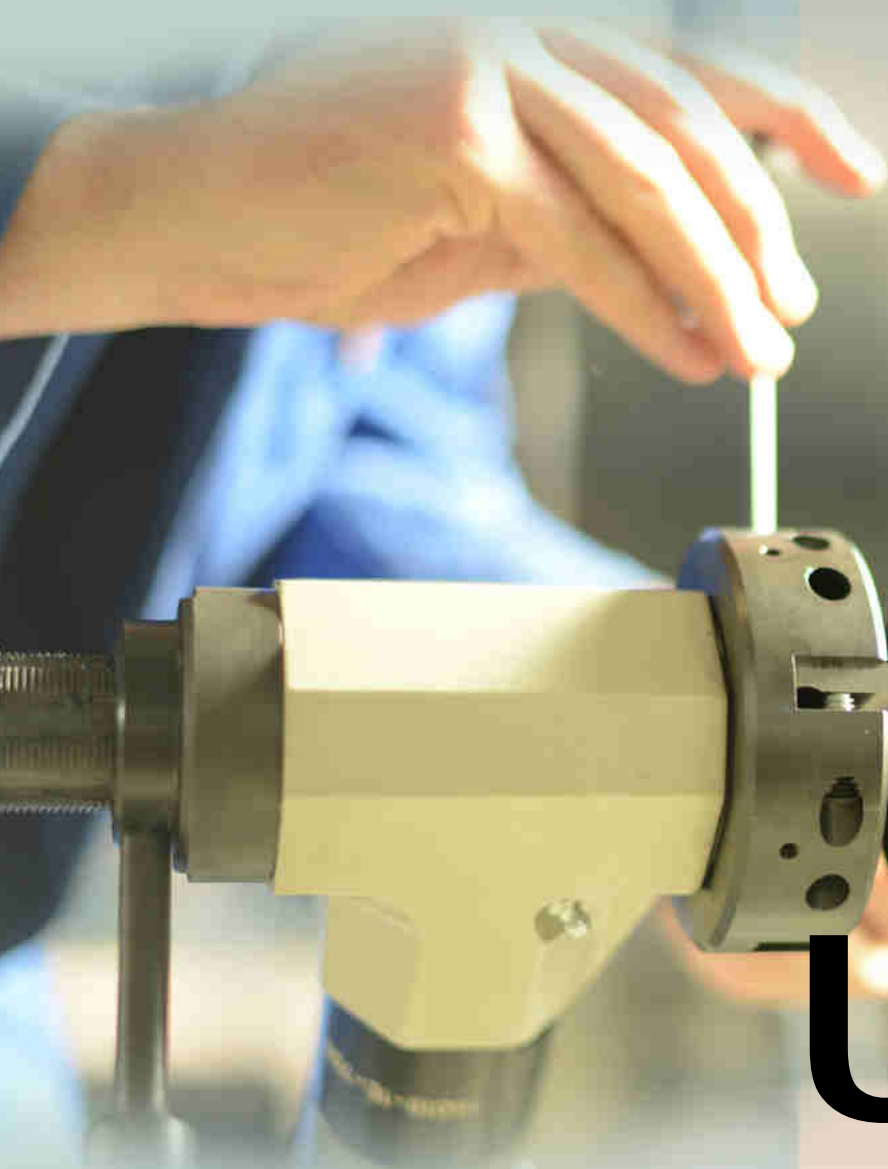




PROTEM
A CUT ABOVE THE REST



**Practical
Tools Inc.**



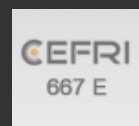
US 25

TUBE & PIPE

BEVELLING

Boiler machine 0.5" - 4.7"

PRACTICAL TOOLS INC.
P.O. Box 233
Aurora, ON L4G 3H3, Canada
Phone: 905-727-0014 / 888-847-8880
Fax: 905-727-8483
info@practicaltoolsinc.com
www.practicaltoolsinc.com





US 25

US 25 ID clamping bevelling machine
End forming of tubes, pipes, boiler tubes,
and much more ...

For unmatched results!

The US25 portable pipe bevelling tool is the most powerful, robust, reliable and versatile portable tube and pipe bevelling/ facing machine in the world.

- ✓ **Versatile possibilities :**
 - Mandrel from 12.5 up to 18 mm – 0.5" up to 0.7"
 - Mandrel from 18 up to 26 mm – 0.7" up to 1"
 - Tool holders plate 60 – 90 – 120 mm
- ✓ **Automatic feed and automatic clamping** – US25CA
- ✓ **Flange facing/single point machining:** available on request.
- ✓ **Short clamping mandrel for elbows, fittings, tees, flanges.**
- ✓ **Specific milling head for use membrane walls and boiler panels** – US25TA
- ✓ **Quick clamping device for serial machining works**
- ✓ **For almost all environments:** Irradiated areas, extreme conditions, subsea.

WE DELIVER

UNMATCHED SOLUTIONS!

For perfect weld
preparations

The PROTEM US 25 features

A wide capacity:

For diameters ranging from 12.5mm ID – 120mm OD
0.5" ID – 4.7" OD

Versatile cutting head accepting up to 4 cutting bits:
Four machining operations can be carried out
simultaneously or individually

Dimensions complying with tight spaces

Safe and easy to use

The machine can be supplied in pneumatic, electric or hydraulic power.

Feed length suitable for deep counter boring works

The PROTEM US25 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 and exotic alloys.

Developed and tested in collaboration with users and approved by them worldwide!





Practical Tools Inc.

US 25

US 25 ID clamping bevelling machine
End forming of tubes, pipes, boiler tubes,
and more.

The durability, reliability, capacity of the US25 earned this machine the excellent reputation it enjoys wherever it is used around the world.

The PROTEM US 25
is the equipment you
will need for your
chamfering works!

- ✓ **New generation!**
Equipped with two bearings!
Improvement of the tool holder plate stability
- ✓ No heat affected zone!
- ✓ For unmatched results!
- ✓ Burr-free
- ✓ No vibrations
- ✓ Perfect weld preparation
- ✓ On site or in the assembly workshop
- ✓ Portable ID locking tube end forming
- ✓ For construction, inspection and repair works
- ✓ Suitable for I, V, J-preps, compound bevels, lengthening of tubes, weld removals, counterboring works, membrane walls and boiler panels
- ✓ pneumatic, electric or hydraulic drive configurations

Developed and tested in collaboration with users and approved by them worldwide!





Practical Tools Inc.

Technical Data

READY TO USE



Machining capacity:

12.5 mm ID – 120 mm OD *

0.5" ID to 4.7" OD

Clamping capacity:

12.5 mm ID – 107 mm ID *

0.5" ID to 4.2" ID

*according to the tool holder plate and/or the clamping mandrel used

Standard version includes clamping mandrel for Ø 25–90mm, 1"–3.5" and tool holder plate 90 mm – 3.5"

Weight: 4,0 kg!

Bevel forms:

Facing, 30° and 37°30', 45° bevel, J-bevel, compound bevels, others on request

Clamping: manual with key

Expansion: 10 mm / 0.4"

Feed stroke: 35 mm / 1.4"

Cutting head gear drive:

150 rpm off-load speed, 70 rpm nominal speed *

*Approximate rotation speed according to air pressure and air flow

Machine is delivered with:

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

Facing - Bevelling - Counterboring



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Order no.	Article	Weight
US25A	- US25 with pneumatic drive 0,73 kW and tool holder Ø 60 mm (2.3")	~ 4,0 kg
US25A/E	- US25 with electric drive 1050 W * and tool holder Ø 60 mm (2.3")	~ 4,0 kg
US25B	- US25 with pneumatic drive 0,73 kW and tool holder Ø 90 mm (3.5")	~ 4,0 kg
US25B/E	- US25 with electric drive 1050 W * and tool holder Ø 90 mm (3.5")	~ 4,0 kg
US25-ACC	- With flange facing attachment for flange-diameters to 280mm (11")	~ 20,0 kg
US25CA	- Flange facing equipment type US25CA with automatic clamping system	~ 15,0 kg
US25TA	- for tube bevelling and membrane removal	~ 10,0 kg

*Please note that the capacity of the US25 with electric drive is limited for the machining of tubes with large diameters (>76 mm) in connection with heavy wall thicknesses (>10 mm). Please ask us if you want to use this machine for such cases. The pneumatic drive is unlimited usable for the machining of tubes with large diameters and heavy wall thicknesses. Therefore, it is recommended to use a pneumatic drive in such cases.

Order no.	Article
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US25-K01



- Transport case for US25

US25-K04

- Wooden crate for US25 E

US25-1

- Quick lever clamping device

US25-2

- Hand wheel clamping device

US25-5

- Right angle feed with lever

US25-6

- Ratchet clamping device

US25-CA



- US25CA with pneumatic drive and automatic clamping system

US25TA-PPF



- BOILERS FABRICATION, MAINTENANCE AND REPAIRS

Milling tool for US25TA for the removal of membrane walls and bevelling of tubes on tube panels. These works can be performed in a single operation or simultaneously.

US25-ACC



- US25 with flange facing attachment up to 12" - 323.9 mm



US25-19



- Tool holder 60 mm (2.3")

US25-12



- Tool holder 90 mm (3.5")

US25-21



- Tool holder 120 mm (4.7")

US25-OM1



- Optional mandrel for diameters ranging from 12,5 up to 18 mm (0.5-0.7")

US25-OM2



- Optional mandrel for diameters ranging from 18 up to 26 mm (0.7-1")

US25-EMA



- Elbow mandrel assembly up to 4.7" - 120 mm

OPT-RP



- Pneumatic valve for flow regulation

FRL200



- Air filter and lubricating unit with pressure adjustment for pneumatically operated machines



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Kit02



Flexible hose set for pneumatically operated machine (2 meter, longer hoses on request)

OPT-SPH



Chips hook

US25-EMA-40-64 Elbow mandrel assembly for Ø 40-64 mm (1.57 - 2.5")

US25-EMA-64-90 Elbow mandrel assembly for Ø 64-90 mm (2.5 - 3.5")

US25-EMA-90-119 Elbow mandrel assembly for Ø 90-119 mm (3.5 - 4.68")

F-Lub-0,5-L Oil for lubricating filters - bottle of 0,5 liter

F-Lub-1-L Oil for lubricating filters - bottle of 1 liter

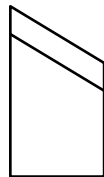
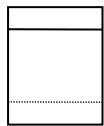
F-Lub-5-L Oil for lubricating filters - bottle of 5 liter

TOOL BITS

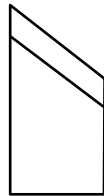
Width 25 mm - 0.9"

Facing: A1

Bevelling: A2 - A3



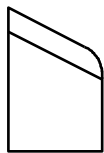
30°



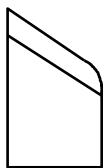
37°/30

J Bevel: C5 - C6 - C9

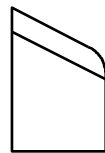
Counterboring: A4 - B11



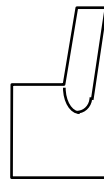
7° (r=6)



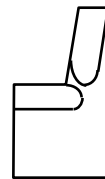
12° (r=6)



10° (r=1.5)



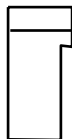
15°



15°

Facing: B6

Bevelling: B7 - B8



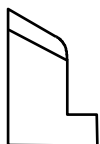
30°



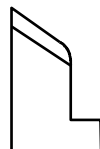
37°/30

J Bevel: C7 - C8

Counterboring: B9



7° (r=6)



12° (r=6)



15°

Nota: available wall thicknesses: 6 or 9 mm (0.2 or 0.3")



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Order no.	Article	For
O-US-A1-6-H-18	O-US-A1-6-H-18 tool bit 90°	US25
O-US-A1-6-H-T-18	O-US-A1-6-H-T-18 tool bit 90° with titanium coating	US25
O-US-A1-6-H-F-18	O-US-A1-6-H-F-18 tool bit 90° with TiCN coating	US25
O-US-A2-6-H-17	O-US-A2-6-H-17 tool bit 30° bevel	US25
O-US-A2-6-H-T-17	O-US-A2-6-H-T-17 tool bit 30° bevel with titanium coating	US25
O-US-A1-6-H-F-18	O-US-A2-6-H-17 tool bit 30° bevel with TiCN coating	US25
O-US-A2-6-H-80	O-US-A2-6-H-80 tool bit 30° invers bevel	US25
O-US-A3-6-H-19	O-US-A3-6-H-19 tool bits 37°30 bevels	US25
O-US-A3-6-H-T-19	O-US-A3-6-H-T-19 tool bit 37°30 bevel with titanium coating	US25
O-US-A3-6-H-F-19	O-US-A2-6-H-F-17 tool bit 37°30 bevel with TiCN coating	US25
O-US-A3-6-H-81	O-US-A3-6-H-81 tool bit 37°30 invers bevel	US25
O-US-A4-6-H-16	O-US-A4-6-H-16 tool bit counterboring 15°	US25
O-US-A4-6-H-F-16	O-US-A4-6-H-F-16 tool bit counterboring 15° with TiCN coating	US25
O-US-A5-6-H-85	O-US-A5-6-H-85 tool bit 45° bevels	US25
O-US-B6-6-H-55	O-US-B6-6-H-55 tool bit 90°, with disalignment	US25
O-US-B7-6-H-57	O-US-B7-6-H-57 tool bit 30°, with disalignment	US25
O-US-B8-6-H-58	O-US-B8-6-H-58 tool bit 37°30, with disalignment	US25
O-US-B9-6-H-60	O-US-B9-6-H-60 tool bit counterboring 15°, with disalignment	US25
O-US-B11-6-H-24	O-US-B11-6-H-24 tool bit counterboring and squaring	US25
O-US-C5-6-H-62	O-US-C5-6-H-62 tool bit 7° R6 j-bevels	US25
O-US-C6-6-H-64	O-US-C6-6-H-64 tool bit 12,5° R6 j-bevels	US25
O-US-C7-6-H-66	O-US-C7-6-H-66 tool bit 7° R6 j-bevels, with disalignment	US25
O-US-C8-6-H-68	O-US-C8-6-H-68 tool bit 12,5° R6 j-bevels, with disalignment	US25
O-US-C9-6-H-20	O-US-C9-6-H-20 tool bit 10° R1,5 j-bevels	US25
O-US-C10-6-H-61	O-US-C10-6-H-61 tool bit 20° j-bevels	US25

