# **TNO SERIES**

# HEAVY DUTY SEVERING & BEVELING

Ø 114.3 mm - 1828.8 mm Ø 4.5" - 72"



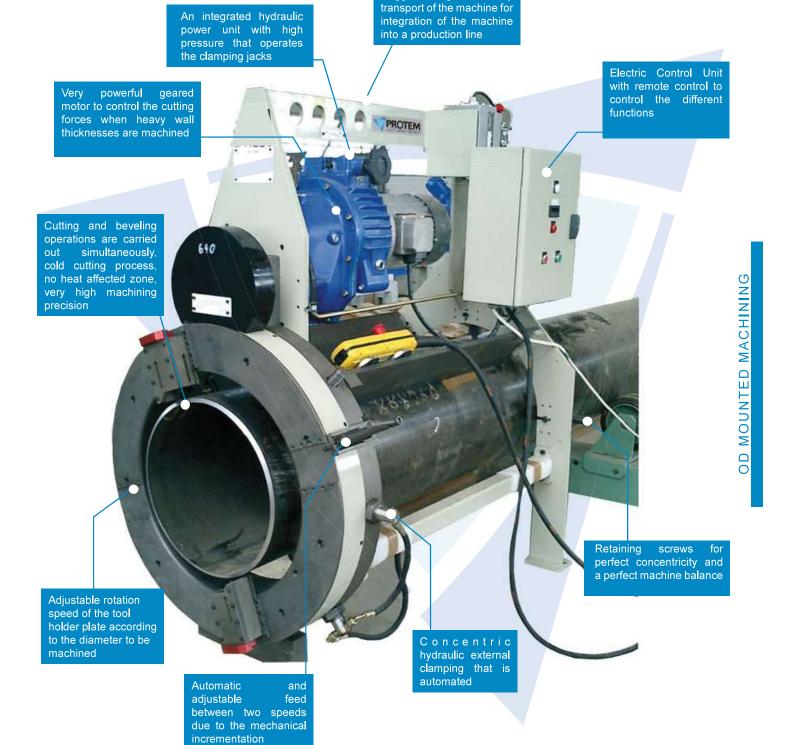
TNO Series	Machining Ca	pacity
TNO 4-12	114.3 - 323.9 mm	4" - 12"
TNO 12-24	323.9 - 610 mm	12" - 24"
TNO 24-36	610 <b>-</b> 914.4 mm	24" – 36"

#### **▼ INDUSTRIES:**









Rugged design and easy



# **TNO SERIES**

#### **TNO**



#### Ø 114.3 - 1828.8 mm (4.5" - 72")

#### **▼ DESCRIPTION:**

The TNO are high speed cutting and beveling machines, specially designed to fit your piping or tubing prefab applications on-site or in workshops. These machines cut and bevel heavy wall pipes faster than any other machine!

The TNO machines save space in your workshops and can be integrated into your production lines for unmatched results.

They save man hours by avoiding grinding operations, flame cutting, difficult handling and the setting of pipes on a lathe. They are transportable, rigid, fast and accurate.

The TNO machines are electrically driven and equipped with a hydraulic power unit for the automatic clamping system. Clamping screws located on the front and on the rear of the machine adjust the concentricity and allow a perfect alignment and a perfect squaring.

The TNO is an OD clamping orbital cutting and beveling machine. The cutting tools rotate around the tube.

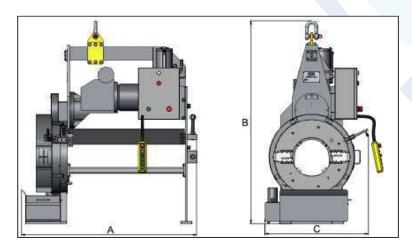
The automatic incremental feed system controls the two tool carriages with two feed speeds.

The rotation speed of the tool holder plate is adjustable according to the tube diameter.

SPECIFIC WELD PREPARATIONS ON REQUEST

Beveling	Cutting	Facing	Counterboring	Surfacing
<b>~</b>	<b>~</b>	<b>~</b>	<b>/</b>	×

#### **▼ DIMENSIONS:**



#### **TECHNICAL FEATURES:**

Machine	TNO Series	
Clamping range	114.3 - 1828.8 mm 4" - 12"	
Clamping	Automatic	
Machining Time	Few minutes	
Power	400 V – 50 Hz	
Stroke of the tool holder	100 mm 3.937"	
Usable feed of cutting or beveling tool bits	60 mm 2.362"	
Feed of the clamping cylinders	100 mm 3.937"	

## TNO 4-12



#### Ø 114.3 - 323.9 mm (4" - 12")

#### **▼ DESCRIPTION:**

ORDER NO.	DESCRIPTION
TNO FAB-12	Cutting and beveling machine type TNO 4-12"

Machine  TNO 4-12  114.3 - 323.9 mm  4" - 12"  Minimum Maximum  Tool-plate rotation speed:  Advance speed of tool holder plates:  Operating pressure of the clamping cylinders  100 bar 200 bar 1450 psi 2900 psi  Tube outside diameter.			
Clamping range  4" - 12"  Minimum Maximum  Tool-plate rotation speed:  5,5 rpm 30 rpm  Advance speed of tool holder plates:  Operating pressure of the clamping cylinders  100 bar 200 bar 1450 psi 2900 psi 114.3 mm 323.9 mm	Machine	TNC	4-12
Minimum Maximum  Tool-plate rotation speed:  Advance speed of tool holder plates:  Operating pressure of the clamping cylinders  4" - 12"  Minimum Maximum  5,5 rpm 30 rpm  0.16 mm/ round round  100 bar 200 bar 1450 psi 2900 psi  114.3 mm 323.9 mm	01	114.3 - 323.9 mm	
Tool-plate rotation speed:  Advance speed of tool holder plates:  Operating pressure of the clamping cylinders  5,5 rpm  30 rpm  0.16 mm/ round  100 bar 200 bar 1450 psi 2900 psi	Clamping range	4" - 12"	
speed:  Advance speed of tool holder plates:  Operating pressure of the clamping cylinders  5,5 rpm  30 rpm  0.16 mm/ round  100 bar 200 bar 1450 psi 2900 psi		Minimum	Maximum
holder plates: round round  Operating pressure of the clamping cylinders 100 bar 200 bar 1450 psi 2900 psi 114.3 mm 323.9 mm	•	5,5 rpm	30 rpm
the clamping cylinders 1450 psi 2900 psi 114.3 mm 323.9 mm	•		
114.3 mm 323.9 mm	Operating pressure of	100 bar	200 bar
	the clamping cylinders	1450 psi	2900 psi
	Tube outside diameter	114.3 mm	323.9 mm
4.5" 12.751"		4.5"	12.751"

#### **DIMENSIONS:**

#### **TNO 4-12**

^	1700 mm
A	66.929"
_	1964 mm
В	77.322"
С	1000 mm
C	39.370"

## TNO 12-24



Ø 323.9 - 610 mm (12" - 24")

#### **▼ DESCRIPTION:**

ORDER NO.	DESCRIPTION
TNO FAB-24	Cutting and beveling machine type TNO 12-24"

Machine	TNO	12-24
	323.9 <b>-</b> 610 mm	
Clamping range	12" - 24"	
	Minimum	Maximum
Tool-plate rotation speed:	4.2 tr/mn	21.5 tr/mn
Advance speed of tool holder plates:	0.08 mm/ round.	0.16 mm/ round
Operating pressure of	100 bar	200 bar
the clamping cylinders	1450 psi	2900 psi
Tube outside diameter	323.9 mm	610 mm
	12.751"	24.015"

#### **DIMENSIONS:**

#### **TNO 12-24**

	1700 mm
Α	66.929"
В	2118 mm
	88.385"
С	1210 mm
Ŭ	47.637"







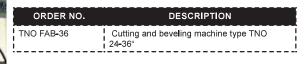
# **TNO SERIES**

## TNO 24-36

Ø 610 - 914.4 mm (24" - 36")



#### **DESCRIPTION:**



Machine	TNO	24-36
Clamping range	610 <b>-</b> 914.4 mm	
Clamping range	24" <b>–</b> 36"	
	Minimum	Maximum
Tool-plate rotation speed:	2.2 rpm	11.9 rpm
Advance speed of tool holder plates:	0.08 mm/ round.	0.16 mm/ round
Operating pressure of	100 bar	200 bar
the clamping cylinders	1450 psi	2900 psi
Tube outside diameter	610 mm	915 mm
Tube outside diameter	24.015"	36.023"

#### **DIMENSIONS:**

#### **TNO 24-36**

А	1700 mm
	66.929"
В	2515 mm
Б	99.015"
С	1510 mm
	59.448"

**▼ BIGGER MODELS ON REQUEST** 









#### **OPTIONS:**

#### **Tool block carriage**



100 mm (3.937") stroke carriages or two ovality tracking carriages are necessary. Depending on the application, a wide range of cutting or beveling tool bits are available to perform the majority of the required machining applications.

ORDER NO.	DESCRIPTION
TTNG-2200	TTNG-PO-C-50 Tool holder carriage, 50 mm stroke
TTNG-2400	TTNG-PO-C-100 Tool holder carriage, 100 mm stroke
TNO_FAB-1002	TTNG FAB-4/12-POSUI Carriage for ovalization tracking with kit intermediate plates and clutch holder

#### **Lubrification device**



In order to increase the lifetime of the inserts and to reduce the noise level during the machining operations a lubrication device must be used. This lubrication device is made up of a cutting fluid tank, covered by a chip container and a pump for circulating the cutting fluid . A flexible piping kit for aiming the fluid at the cutting point is also supplied together with a tank support plate. This option is activated through a push button.

ORDER NO.	DESCRIPTION	1					Į
TNO_FAB-36-LUB	TNO FAB-36-LUB Lubrication kit			Z	Z	 _	į

#### **Counterboring carriage**



The counterboring carriage performs an ID bevel in order to obtain a regular land.

ORDER NO.	DESCRIPTION
TTNG-2700	Counterboring carriage, stroke 50 mm with tool bit holder
TTNG-2800	Counterboring carriage, stroke 50 mm with insert holder
TTNG-2900	Counterboring carriage, stroke 100 mm with tool bit holder
TTNG-3000	Counterboring carriage, stroke 100 mm with insert holder

### Chipguard



The whole range of TNO units is fitted with a protective housing which covers the tool-plate. The housing represents a safety system for the operators. It has a slot to be able to adjust the posit ion of the clutch pin that moves the tool carriage forward.

ORDER NO.	DESCRIPTION
TNO <b>-</b> 3200	Safety housing

