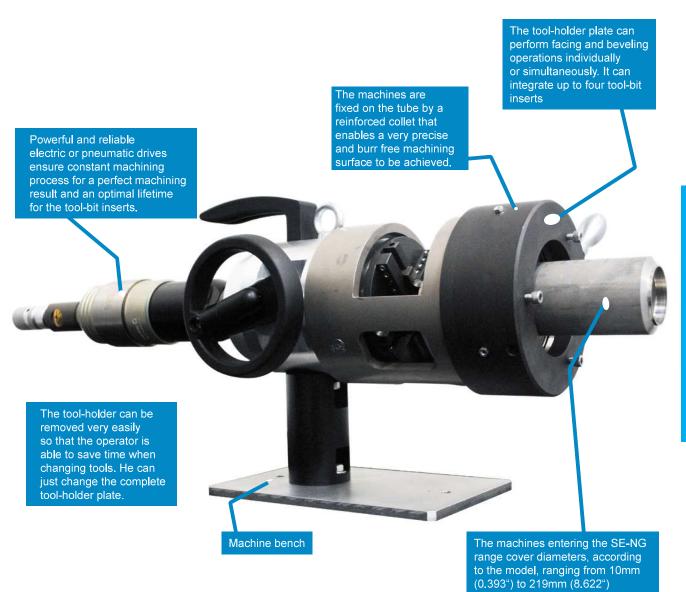


## **SE-NG Series Tube Squaring Machines**



These machines obtain repeatable high quality weld preparations on tubes & pipes of all materials, including mild, stainless steel or exotic alloys.



## **SE60NG Tube and Pipe Beveling Machine**

Standard Capacity: 10mm - 60,3mm (0.393"-2.374")



The pneumatic or electric powered Tube & Pipe end preparation machine PROTEM SE60NG is lightweighted and portable. It will perform repeatable perfect quality weld preps on all metal tubes and pipes including mild, stainless steel, exotic alloys such as inconel, P91, hastelloy, copper etc.. The SE60NG allows to cover diameters ranging from 0.393" to 2.374" (10mm-60,3mm). The cutting head will face, bevel and counterbore individually or in a simultaneous operation. The toolholder plate can hold up to 4 tool blocks. The tool-holder plate is easily removable and thus allows the operator to save time once the tool blocks have been adjusted by exchanging the whole plate. The SE60NG machine is available with either pneumatic or electric (230 V or 110 V) drives. It clamps to the tubes and pipes by means of a heavy clamping collet and thus provides a chatterfree accurate finish.

Beveling	Squaring	Counter- boring	Cut to length	Weld Joint Removal	Coating Removal	Saddles	Surfacing
<b>&gt;</b>	>	>	>	×	×	×	×

#### **Advantages:**

- Portable
- Powerful Machining Equipment
- Easy and Safe use for the Operators
- No Heat Affected Zone
- High Accuracy
- Fast and easy mounting
- Perfect and repeatable welding preparation
- Adapted for works in tight spaces
- The machine can be used in all positions: vertical, horizontal, over head
- The tool-Inserts can be changed and adjusted very quickly
- Smooth and Burr-Free Surface Finish
- No vibration during the machining process



Dimensions





# **SE60NG Tube and Pipe Beveling Machine**

#### **Technical Features:**

Specific shapes	I, V, J-bevel,		
& angles	Other on Requests		
Clamping	Manual		
Feed stroke	10 mm (0.394")		
Gear drive	240 rpm to 330 rpm		
Pneumatic drive	730 W, 6 bar (87 psi),		
Prieumanc urive	1400 l/min (49 cfm)		
Electrical drive	110 V (1500 W) or		
Electrical drive	220 V (1050 W)		
Pneumatically dr	iven machines have to be		
used with a lubri	cating filter.		
Recommended option: regulation valve.			

Order No.	Description
SE60NG-1000	Tube & Pipe Beveling and Facing Machine PROTEM SE60NG for Ø 0.393"-2.374" (10mm-60.3mm) with pneumatic drive
SE60NG-1002	Tube & Pipe Beveling and Facing Machine PROTEM SE60NG for Ø 0.393"-2.374" (10mm-60.3mm) with pneumatic drive and automatic clamping.
SE60NG-1004	Tube & Pipe Beveling and Facing Machine PROTEM SE60NG for Ø 0.393"-2.374" (10mm-60.3mm) with integrated pneumatic automatic clamping and feed device
SE60NG-1020	Tube & Pipe Beveling and Facing Machine PROTEM SE60NG for Ø 0.393"-2.374" (10mm-60.3mm) with electric drive 220V.
SE60NG-1022	Tube & Pipe Beveling and Facing Machine PROTEM SE60NG for Ø 0.393"-2.374" (10mm-60.3mm) with electric right angle drive 220V.
SE60-1040	Tube & Pipe Beveling and Facing Machine PROTEM SE60NG for Ø 0.393"-2.374" (10mm-60.3mm) with electric drive 110V.
SE60-SAA	Tube & Pipe Beveling and Facing Machine PROTEM SE60NG for Ø 0.393"-2.374" (10mm-60.3mm) with automatic feed.

## **Applications:**







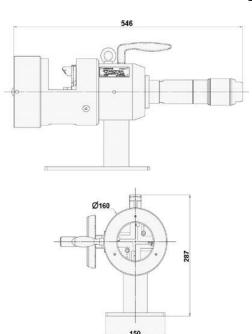
### SE90NG Tube and Pipe Facing Machine

Standard Capacity: 10mm - 90mm (0.393"-3.543")



The pneumatic or electric powered Tube & Pipe end preparation machine PROTEM SE90NG is lightweighted and portable. It will perform repeatable perfect quality weld preps on all metal tubes and pipes including mild, stainless steel, exotic alloys such as inconel, P91, hastelloy, copper etc.. The SE90NG allows to cover diameters ranging from 0.393" to 3.543" (10mm-90mm). The cutting head will face, bevel and counterbore individually or in a simultaneous operation. The tool-holder plate can hold up to 4 tool blocks. The tool-holder plate is easily removable and thus allows the operator to save time once the tool blocks have been adjusted by exchanging the whole plate. The SE90NG machine is available with either pneumatic or electric (230 V or 110 V) drives. It clamps to the tubes and pipes by means of a heavy clamping collet and thus provides a chatterfree accurate finish.

Beveling	Squaring	Counter- boring	Cut to length	Weld Joint Removal	Coating Removal	Saddles	Surfacing
<b>/</b>	<b>*</b>	<b>/</b>	<b>/</b>	×	×	×	×



#### **Technical Features:**

Specific shapes & angles	I, V, J-bevel, Other on Requests		
Clamping	Manual		
Feed stroke	10 mm (0.394")		
Gear drive	75 rpm to 90 rpm		
Pneumatic drive	730 W, 6 bar (87 psi), 1400 l/min (49 cfm)		
Electrical drive	110 V (1500 W) or 220 V (1050 W)		

Pneumatically driven machines have to be used with a lubricating filter.
Recommended option: regulation valve.

Order No.	Description				
SE90NG-1000	Tube & Pipe Beveling and Facing Machine PROTEM SE90NG for Ø 0,393"-3,543" (10mm-90mm) with pneumatic drive				
SE90NG-1002	Tube & Pipe Beveling and Facing Machine PROTEM SE90NG for Ø 0,393"-3,543" (10mm-90mm) with pneumatic drive and automatic clamping.				
SE90NG-1004	Tube & Pipe Beveling and Facing Machine PROTEM SE90NG for Ø 0.393"-3.543" (10mm-90mm) with integrated pneumatic automatic clamping and feed device				
SE90NG-1020	Tube & Pipe Beveling and Facing Machine PROTEM SE90NG for Ø 0.393"-3.543" (10mm-90mm) with electric drive 220V.				

Dimensions

Order No.	Description
SE90NG-1022	Tube & Pipe Beveling and Facing Machine PROTEM SE90NG for Ø 0.393"-3.543" (10mm-90mm) with electric right angle drive 220V.
SE90-1040	Tube & Pipe Beveling and Facing Machine PROTEM SE90NG for Ø 0.393"-3.543" (10mm-90mm) with electric drive 110V.
SE90-SAA	Tube & Pipe Beveling and Facing Machine PROTEM SE90NG for Ø 0.393"-3.543" (10mm-90mm) with automatic feed.



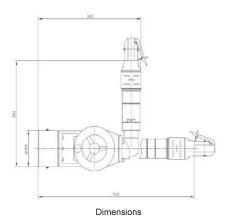
### SE120NG Tube Squaring Machine

Standard Capacity: 50mm - 120mm (1.968"-4.724")



The pneumatic or electric powered Tube & Pipe end preparation machine PROTEM SE120NG is lightweighted and portable. It will perform repeatable perfect quality weld preps on all metal tubes and pipes including mild, stainless steel, exotic alloys such as inconel, P91, hastelloy, copper etc.. The SE120NG allows to cover diameters ranging from 1.968" to 4.724" (50mm-120mm). The cutting head will face, bevel and counterbore individually or in a simultaneous operation. The toolholder plate can hold up to 4 tool blocks. The tool-holder plate is easily removable and thus allows the operator to save time once the tool blocks have been adjusted by exchanging the whole plate. The SE120NG machine is available with either pneumatic or electric (230 V or 110 V) drives. It clamps to the tubes and pipes by means of a heavy clamping collet and thus provides a chatterfree accurate finish.

ĺ	<b>/</b>	<b>/</b>	<b>/</b>	<b>/</b>	×	×	×	×
	Beveling	Squaring	Counter- boring	Cut to length	Weld Joint Removal	Coating Removal	Saddles	Surfacing



#### **Technical Features:**

Specific shapes & angles	I, V, J-bevel, Other on Requests		
Clamping	Manual		
Feed stroke	10 mm (0.394")		
Gear drive	60 rpm to 75 rpm		
Pneumatic drive	730 W, 6 bar (87 psi), 1400 l/min (49 cfm)		
Electrical drive	110 V (1500 W) or 220 V (1050 W)		

Pneumatically driven machines have to be used with a lubricating filter.
Recommended option: regulation valve.

Order No.	Description
SE120NG-1000	Tube & Pipe Beveling and Facing Machine PROTEM SE120NG for Ø 1.968"-4.724" (50mm-120mm) with pneumatic drive
SE120NG-1002	Tube & Pipe Beveling and Facing Machine PROTEM SE120NG for Ø 1.968"-4.724" (50mm-120mm) with pneumatic drive and automatic clamping.
SE120NG-1004	Tube & Pipe Beveling and Facing Machine PROTEM SE120NG for Ø 1.968"-4.724" (50mm- 120mm) with integrated pneumatic automatic clamping and feed device
SE120NG-1020	Tube & Pipe Beveling and Facing Machine PROTEM SE120NG for Ø 1.968"-4.724" (50mm-120mm) with electric drive 220V.

Order No.	Description				
SE120NG-1022	Tube & Pipe Beveling and Facing Machine PROTEM SE120NG for Ø 1.968"-4.724" (50mm- 120mm) with electric right angle drive 220V.				
SE120-1040	Tube & Pipe Beveling and Facing Machine PROTEM SE120NG for Ø 1.968"-4.724" (50mm- 120mm) with electric drive 110V.				
SE120-SAA	Tube & Pipe Beveling and Facing Machine PROTEM SE120NG for Ø 1.968"-4.724" (50mm-120mm) with automatic feed.				



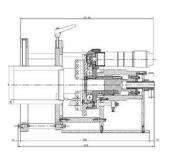
## SE219NG Tube Squaring Machine

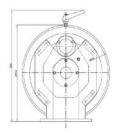
Standard Capacity: 60,3mm - 219mm (2.374"-8.622")



The PROTEM SE219NG is especially designed and engineered to face and bevel tubes with Ø  $2.374^{\circ}$ -8.622° (60.3mm-219mm) OD. Its design and unique working range makes it the best tool in its class. The stainless steel or aluminium collet and its front support allow a perfect clamping and squareness without deformation for orbital welding. 4 standard HSS tool-bits can be mounted on the tool-holder plate to work simultaneously. This tool is ideal for sanitary tubing, food processing and chemical and pharmaceutical applications. The SE219NG can be mounted either with an electric or a pneumatic drive.

ĺ	<b>/</b>	<b>/</b>	<b>/</b>	<b>/</b>	×	×	×	×
	Beveling	Squaring	Counter- boring	Cut to length	Weld Joint Removal	Coating Removal	Saddles	Surfacing





Dimensions

#### **Technical Features:**

Specific shapes & angles	I, V, J-bevel, Other on Requests	
Clamping	Manual	
Feed stroke	10 mm (0.394")	
Gear drive	16,5 rpm	
Pneumatic drive	730 W, 6 bar (87 psi), 1400 l/min (49 cfm)	
Electrical drive	110 V (1500 W) or 220 V (1050 W)	

Pneumatically driven machines have to be used with a lubricating filter.
Recommended option: regulation valve.

Order No.	Description
SE219NG-1000	Tube & Pipe Beveling and Facing Machine PRO- TEM SE219NG for Ø 2.374"-8.622" (60.3mm- 219mm) with pneumatic drive
SE219NG-1002	Tube & Pipe Beveling and Facing Machine PROTEM SE219NG for Ø 2.374"-8.622" (60.3mm-219mm) with pneumatic drive and automatic clamping.
SE219NG-1004	Tube & Pipe Beveling and Facing Machine PRO- TEM SE219NG for Ø 2.374"-8.622" (60.3mm- 219mm) with integrated pneumatic automatic clamping and feed device
SE219NG-1020	Tube & Pipe Beveling and Facing Machine PRO- TEM SE219NG for Ø 2.374"-8.622" (60.3mm- 219mm) with electric drive 220V MS10.

Order No.	Description	
SE219NG-1022	Tube & Pipe Beveling and Facing Machine PROTEM SE219NG for Ø 2.374"-8.622" (60.3mm-219mm) with electric right angle drive 220V MS15.	
SE219-1040	Tube & Pipe Beveling and Facing Machine PROTEM SE219NG for Ø 2.374"-8.622" (60.3mm- 219mm) with electric drive 110V.	
SE219-SAA	Tube & Pipe Beveling and Facing Machine PROTEM SE219NG for Ø 2.374"-8.622" (60.3mm-219mm) with automatic feed.	



### SE-NG Tube Squaring Machines Options & Accessories

#### **SE-NG Crates:**

Order No.	Description
SE60NG-K01	Transport crate for SE60
SE60NG-K02	Transport crate for SE60E
SE60-K03	Transport crate for SE60-RA
SE90NG-K01	Transport crate for SE90
SE90NG-K02	Transport crate for SE90E
SE120NG-K01	Transport crate for SE120
SE120NG-K02	Transport crate for SE120E
SE219-K01	Transport crate for SE219
SE219-K02	Transport crate for SE219E

### **SE60NG Tool-holders:**

Order No.	Description
SE60NG-1310	Tool-holder plate
SE60PP-30-41	Tool-holder 30°
SE60PP-37-10	Tool-holder 37°30
SE60PP-45-11	Tool-holder 45°
SE60PP-90-09	Tool-holder 90°
SE60PPD-14-16	Tool-holder for counterboring works 14°

Order No.	Description
SE60PPD-15-12	Tool-holder for counterboring works 15°
SE60PPJ-15-43	Tool-holder for J-bevels 15°
SE60PPJ-20-44	Tool-holder for J-bevels 20°
SE60PPJ-20-45	Tool-holder for J-bevels 20° R=0
SE60PPJ-20-47	Tool-holder for J-bevels 20° R=2
SE60PPJ-30-46	Tool-holder for J-bevels 30°

#### SE90NG Tool-holders:

Order No.	Description
SE90NG-1310	Tool-holder plate
SE90NG-1311	Tool-holder 30°
SE90NG-1312	Tool-holder for inside machining works 5°
SE90NG-1313	Tool-holder 90°

Order No.	Description
SE90NG-1314	Tool-holder 37°30
SE90NG-1315	Tool-holder 45°
SE90NG-1316	Tool-holder for inside machining works 15°



#### SE120NG Tool-holders:

Order No.	Description
SE120-68	Tool-holder plate
SE60PP-30-41	Tool-holder 30°
SE60PP-37-10	Tool-holder 37°30
SE60PP-45-11	Tool-holder 45°
SE60PP-90-09	Tool-holder 90°

SE-NG Tube Squaring Machines

### **SE-NG Collets:**

Order No.	Description
SE60NG-1200-(Please specify the required Ø)	Clamping collet. One collet necessar per Ø. Please specify the required Ø
SE60NG-1204-(Please specify the required Ø)	Clamping collet, stainless steel. One collet necessar per Ø. Please specify the required Ø
SE90NG-1200-(Please specify the required Ø)	Clamping collet, aluminium. One collet necessar per Ø. Please specify the required Ø
SE90NG-1202-(Please specify the required Ø)	Clamping collet, steel. One collet necessar per Ø. Please specify the required Ø

Order No.	Description
SE90NG-1204-(Please specify the required Ø)	Clamping collet, stainless steel. One collet necessar per Ø. Please specify the required Ø
SE120-69-(Please specify the required Ø)	Clamping collet. One collet necessar per Ø. Please specify the required Ø
SE219-1200-(Please specify the required Ø)	Clamping collet, aluminium. One collet necessar per Ø. Please specify the required Ø
SE219-1204-(Please specify the required Ø)	Clamping collet, stainless steel. One collet necessar per Ø. Please specify the required Ø



## **SE-NG Tube Squaring Machines**

Order No.	Description	Picture
O-SE-P2-3H-T-25	Insert, right, material HSSE with TiN coating	
O-SE-P2-3H-F-25	Insert, right, material HSSE with TiALN coating	
O-SE-P3-3H-T-25A		
O-SE-P3-3H-F-25A	Insert right for J-prep with radius 1.5, ma- terial HSSE with TiALN coating	
O-SE-P3-3H-T-25C	Insert, right for J-prep with radius 2	
O-SE-P4-3H-T-26		
O-SE-P4-3H-F-26	Insert, left, material HSSE with TiALN coating	
O-SE-P5-3H-T-26A	Insert, left for J-prep with radi- us 1.5, material HSSE with TiN coating	
O-SE-P5-3H-F-26A	Insert, left, for J-prep with radius 1.5, ma- terial HSSE with TiALN coating	
O-US-A1-9-H-27	Tool-bit 90°	PROTEMAT-9
O-US-A2-9-H-26	Tool-bit for 30° bevel	Pictoria.
O-US-A3-9-H-28	Tool-bit for 37°30 bevel	MOTHAL S