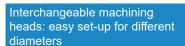
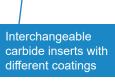


## SE Series Tube Squaring Machines

Precise feed set-up with indexed barrel



The OD mount tube squaring machine is clamped onto the OD diameter of the tube with clamping collets. One collet is necessary for every different diameter which enables a perfect concentric clamping. No deformation of tubes, even for the thinnest ones.



Modular design, portable and lightweight for several different applications in many industries such as:

#### High Purity:

- >> Semi-conductors
- >> Pharmaceuticals
- >> Clean Rooms
- >> Food Processing
- » Aerospace
- >> Shipbuilding
- >> Nuclear
- >> Oil and Gas
- >> Cryogenics
- >> Defence
- >> Green Energies
- >> Chemicals



**PROTEM** 

SE Series	Machining Capacities				
SE25	0.118" - 1"	3mm - 25.4mm			
SE65	0.5" - 2.5"	12.7mm - 63.5mm			
SE2T	0.118" - 2.5"	3mm - 63.5mm			
SE25RA	0.118" - 1"	3mm - 25.4mm			
SE65RA	0.5" - 2.5"	12.7mm - 63.5mm			



### SE25 Tube Squaring Machine

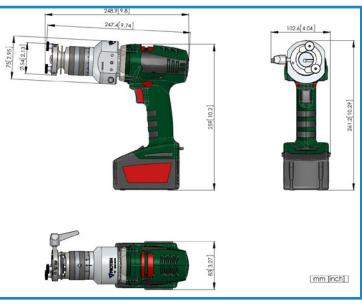
#### Standard Capacity: 0.118" - 1" (3mm - 25.4mm)



The OD Mounted Facing machine SE25 clamps on the outside  $\emptyset$  of the tube with clamping collets. One collet per  $\emptyset$  is necessary.

No distortion of the tubes, even for the thinnest ones. Powered: Electrically or with cordless electric drive. The tube facing machine SE25 can be mounted onto a bench support.

Beveling	Squaring	Counter- boring	Flush pipes	Weld Joint Removal	Coating Removal	Saddles	Surfacing
<b>✓</b>	>	×	>	×	×	×	×



Dimensions



#### **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



# **SE25 Tube Squaring Machine**

#### **Technical Features:**

Specific shapes & angles	I and V
Clamping	Manual
Feed stroke	0.394" (10mm)
Gear drive	1. Level 500 rpm 2. Level 1700 rpm
Electrical or	110 V (1100 W) or
Cordless drive	220 V (1300 W)

Order No.	Description
SE25-1020	Tube Squaring Machine PROTEM SE25 for Ø 0.118"-1" (3mm-25.4mm) with cordless drive 220V.
SE25-1030	Tube Squaring Machine PROTEM SE25 for Ø 0.118"-1" (3mm-25.4mm) with electric drive 220V.
SE25-1040	Tube Squaring Machine PROTEM SE25 for Ø 0.118"-1" (3mm-25.4mm) with cordless drive 110V.
SE25-1050	Tube Squaring Machine PROTEM SE25 for Ø 0.118"-1" (3mm-25.4mm) with electric drive 110V

### **Applications:**











## **SE65 High Purity Tube Squaring Machine**

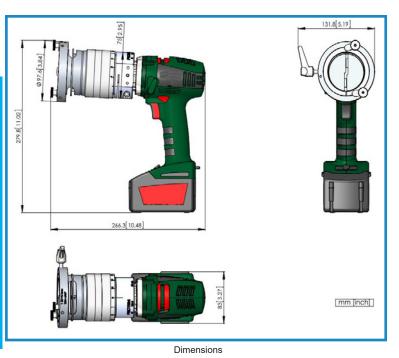
Standard Capacity: 0.5" - 2.5" (12.7mm - 63.5mm)



The OD Mounted Facing machine SE65 clamps on the outside  $\emptyset$  of the tube with clamping collets. One collet per  $\emptyset$  is necessary. No distortion of the tubes, even for the thinnest ones.

Powered: Electrically or with cordless electric drive. The tube facing machine can be mounted onto a bench support.

<b>/</b>	<b>/</b>	×	/	×	×	×	×
Beveling	Squaring	Counter- boring	Flush pipes	Weld Joint Removal	Coating Removal	Saddles	Surfacing



Specific shapes & angles	I
Clamping	Manual
Feed stroke	0.394" (10mm)
Gear drive	1. Level 500 rpm 2. Level 1700 rpm
Electrical or Cordless drive	110 V (1100 W) or 220 V (1300 W)

Order No.	Description			
SE65-1020	Tube Squaring Machine PROTEM SE65 for Ø 0.5" - 2.5" (12.7mm - 63.5mm) with electric cordless drive 220V.			
SE65-1030	Tube Squaring Machine PROTEM SE65 for Ø 0.5" - 2.5" (12.7mm - 63.5mm) with electric drive 220V.			
SE65-1040	Tube Squaring Machine PROTEM SE65 for Ø 0.5" - 2.5" (12.7mm - 63.5mm) with electric cordless drive 110V.			
SE65-1050	Tube Squaring Machine PROTEM SE65 for Ø 0.5" - 2.5" (12.7mm - 63.5mm) with electric drive 110V.			



## **SE2T OD Mounted Tube End Squaring Machine**

#### Standard Capacity: 0.118" - 2.5" (3mm - 63.5mm)



SE2T with a SE25 Machining Head

2 Machines in one! SE2T= SE25+SE65

The OD Mounted Facing machine SE2T clamps on the outside  $\varnothing$  of the tube with clamping collets. One collet per  $\varnothing$  is necessary. No distortion of the tubes, even for the thinnest ones.

Powered: Electrically or with cordless electric drive. The tube facing machine can be mounted onto a bench support.

ľ			×	1	×	×	×	×
	Beveling	Squaring	Counter- boring	Flush pipes	Weld Joint Removal	Coating Removal	Saddles	Surfacing



SE2T with a SE65 Machining Head

Specific shapes & angles	I and V		
Clamping	Manual		
Feed stroke	0.394" (10mm)		
Gear drive	1. Level 500 rpm 2. Level 1700 rpm		
Electrical or Cordless drive	110 V (1100 W) or 220 V (1300 W)		

Order No.	Description		
SE2T-1020	Tube End Squaring Machine PROTEM SE2T for Ø 0.118" - 2.5" (3mm - 63.5mm) with electric cordless drive, 220V.		
SE2T-1030	Tube End Squaring Machine PROTEM SE2T for Ø 0.118" - 2.5" (3mm - 63.5mm) with electric drive 220V		
SE2T-1040	Tube End Squaring Machine PROTEM SE2T for Ø 0.118" - 2.5" (3mm - 63.5mm) with electric cordless drive, 110V.		
SE2T-1050	Tube End Squaring Machine PROTEM SE2T for Ø 0.118" - 2.5" (3mm - 63.5mm) with electric drive 110V		



### SE25RA Tube Squaring Machine with Angle Drive

Standard Capacity: 0.118" - 1" (3mm - 25.4mm)



The OD Mounted Facing machine SE25RA clamps on the outside  $\emptyset$  of the tube with clamping collets. One collet per  $\emptyset$  is necessary. No distortion of the tubes, even for the thinnest ones.

Powered: Electrically or with cordless electric drive. The tube facing machine can be mounted onto a bench support.

ſ	<b>/</b>	<b>/</b>	×	<b>/</b>	×	×	×	×
	Beveling	Squaring	Counter- boring	Flush pipes	Weld Joint Removal	Coating Removal	Saddles	Surfacing



Specific shapes & angles	I
Clamping	Manual
Feed stroke	0.394" (10mm)
Gear drive	700 rpm
Electrical or Cordless drive	110 V (1100 W) or 220 V (1300 W)

Order No.	Description
SE25RA-1020	Tube Squaring Machine PROTEM SE-25RA for Ø 0.118"-1" (3mm-25.4mm) with right angle cordless drive.
SE25DASH-1020	Tube Squaring Machine PROTEM SE25 DASH for Ø 0.118"-1" (3mm-25.4mm) with cordless drive. Adapted for aerospace applications.
SE25RA- DASH-1020	Tube Squaring Machine PROTEM SE25RA-DASH for Ø 0.118"-1" (3mm-25.4mm) with right angle cordless drive. Adapted for aerospace applications.



### SE65RA Tube End Squaring Machine with Angle Drive

Standard Capacity: 0.5" - 2.5" (12.7mm - 63.5mm)



The OD Mounted Facing machine SE65RA clamps on the outside Ø of the tube with clamping collets. One collet per Ø is necessary. No distortion of the tubes, even for the thinnest ones.

Powered: Electrically or with cordless electric drive. The tube facing machine can be mounted onto a bench support.

ſ	<b>/</b>	<b>/</b>	×	<b>/</b>	×	×	×	×
	Beveling	Squaring	Counter- boring	Flush pipes	Weld Joint Removal	Coating Removal	Saddles	Surfacing



Specific shapes & angles	I and V
Clamping	Manual
Feed stroke	0.394" (10mm)
Gear drive	700 rpm
Electrical or Cordless drive	110 V (1100 W) or 220 V (1300 W)

Order No.	Description	
SE65RA-1020	Tube Squaring Machine PROTEM SE65RA for Ø 0.5" - 2.5" (12.7mm - 63.5mm) with right angle cordless drive.	
SE65DASH-1020	Tube Squaring Machine PROTEM SE65 DASH for Ø 0.5" - 2.5" (12.7mm - 63.5mm) with cordless drive. Adapted for aerospace applications.	
SE65RA- DASH-1020	Tube Squaring Machine PROTEM SE65RA-DASH for Ø 0.5" - 2.5" (12.7mm - 63.5mm) with right angle cordless drive. Adapted for aerospace applications.	



### **SE Tube Squaring Machines**

### **Options & Accessories**

#### **SE Crates:**



Order No.	Description
SE25-K04	Transport box for SE25 with cordless electric drive
SE25-K05	Transport box for SE25
SE65-K03	Transport box for SE65 with battery
SE65-K04	Transport box for SE65
SE2T-K01	Transport box for SE-2T

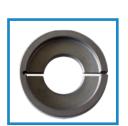
### SE25 Insert Holders:

Order No.	Description	Picture
SE25-3102	37,30° spindle subassembly	
SE25-3202	30° spindle subassembly	The same of the sa
SE25-3302	45° spindle subassembly	
SE65-3102	37,30° spindle subassembly	
SE65-3111	37°30 insert holder	
SE65-3202	30° spindle subassembly	
SE65-3211	30° insert holder	Subject of the Control of the Contro
SE65-3302	45° spindle subassembly	
SE65-3311	45° insert holder	
SE65-3010	facing insert holder	

#### **SE Collets:**

Order No.	Description
SE25-2000-(Please specify the required Ø)	Stainless Steel short clamping collet for SE25 and SE2T (Please specify the required Ø)
SE25-2100-(Please specify the required Ø)	Stainless Steel long clamping collet for SE25 and SE2T (Please specify the required Ø)
SE25-2300-(Please specify the required Ø)	Stainless Steel extra short clamping collet for SE25 and SE2T for Micro Fittings (Please specify the required Ø)
SE65-2000-(Please specify the required Ø)	Stainless Steel short clamping collet for SE65 and SE2T (Please specify the required Ø)
SE65-2100-(Please specify the required Ø)	Stainless Steel long clamping collet for SE65 and SE2T (Please specify the required Ø)
SE65-2300-(Please specify the required Ø)	Stainless Steel extra short clamping collet for SE65 and SE2T Micro Fittings (Please specify the required Ø)











# **SE Tube Squaring Machines**

## **Tool bits**

Order No.	Description	Picture
O-SE-P0-3H-T-24	HSS Short insert (Tin Coating)	
O-SE-P1-3H-F-20	Tool bit, material HSS, coating: TiALN	
O-SE-P1-3C-T-20A	Tool bit, material carbide, coating: TiN	
O-SE-P1-3H-T-20	Tool bit, material HSS, coating: TiN	
O-SE-P1-3C-F-20A	Tool bit, material carbide, coating: TiALN	
O-SE-P1-3H-HC-20	Tool bit, material HSS, coating: TiSiN	
O-SE-P2-3H-T-25	Insert, right, material HSS with TiN coating	
O-SE-P2-3H-F-25	Insert, right, material HSS with TiALN coating	
O-SE-P3-3H-T-25A	Insert right for J-prep with radius 1.5, material HSS with TiN coating	
O-SE-P3-3H-F-25A	Insert right for J-prep with radius 1.5, material HSS with TiALN coating	
O-SE-P3-3H-T-25C	HSS Insert, Right, J-Bevel with Radius 2	
O-SE-P4-3H-T-26	Insert, left, material HSS with TiN coating	
O-SE-P4-3H-F-26	Insert, left, material HSS with TiALN coating	
O-SE-P5-3H-T-26A	Insert, left for J-prep with radius 1.5, material HSS with TiN coating	
O-SE-P5-3H-F-26A	Insert, left, for J-prep with radius 1.5, material HSS with TiALN coating	
SE65-1121	HSS Insert 12,5X8 for collet Ø >61-Hardcut Material	