

TTNG Series Splitframe Orbital Pipe Cutting & Beveling Machines

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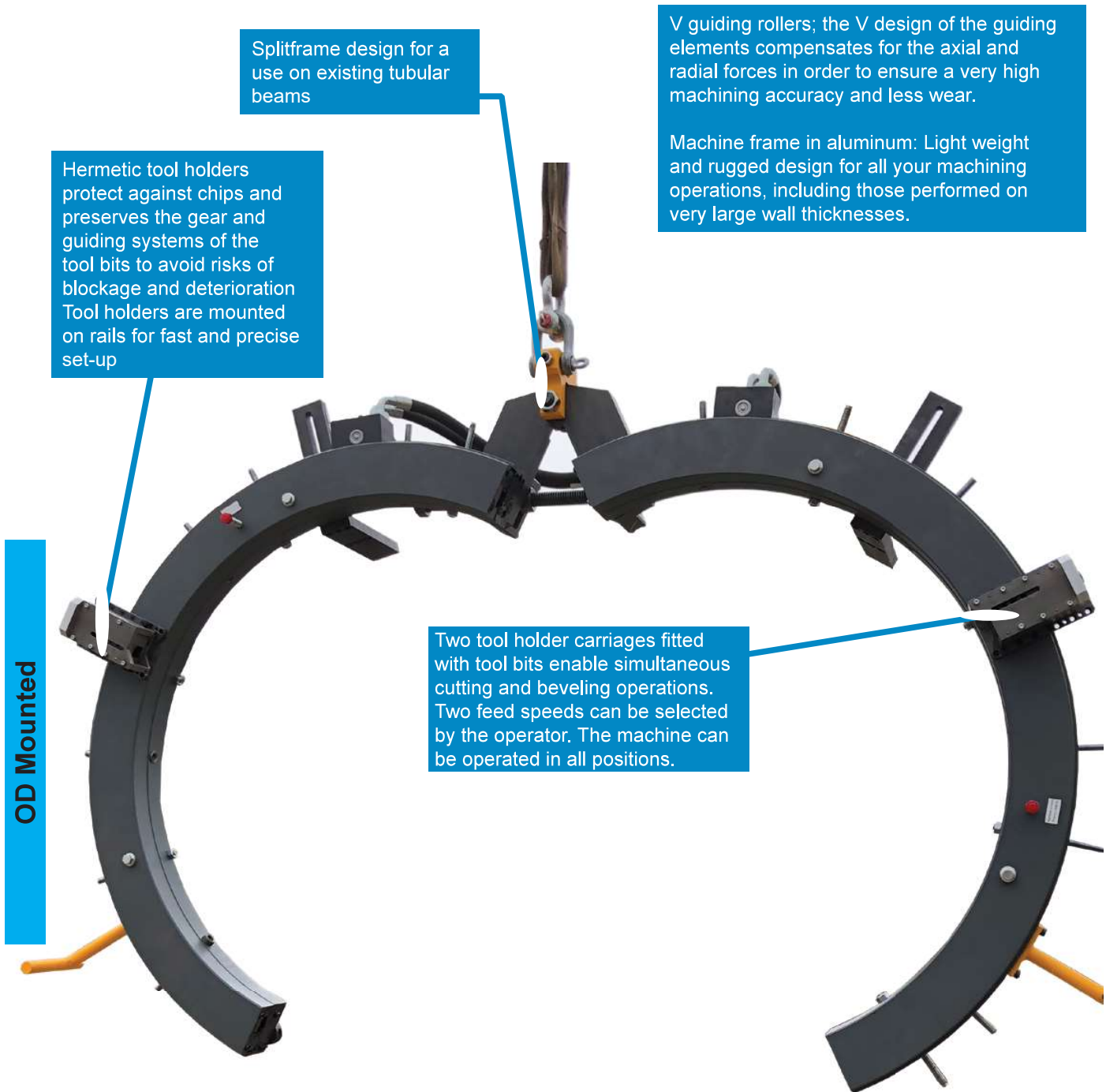


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TTNG Series Splitframe Orbital Pipe Cutting & Beveling Machines



The machines in the TT series are available with numerous options and in different configurations with standard or specific optional tooling, such as, counterboring carriages, wheel cutters, enveloping jaws, etc.

Hydraulic, pneumatic or electric drives are available for all machines in the TT series.

Cold Cutting Process.
No Heat Affected Zone

TTNG Series Splitframe Orbital Pipe Cutting & Beveling Machines

Standard Capacity: 60.3mm - 1422.4mm (2.374" - 56")

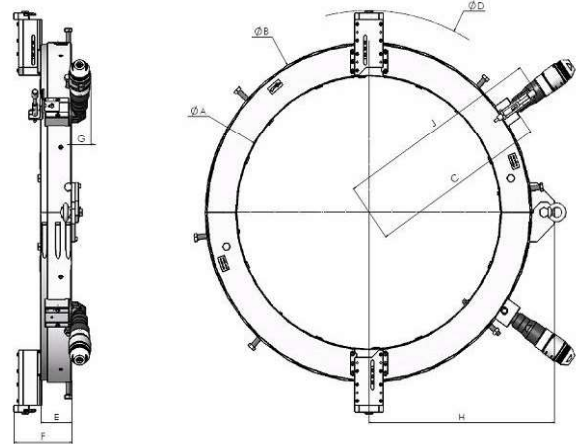
TTNG are engineered to serve all industries where the weld quality is critical and projects must stay on schedule. TTNG series machines are available in many configurations with standard or customised accessories and options. All the devices provided with the TTNG series machines are built based on 50 years knowledge and expertise of PROTEM to provide enhanced performance and job specific solutions. They are built to cut and bevel tubes up to 100mm (3.937") thick (larger upon request) in the field, in prefabrication workshops.

Their low clearance design of rotating parts is highly appreciated by all operators worldwide. To mount the machine on the pipe, the two half-shells connected with a hinge can be opened. The alignment of concentricity is done by separately adjustable clamping jaws. The perpendicularity is adjusted in the same time. Additional clamping screws allow to bear the axial forces.

Beveling	Cutting	Counterboring	Severing	Coating Removal	Squaring	Weld joint removal	Surfacing
✓	✓	✓	✓	✓	✗	✗	✗

Advantages:

- Mobile
- 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
- Smooth and Burr-Free Surface Finish
- No vibration during the machining process
- Splitframe Configuration



Dimensions

OD Mounted

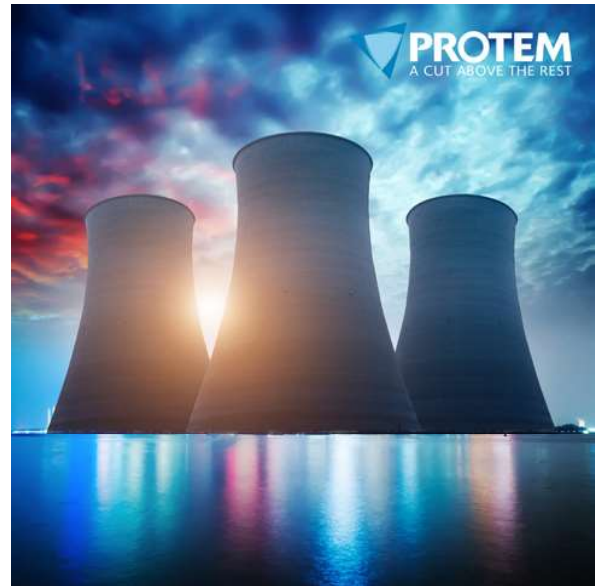
Tool carriages with covered spindles enable to ensure a protection against chips. The main advantage of the TTNG machines are: cut and bevel individually or simultaneously, Perfect Weld End Preparation suited for manual welding operations and for advanced orbital welding systems, V track and rollers: The V shape design compensates for axial and radial forces to ensure maximum precision and less wear. Aluminium body: Light weight and durable for limitless machining jobs! Split frame design with hinge: Easier to set up on continuous or long length pipes. Fully enclosed tool-holder design: Protects the feed system from chips and prevents damage during machining.

Sliding tool-holders: Easier and faster to set up. Machine design permits cutting and beveling operation simultaneously, maximizes productivity! Large diameter machines delivered with two standard configuration motors allowing more power for highly demanding jobs, Cold cutting process, no heat affected zone, Dependability, Versatility, Durability, Rapidity, High Accuracy, Rigidity, Compact design, dimensions adapted for works in areas of tight clearances. For any material: mild, stainless steel, alloys, hastelloy, Inconel, duplex, super duplex, P91

TTNG Series Splitframe Orbital Pipe Cutting & Beveling Machines

Technical Features:

Specific shapes & angles	I, V, X, J-bevel, other on request
Clamping	Manual
Feed stroke	98 mm (3.858")
Cutting head gear drive	174 rpm. Approximate rotation speed according to air pressure and air flow
TTNG168-TTNG323 pneumatic drive	1.47 kW, 6 bar (87 psi), 1800 l/min (63 cfm)
TTNG406-TTNG900 pneumatic drive	1.47 kW, 6 bar (87 psi), 3600 l/min (128 cfm)
TTNG1016 hydraulic drive	0 - 5.7 rpm (speed to be adjusted according to the diameter, the thickness and the material of the pipe to be machined)
TTNG1200 hydraulic drive	0.4 - 6 rpm (speed to be adjusted according to the diameter, the thickness and the material of the pipe to be machined)
TTNG1400 hydraulic drive	0.5 - 5.2 rpm (speed to be adjusted according to the diameter, the thickness and the material of the pipe to be machined)
Electric drive	110V, 240V and 380V
<i>Pneumatically driven machines have to be used with a lubricating filter. Recommended option: regulation valve.</i>	



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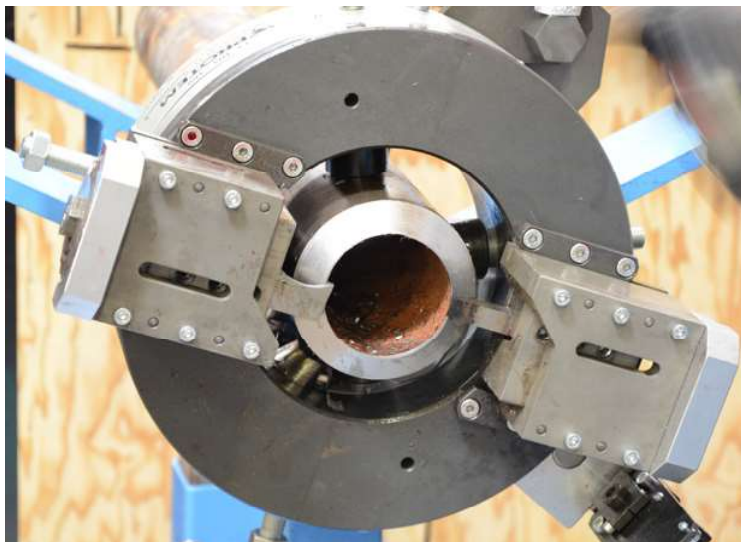
Several options available: Enveloping jaws can be optionally proposed, they are designed to clamp the machine onto even the thinnest tubes without any distortion. Remote control available on request for works in hazardous areas (under water, explosive areas, areas submitted to ionizing radiations etc) Counterboring carriages, cam-copying operations and wheel cutting are possible within the wide range of diameters covered by each model in the TTNG series.

The OD tracker ensures consistent machining, regardless of the tube's ovality. Its roller follows the tube's OD profile and adjusts the position of the tool-holder. Radial Copying carriage. Copying carriage allows the user to machine any geometry of bevel thanks to a cam-following system. This technology of single point machining is particularly suited for heavy wall machining. Axial copying carriage. Performs special shape machining on the inner or outer diameter Axial copying carriage. Performs special shape machining on the inner or outer diameter Counterboring tool-holder.

Counterboring operations ensure consistent thickness all around the tube by machining the inside diameter. Operations of this type are essential when automatic welding machines are used - Cutting wheel. The cutting wheel accessory allows the user to cut the tube without producing chips. The wheel is very useful when cleanliness standards require that no chips can be introduced inside the tube during machining.

TTNG168 Splitframe Orbital Pipe Cutting & Beveling Machine

Standard Capacity: 60.3mm - 168.3mm (2.374" - 6.625")

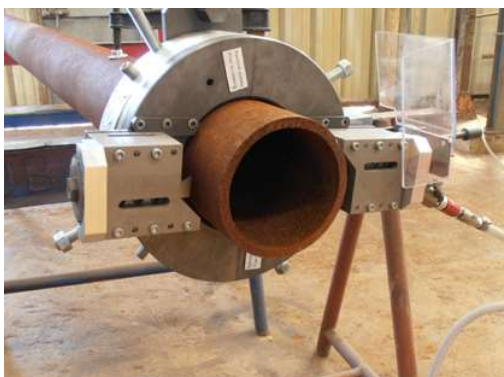


Order No.	Description
TTNG168-1000	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG168 for Ø 2.374" - 6.625" (60.3mm - 168.3mm) with single pneumatic drive
TTNG168-1002	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG168 for Ø 2.374" - 6.625" (60.3mm - 168.3mm) with single pneumatic drive and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG168-1020	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG168 for Ø 2.374" - 6.625" (60.3mm - 168.3mm) with angle electric drive 230V - ME25
TTNG168-1022	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG168 for Ø 2.374" - 6.625" (60.3mm - 168.3mm) with angle electric drive MS15 - 230V
TTNG168-1040	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG168 for Ø 2.374" - 6.625" (60.3mm - 168.3mm) with 110V electric drive

Order No.	Description
TTNG168-1042	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG168 for Ø 2.374" - 6.625" (60.3mm - 168.3mm) with angled drive 110 V MS15
TTNG168-1060	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG168 for Ø 2.374" - 6.625" (60.3mm - 168.3mm) with 1 hydraulic Motor and reversing valve
TTNG168-1062	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG168 for Ø 2.374" - 6.625" (60.3mm - 168.3mm) with 1 hydraulic Motor
TTNG168-1064	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG168 for Ø 2.374" - 6.625" (60.3mm - 168.3mm) with hydraulic drive (1 Motor) and reversing valve and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG168-1080	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG168 for Ø 2.374" - 6.625" (60.3mm - 168.3mm) with Brushless electric drive. 3 Phase

OD Mounted

TTNG168 On-Site or in Workshop:



TTNG219 Splitframe Orbital Pipe Cutting & Beveling Machine

Standard Capacity: 114.3mm - 219.1mm (4.5" - 8.625")



OD Mounted

Order No.	Description
TTNG219-1000	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG219 for Ø 4.5" - 8.625" (114.3mm - 219.1mm) with single pneumatic drive
TTNG219-1002	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG219 for Ø 4.5" - 8.625" (114.3mm - 219.1mm) with single pneumatic drive and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG219-1020	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG219 for Ø 4.5" - 8.625" (114.3mm - 219.1mm) with angle electric drive 230V - ME25
TTNG219-1022	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG219 for Ø 4.5" - 8.625" (114.3mm - 219.1mm) with angle electric drive MS15 - 230V
TTNG219-1040	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG219 for Ø 4.5" - 8.625" (114.3mm - 219.1mm) with 110V electric drive

Order No.	Description
TTNG219-1042	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG219 for Ø 4.5" - 8.625" (114.3mm - 219.1mm) with angled drive 110 V MS15
TTNG219-1060	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG219 for Ø 4.5" - 8.625" (114.3mm - 219.1mm) with 1 hydraulic Motor and reversing valve
TTNG219-1062	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG219 for Ø 4.5" - 8.625" (114.3mm - 219.1mm) with 1 hydraulic Motor
TTNG219-1064	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG219 for Ø 4.5" - 8.625" (114.3mm - 219.1mm) with hydraulic drive (1 Motor) and reversing valve and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG219-1080	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG219 for Ø 4.5" - 8.625" (114.3mm - 219.1mm) with 1 Brushless electric drive. 3 Phase

TTNG273 Splitframe Orbital Pipe Cutting & Beveling Machine

Standard Capacity: 168.3mm - 273.1mm (6.625" - 10.751")



OD Mounted

Order No.	Description
TTNG273-1000	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG273 for Ø 6.625" - 10.751" (168.3mm - 273.1mm) with single pneumatic drive
TTNG273-1002	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG273 for Ø 6.625" - 10.751" (168.3mm - 273.1mm) with single pneumatic drive and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG273-1020	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG273 for Ø 6.625" - 10.751" (168.3mm - 273.1mm) with angle electric drive 230V - ME25
TTNG273-1022	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG273 for Ø 6.625" - 10.751" (168.3mm - 273.1mm) with angle electric drive MS15 - 230V
TTNG273-1040	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG273 for Ø 6.625" - 10.751" (168.3mm - 273.1mm) with 110V electric drive

Order No.	Description
TTNG273-1042	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG273 for Ø 6.625" - 10.751" (168.3mm - 273.1mm) with angled drive 110 V MS15
TTNG273-1060	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG273 for Ø 6.625" - 10.751" (168.3mm - 273.1mm) with 1 hydraulic Motor and reversing valve
TTNG273-1062	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG273 for Ø 6.625" - 10.751" (168.3mm - 273.1mm) with 1 hydraulic Motor
TTNG273-1064	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG273 for Ø 6.625" - 10.751" (168.3mm - 273.1mm) with hydraulic drive (1 Motor) and reversing valve and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG273-1080	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG273 for Ø 6.625" - 10.751" (168.3mm - 273.1mm) with 1 Brushless electric drive. 3 Phase

TTNG323 Splitframe Orbital Pipe Cutting & Beveling Machine

Standard Capacity: 219.1mm - 323.9mm (8.625" - 12.751")



OD Mounted

Order No.	Description
TTNG323-1000	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG323 for Ø 8.625" - 12.751"(219.1mm - 323.9mm) with single pneumatic drive
TTNG323-1002	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG323 for Ø 8.625" - 12.751"(219.1mm - 323.9mm) with single pneumatic drive and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG323-1020	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG323 for Ø 8.625" - 12.751"(219.1mm - 323.9mm) with angle electric drive 230V - ME25
TTNG323-1022	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG323 for Ø 8.625" - 12.751"(219.1mm - 323.9mm) with angle electric drive MS15 - 230V
TTNG323-1040	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG323 for Ø 8.625" - 12.751"(219.1mm - 323.9mm) with 110V electric drive

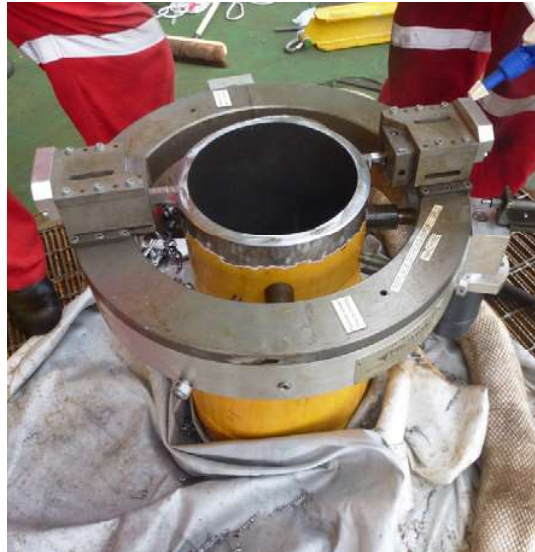
Order No.	Description
TTNG323-1042	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG323 for Ø 8.625" - 12.751"(219.1mm - 323.9mm) with angled drive 110 V MS15
TTNG323-1060	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG323 for Ø 8.625" - 12.751"(219.1mm - 323.9mm) with 1 hydraulic Motor and reversing valve
TTNG323-1062	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG323 for Ø 8.625" - 12.751"(219.1mm - 323.9mm) with 1 hydraulic Motor
TTNG323-1064	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG323 for Ø 8.625" - 12.751"(219.1mm - 323.9mm) with hydraulic drive (1 Motor) and reversing valve and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG323-1080	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG323 for Ø 8.625" - 12.751"(219.1mm - 323.9mm) with 1 Brushless electric drive. 3 Phase

TTNG323 On-Site or in Workshop:



TTNG406 Splitframe Orbital Pipe Cutting & Beveling Machine

Standard Capacity: 273.1mm - 406.4mm (10.751" - 16")

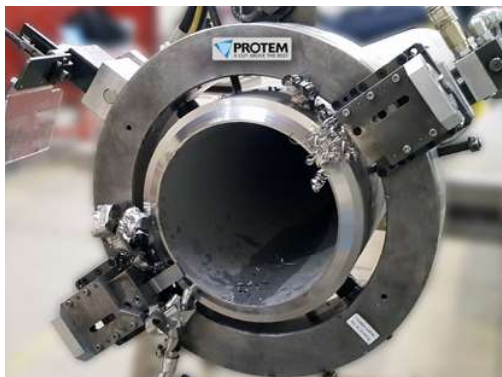


Order No.	Description
TTNG406-1000	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG406 for Ø 10.751" - 16" (273.1mm - 406.4mm) with 2 pneumatic drives
TTNG406-1002	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG406 for Ø 10.751" - 16" (273.1mm - 406.4mm) with double pneumatic drive (2 pneumatic drives) and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG406-1020	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG406 for Ø 10.751" - 16" (273.1mm - 406.4mm) with angle electric drive 230V - ME25

Order No.	Description
TTNG406-1060	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG406 for Ø 10.751" - 16" (273.1mm - 406.4mm) with 2 hydraulic drives and reversing valve
TTNG406-1062	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG406 for Ø 10.751" - 16" (273.1mm - 406.4mm) with 2 hydraulic drives
TTNG406-1064	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG406 for Ø 10.751" - 16" (273.1mm - 406.4mm) with 2 hydraulic drives and reversing valve and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG406-1080	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG406 for Ø 10.751" - 16" (273.1mm - 406.4mm) with 1 Brushless electric drive. 3 Phase

OD Mounted

TTNG406 On-Site or in Workshop:



TTNG508 Splitframe Orbital Pipe Cutting & Beveling Machine

Standard Capacity: 323.9mm - 508mm (12.751" - 20")

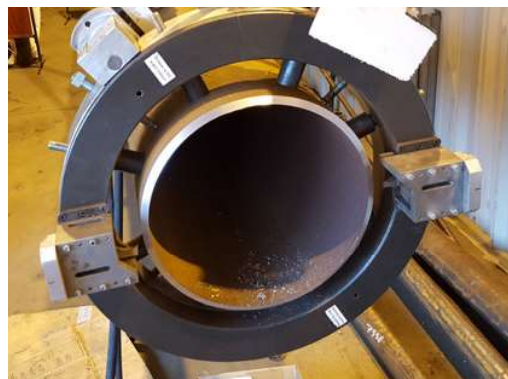


OD Mounted

Order No.	Description
TTNG508-1000	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG508 for Ø 12.751" - 20" (323.9mm - 508mm) with 2 pneumatic drives
TTNG508-1002	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG508 for Ø 12.751" - 20" (323.9mm - 508mm) with 2 pneumatic drives and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG508-1020	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG508 for Ø 12.751" - 20" (323.9mm - 508mm) with angle electric drive 230V - ME25

Order No.	Description
TTNG508-1060	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG508 for Ø 12.751" - 20" (323.9mm - 508mm) with 2 hydraulic drives and reversing valve
TTNG508-1062	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG508 for Ø 12.751" - 20" (323.9mm - 508mm) with 2 hydraulic drives
TTNG508-1064	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG508 for Ø 12.751" - 20" (323.9mm - 508mm) with 2 hydraulic drives and reversing valve and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG508-1080	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG508 for Ø 12.751" - 20" (323.9mm - 508mm) with 1 Brushless electric drive. 3 Phase

TTNG508 On-Site or in Workshop:



TTNG610 Splitframe Orbital Pipe Cutting & Beveling Machine

Standard Capacity: 406.4mm - 610mm (16" - 24")



Order No.	Description
TTNG610-1000	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG610 for Ø 16" - 24" (406.4mm - 610mm) with 2 pneumatic drives
TTNG610-1002	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG610 for Ø 16" - 24" (406.4mm - 610mm) with 2 pneumatic drives and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG610-1020	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG610 for Ø 16" - 24" (406.4mm - 610mm) with angle electric drive 230V - ME25

Order No.	Description
TTNG610-1060	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG610 for Ø 16" - 24" (406.4mm - 610mm) with 2 hydraulic drives and reversing valve
TTNG610-1062	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG610 for Ø 16" - 24" (406.4mm - 610mm) with 2 hydraulic drives
TTNG610-1064	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG610 for Ø 16" - 24" (406.4mm - 610mm) with 2 hydraulic drives and reversing valve and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG610-1080	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG610 for Ø 16" - 24" (406.4mm - 610mm) with 1 Brushless electric drive. 3 Phase

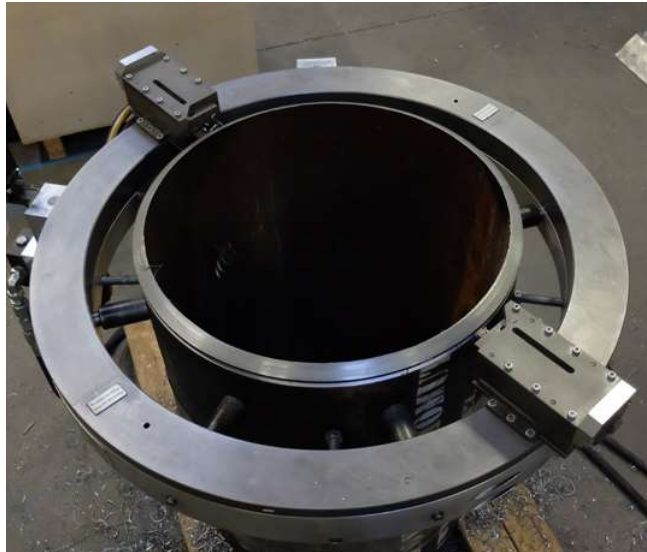
OD Mounted

TTNG610 On-Site or in Workshop:



TTNG762 Splitframe Orbital Pipe Cutting & Beveling Machine

Standard Capacity: 558.8mm - 762mm (22" - 30")



OD Mounted

Order No.	Description
TTNG762-1000	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG762 for Ø 22" - 30" (558.8mm - 762mm) with 2 pneumatic drives
TTNG762-1002	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG762 for Ø 22" - 30" (558.8mm - 762mm) with 2 pneumatic drives and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG762-1020	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG762 for Ø 22" - 30" (558.8mm - 762mm) with angle electric drive 230V - ME25

Order No.	Description
TTNG762-1060	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG762 for Ø 22" - 30" (558.8mm - 762mm) with 2 hydraulic drives and reversing valve
TTNG762-1062	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG762 for Ø 22" - 30" (558.8mm - 762mm) with 2 hydraulic drives
TTNG762-1064	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG762 for Ø 22" - 30" (558.8mm - 762mm) with 2 hydraulic drives and reversing valve and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG762-1080	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG762 for Ø 22" - 30" (558.8mm - 762mm) with 1 Brushless electric drive, 3 Phase

TTNG762 On-Site or in Workshop:



TTNG900 Splitframe Orbital Pipe Cutting & Beveling Machine

Standard Capacity: 660.4mm - 914.4mm (26" - 36")

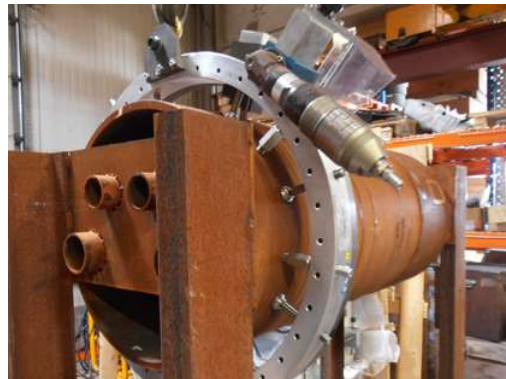


Order No.	Description
TTNG900-1000	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG900 for Ø 26" - 36" (660.4mm - 914.4mm) with 2 pneumatic drives
TTNG900-1002	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG900 for Ø 26" - 36" (660.4mm - 914.4mm) with 2 pneumatic drives and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG900-1020	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG900 for Ø 26" - 36" (660.4mm - 914.4mm) with angle electric drive 230V - ME25

Order No.	Description
TTNG900-1060	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG900 for Ø 26" - 36" (660.4mm - 914.4mm) with 2 hydraulic drives and reversing valve
TTNG900-1062	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG900 for Ø 26" - 36" (660.4mm - 914.4mm) with 2 hydraulic drives
TTNG900-1064	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG900 for Ø 26" - 36" (660.4mm - 914.4mm) with 2 hydraulic drives and reversing valve and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG900-1080	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG900 for Ø 26" - 36" (660.4mm - 914.4mm) with 1 Brushless electric drive. 3 Phase

OD Mounted

TTNG900 On-Site or in Workshop:



TTNG1016 Splitframe Orbital Pipe Cutting & Beveling Machine

Standard Capacity: 812.8mm - 1016mm (32" - 40")



OD Mounted

Order No.	Description
TTNG1016-1000	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1016 for Ø 32" - 40" (812.8mm - 1016mm) with 2 pneumatic drives
TTNG1016-1002	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1016 for Ø 32" - 40" (812.8mm - 1016mm) with 2 pneumatic drives and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG1016-1020	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1016 for Ø 32" - 40" (812.8mm - 1016mm) with angle electric drive 230V - ME25

Order No.	Description
TTNG1016-1060	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1016 for Ø 32" - 40" (812.8mm - 1016mm) with 2 hydraulic drives and reversing valve
TTNG1016-1062	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1016 for Ø 32" - 40" (812.8mm - 1016mm) with 2 hydraulic drives
TTNG1016-1064	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1016 for Ø 32" - 40" (812.8mm - 1016mm) with 2 hydraulic drives and reversing valve and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG1016-1080	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1016 for Ø 32" - 40" (812.8mm - 1016mm) with 2 Brushless electric drive, 3 Phase

TTNG1200 Splitframe Orbital Pipe Cutting & Beveling Machine

Standard Capacity: 914.4mm - 1219.2mm (36" - 48")



Order No.	Description
TTNG1200-1000	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1200 for Ø 36" - 48" (914.4mm - 1219.2mm) with 2 pneumatic drives
TTNG1200-1002	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1200 for Ø 36" - 48" (914.4mm - 1219.2mm) with 2 pneumatic drives and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG1200-1020	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1200 for Ø 36" - 48" (914.4mm - 1219.2mm) with angle electric drive 230V - ME25

Order No.	Description
TTNG1200-1060	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1200 for Ø 36" - 48" (914.4mm - 1219.2mm) with 2 hydraulic drives and reversing valve
TTNG1200-1062	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1200 for Ø 36" - 48" (914.4mm - 1219.2mm) with 2 hydraulic drives
TTNG1200-1064	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1200 for Ø 36" - 48" (914.4mm - 1219.2mm) with 2 hydraulic drives and reversing valve and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG1200-1080	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1200 for Ø 36" - 48" (914.4mm - 1219.2mm) with 2 Brushless electric drive, 3 Phase

OD Mounted

TTNG1200 On-Site or in Workshop:



TTNG1400 Splitframe Orbital Pipe Cutting & Beveling Machine

Standard Capacity: 1117.6mm - 1422.4mm (44" - 56")



OD Mounted

Order No.	Description
TTNG1400-1000	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1400 for Ø 44" - 56" (1117.6mm - 1422.4mm) with 2 pneumatic drives
TTNG1400-1002	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1400 for Ø 44" - 56" (1117.6mm - 1422.4mm) with 2 pneumatic drives and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG1400-1020	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1400 for Ø 44" - 56" (1117.6mm - 1422.4mm) with angle electric drive 230V - ME25

Order No.	Description
TTNG1400-1060	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1400 for Ø 44" - 56" (1117.6mm - 1422.4mm) with 2 hydraulic drives and reversing valve
TTNG1400-1062	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1400 for Ø 44" - 56" (1117.6mm - 1422.4mm) with 2 hydraulic drives
TTNG1400-1064	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1400 for Ø 44" - 56" (1117.6mm - 1422.4mm) with 2 hydraulic drives and reversing valve and options TTNG-3100 (Extension Kit), TTNG-3700 (hinge) and TTNG-3600 (squares)
TTNG1400-1080	Splitframe - Orbital Pipe Cutting Machine PROTEM TTNG1400 for Ø 44" - 56" (1117.6mm - 1422.4mm) with 2 Brushless electric drive, 3 Phase

TTNG1400 On-Site or in Workshop:

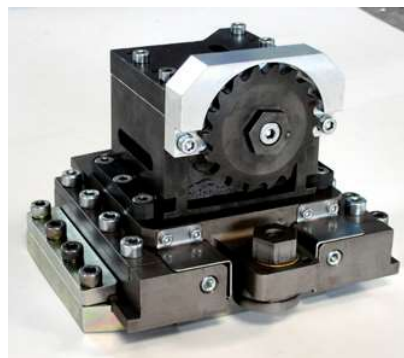


TTNG Pipe Cutting & Beveling Machines

Options & Accessories

TTNG OD Tracker:

Order No.	Description
TTNG-ODT-1000	OD Tracker for TTNG219 - TTNG610
TTNG-ODT-1002	OD Tracker for TTNG762
TTNG-ODT-1004	OD Tracker for TTNG900 - TTNG1016



TTNG Copying Carriage:

Order No.	Description
TTNG-4200	Copying Carriage, stroke 50mm
TTNG-4300	Copying Carriage, stroke 100mm



TTNG Counterboring Carriage:

Order No.	Description
TTNG-2700	Counterboring Carriage, stroke 50mm with tool bit holder
TTNG-2800	Counterboring Carriage, stroke 50mm with insert holder
TTNG-2900	Counterboring Carriage, stroke 100mm with tool bit holder
TTNG-3000	Counterboring Carriage, stroke 100mm with insert holder



TTNG Further Options:

Order No.	Description
TTNG-3600	Adjustment bracket for TTNG168, TTNG219, TTNG273, TTNG323, TTNG406 price per set of 2 units
TTNG-3602	Adjustment bracket for TTNG508, TTNG610, TTNG762, TTNG900, TTNG1016 price per set of 2 units
TTNG-3604	Adjustment bracket for TTNG1200, TTNG1400, price per set of 2 units
TTNG-3700	Opening assisted device for TTNG168, TTNG219, TTNG273, TTNG323, TTNG406, TTNG508
TTNG-3702	Opening assisted device for TTNG610, TTNG762, TTNG1016
TTNG-3704	Opening assisted device for TTNG900
TTNG-3708	Opening assisted device for TTNG1200
TTNG-4100	Carriage with clutch feed for machining of grooves (eg for vitolic joints)



OD Mounted

TTNG Pipe Cutting & Beveling Machines

Deep Counterboring

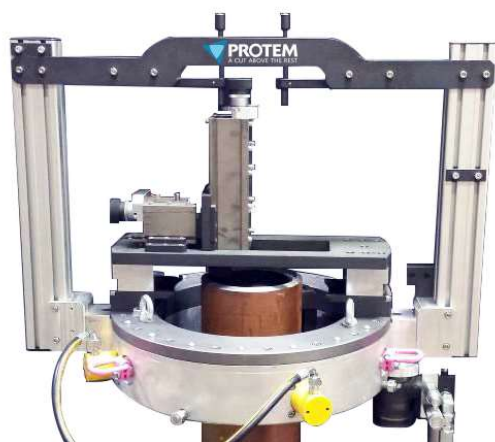


When heavy counterboring lengths are imposed, they are often associated to tight tolerances that are similar to boring operations. Protém has developed some solutions for the TTNG orbital cutting machines, so as to meet the requests of the most demanding users.

Two examples of applications are shown below: The first is more « classic » with a simpler design, the second one performs more difficult shapes and its design is more compact.

TTNG: System with extended counterboring/boring carriage

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This system reproduces the function of the standard counterboring carriage but with an extended tool holder carriage (stroke 180-200mm (7"-8")), a stiffening beam between the tool holder and an axial clutch finger for an automatic feed. In order to get a high degree of rigidity, the holder square of the extended tool holder is stationary.

The entire system offers increased reliability compared to the standard counterboring system, in order to ensure the boring tolerances over a great length (no bending at the end of the tool).

The machining is performed with tool bits or inserts. This is also possible to implement two clutch fingers so as to reduce the cycle times, and a steel rule or a digital gauge on the extended tool holder so as to control the depth of the tool.

TTNG: System with an automatic boring bar through copying



This system is a variation of the copying carriage for heavy wall. It is designed to perform boring operations. The tool holder carriage follows a cam that was machined according to the profile of the required boring. A cam is necessary for each boring configuration. The machining is performed by straight turning with an insert.

The entire system offers a holder beam, a copying device and incrementation with right angle for the use of a finger side clutch. This system, with reduced dimensions, machines difficult boring profiles without manual intervention (angle adjustment or others).

TTNG Pipe Cutting & Beveling Machines

Coating Removal

For TTNG and US machines



PROTEM US with coating removal option

The PROTEM TTNG Cold Cutting and Beveling Machines and the US ID Clamping Beveling Machines can be equipped with optional accessories capable of machining the plastic coating of pipe, up to 130 mm (5") wall thickness. All maintenance operations (cutting and beveling) can be performed at any place along the pipeline, removing the coating to provide space for the welding equipment.

Heating the coating at high temperature and removing it manually with a blade, or using machines with a waterjet cutting system (which damages the pipes) is no longer necessary. The machining of the coating with PROTEM equipment is the ideal solution. PROTEM offers you professional solutions to perform machining operations on the job site safely, while getting perfect results.

Order No.	Description
US80-3600	Beveling machine with coating option
US150-3600	Beveling machine with coating option

Order No.	Description
TT168-3600	Cutting and Beveling Machine with coating option
TT219-3600	Cutting and Beveling Machine with coating option
TT273-3600	Cutting and Beveling Machine with coating option
TT323-3600	Cutting and Beveling Machine with coating option
TT406-3600	Cutting and Beveling Machine with coating option
TT508-3600	Cutting and Beveling Machine with coating option
TT610-3600	Cutting and Beveling Machine with coating option
TT762-3600	Cutting and Beveling Machine with coating option
TT900-3600	Cutting and Beveling Machine with coating option
TT1016-3600	Cutting and Beveling Machine with coating option
TT1200-3600	Cutting and Beveling Machine with coating option
TT1400-3600	Cutting and Beveling Machine with coating option

OD Mounted



PROTEM TTNG Orbital cutting machine with coating removal option



TTNG Pipe Cutting & Beveling Machines

Brushless Motor

For TTNG and US machines



Protem US beveling machine with Brushless Motor

Protem has implemented the brushless motor technology on their US (portable beveling machines) and TT machines (orbital pipe cutting & beveling machines). The brushless motors offer numerous advantages. Compared to classical DC motors, the brushless motors are light and compact. It is a significant benefit for machines mainly used on-site and very often in harsh environments. The lifetime of these motors is approximately four times longer than DC motors.

Any issues related to friction with the brushes have been rectified. The mechanical wear is almost non-existent. Consequently, the reliability of the equipment is greatly improved. The electrical efficiency is higher than what a DC motor is able to provide. Moreover, the thermal heating of a brushless motor is very low compared to a traditional motor.

The speed adjustment is far smoother and the torque stays constant during the use of the motor (no modification is needed for the input voltage) Lastly, the brushless motor is not vibrating, and the low noise level of the running motor guarantees a positive ergonomic experience for the operators using the equipment.

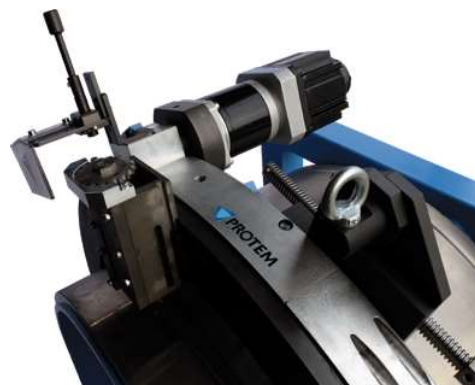
OD Mounted

Order No.	Description
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)
US150-1080	Heavy Duty Pipe Facing Machine with brushless electric drive & Three-Phase Motorization. Please indicate the required voltage and frequency for your application. For Ø 5.905" - 20" (150mm - 508mm)

Order No.	Description
TT168-1080	Cutting and Beveling Machine with Electric motorisation Brushless, 220V
TT219-1080	Cutting and Beveling Machine with Electric motorisation Brushless, 220V
TT273-1080	Cutting and Beveling Machine with Electric motorisation Brushless, 220V
TT323-1080	Cutting and Beveling Machine with Electric motorisation Brushless, 220V
TT406-1080	Cutting and Beveling Machine with Electric motorisation Brushless, 220V
TT508-1080	Cutting and Beveling Machine with Electric motorisation Brushless, 220V
TT610-1080	Cutting and Beveling Machine with Electric motorisation Brushless, 220V
TT762-1080	Cutting and Beveling Machine with Electric motorisation Brushless, 220V
TT900-1080	Cutting and Beveling Machine with Electric motorisation Brushless, 220V
TT1016-1080	Cutting and Beveling Machine with Electric motorisation Brushless, 220V
TT1200-1080	Cutting and Beveling Machine with Electric motorisation Brushless, 220V
TT1400-1080	Cutting and Beveling Machine with Electric motorisation Brushless, 220V



Protem TTNG orbital cutting machine with Brushless Motor



Order No.	Description
O-TTN-TT1-5-H-PL	Severing tool-bit, max. wall thickness 35mm
O-TTN-TT1-5-H-PT	Pointed tool-bit, max. wall thickness 35mm
O-TTN-TT2-12-H-2	Beveling tool-bit 30°, wall thickness 27mm
O-TTN-TT3-12-H-3	Beveling tool-bit 37°30, wall thickness 20mm
O-TTN-TT4-12-H-4	Beveling tool-bit 45°
O-TTN-TT5-12-H-5	Beveling tool-bit 30°, reversed
O-TTN-TT6-12-H-6	Beveling tool-bit 37°30, reversed
O-TTN-TT7-25-H-7	Beveling tool-bit 30°, wall thickness 35mm
O-TTN-TT8-25-H-8	Beveling tool-bit 37°30, wall thickness 35mm
O-TTN-TT9-25-H-9	Beveling tool-bit for double bevel
O-TTN-TT10-12-H-10	Beveling tool-bit 37°30, double bevel, wall thickness 18mm
O-TTN-TT11-5-H-PL	Severing tool-bit, max. wall thickness 90mm
O-TTN-TT11-5-H-PT	Pointed tool-bit, max. wall thickness 90mm
O-TTN-TT12-25-H-12	Beveling tool-bit for double bevel, wall thickness 46mm

Order No.	Description
O-TTN-TT13-25-H-13	Beveling tool-bit for double bevel, wall thickness 39mm
O-TTN-TT14-25-H-14	Beveling tool-bit 37°30, wall thickness 50mm
O-TTN-TT15-8-H-PL	Severing tool-bit, max. wall thickness 90mm , width 30mm
O-TTN-TT15-8-H-PT	Pointed tool-bit, max. wall thickness 90mm , width 30mm
O-TTN-TT16-8-H-PL	Severing tool-bit, max. wall thickness 90mm, width 8mm
O-TTN-TT16-8-H-PT	Pointed tool-bit, max. wall thickness 90mm, width 8mm
O-TTN-TT17-25-H-17	Beveling tool-bit for compound bevel 37°30 / 10°
O-TTN-TT18-25-H-18	Beveling tool-bit for compound bevel, wall thickness 45mm 37°30 / 10°
O-TTN-TT19-25-H-19	Beveling tool-bit for compound bevel, wall thickness 50mm 37°30 / 10°
O-TTN-TT20-25-H-20	Beveling tool-bit for compound bevel, wall thickness 35mm 30° / 10°
O-TTN-TT21-25-H-21	Beveling tool-bit for compound bevel, wall thickness 45mm 30° / 10°
O-TTN-TT22-25-H-22	Beveling tool-bit for compound bevel, wall thickness 50mm 30° / 10°
O-TTN-TT23-25-H-23	Beveling tool-bit for double bevel, wall thickness 50mm 30°
O-TTN-TT24-12-H-24	Beveling tool-bit for double bevel, wall thickness 22mm 30°

OD Mounted