip Hook	
<b>Other options on request</b>		



**Tool bits**

**Facing A1**
**O-US-A1-9-H-27**


90°

**Bevelling A2 - A3**
**O-US-A2-9-H-26**


30°

**O-US-A3-9-H-28**


37°30'

**J Bevel C5 - C6 - C9**
**U-US-C5-9-H-63**


7° (r=6)

**O-US-C6-9-H-65**


12°5' (r=6)

**O-US-C9-9-H-29**


10° (r=1.5)

**Counterboring A4 - B11**
**O-US-A4-9-H-25**


15°

**O-US-B11-9-H-15**


15°

**Tool bits for limited clearance**
**Facing B6**
**O-US-B6-9-H-54**


90°

**Bevelling B7 - B8**
**O-US-B7-9-H-56**


30°

**O-US-B8-9-H-59**


37°30'

**J Bevel C7 - C8**
**O-US-C7-9-H-67**


7° (r=6)

**O-US-C8-9-H-69**


12°5' (r=6)

**Counterboring B9**
**O-US-B9-9-H-61**


15°

**Tool bits**


<b>Order no.</b>	<b>Article</b>
<b>O-US-A1-9-H-27</b>	Tool bit 90°
<b>O-US-A1-9-H-T-27</b>	Tool bit 90° with titanium coating
<b>O-US-A1-9-H-F-27</b>	Tool bit 90° with TiCN coating
<b>O-US-A2-9-H-26</b>	Tool bit for 30° bevel
<b>O-US-A2-9-H-T-17</b>	Tool bit for 30° bevel with titanium coating
<b>O-US-A2-9-H-F-17</b>	Tool bit for 30° bevel with TiCN coating
<b>O-US-A2-9-H-79</b>	Tool bit for 30° invers bevel
<b>O-US-A3-9-H-28</b>	Tool bits for 37°30 bevels
<b>O-US-A3-9-H-T-28</b>	Tool bit for 37°30 bevel with titanium coating
<b>O-US-A3-9-H-F-28</b>	Tool bit for 37°30 bevel with TiCN coating
<b>O-US-A3-9-H-82</b>	Tool bit for 37°30 invers bevel
<b>O-US-A4-9-H-25</b>	Tool bit for counterboring 15°
<b>O-US-A4-9-H-F-25</b>	Tool bit for counterboring 15° with TiCN coating
<b>O-US-A5-9-H-85</b>	Tool bit for 45° bevels
<b>O-US-B6-9-H-54</b>	Tool bit 90°, with disalignment
<b>O-US-B7-9-H-56</b>	Tool bit 30°, with disalignment
<b>O-US-B8-9-H-59</b>	Tool bit 37°30, with disalignment
<b>O-US-B9-9-H-61</b>	Tool bit for counterboring 15°, with disalignment
<b>O-US-B11-9-H-15</b>	Tool bit for counterboring and squaring
<b>O-US-C5-9-H-63</b>	Tool bit for 7° R6 j-bevels
<b>O-US-C6-9-H-65</b>	Tool bit for 12,5° R6 j-bevels
<b>O-US-C7-9-H-67</b>	Tool bit for 7° R6 j-bevels, with disalignment
<b>O-US-C8-9-H-69</b>	Tool bit for 12,5° R6 j-bevels, with disalignment
<b>O-US-C9-9-H-29</b>	Tool bit for 10° R1,5 j-bevels
<b>O-US-C10-9-H-61</b>	Tool bit for 20° j-bevels