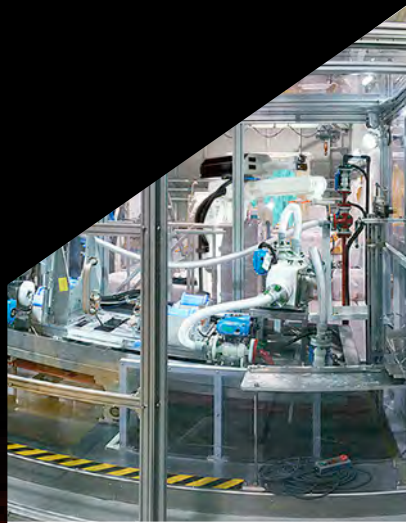
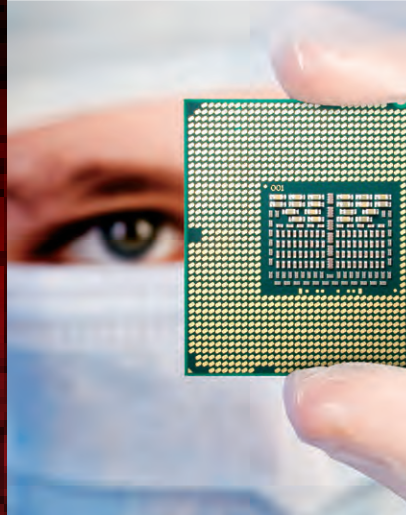


# E.H. WACHS



## HIGH PURITY TUBE SQUARING MACHINES

PORTABLE WELD PREP MACHINE TOOLS



**WACHS** **E.H. WACHS**<sup>®</sup>  
A Division of **TW**

Superior Equipment. Complete Support.<sup>™</sup>

[ehwachs.com](http://ehwachs.com)

# HIGH PURITY MACHINES

E.H. Wachs® High Purity line of portable, compact electric powered machine tools include the FSE (Fitting Squaring Electric), the TSE (Tube Squaring Electric) and TFS (Tube Fitting Squaring) series. In the sub 1.0" (25.4mm) diameter range, the Wachs FSE 1.0 is designed for squaring fittings and tube, while the Wachs TSE 1.0 is built for production tube squaring.

HIGH PURITY MODEL	US TUBING (WALL)	METRIC TUBING (WALL)	POWER SOURCE
<b>TSE 1.0</b>	.25 - 1.0" (.039 - .120")	6.4 - 25.4mm (1- 3mm)	Electric 110V, 220V, Cordless
<b>FSE 1.0</b>	.125 - 1.0" (.025 - .120")	3.2 - 25.4mm (.6 - 3mm)	Electric 110V, 220V, Cordless
<b>TFS 2.5</b>	.5 - 2.5" (.049 - .120")	12.7 - 63.5mm (1.2 - 3mm)	Electric 110V, 220V
<b>TFS 4.5</b>	.5 - 4.5" (.049 - .120")	12.7 - 114.3mm (1.2-3mm)	Electric 110V, 220V
<b>TQ 1.0</b>	.125 - 1.0" (.02 - .065")	3.2 - 25.4mm (.5-1.7mm)	Electric 110V, 220V



FSE 1.0 CORDLESS

## FSE 1.0

The FSE 1.0 (Fitting Squaring Electric) is a portable, handheld or (optionally) bench mounted tool for precision end finishing on fittings and tubes. Designed to produce square, high-quality end preps on micro fittings and tubes from .125" through 1.00" (3.2-25.4mm) O.D. Available in cordless or electric models.



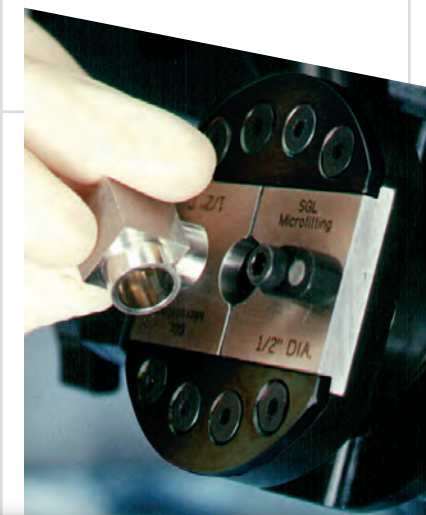
TSE 1.0 ELECTRIC

## TSE 1.0

Wachs TSE 1.0 (Tube Squaring Electric) is a portable handheld or (optionally) bench mounted electric or cordless tool designed for precise machining of tubing from .25" through 1.00" (6.35-25.4mm) O.D. This unit features a unique hand rotating collet closure system, with stainless steel collets to prevent contact damage to the tubes micro finished I.D.

The Wachs index gauge, unlike cam feed designs, allows for precision machining operations.

The feed systems linear advance design permits accurate indexing in  $\pm 0.002"$  ( $\pm 0.05\text{mm}$ ) increments for excellent control and precision finishes.



# TUBE SQUARING

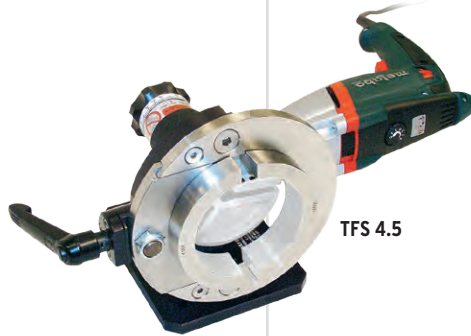
For larger diameter tube squaring in the .50" to 4.50" (12.7-114mm) range, consider the E.H. Wachs® TFS series. Like all Wachs High Purity machine tools, they're powered by industrial grade Metabo German drills featuring Vario Tacho Constamatic (VTC) speed control. These units maintain constant speed, regardless of load, to deliver uniform, precise end preps.



TFS 2.5

## TFS 2.5

The TFS 2.5 (Tube Fitting Squaring) is a portable electric handheld or bench mounted machine tool designed to produce square, burr-free end preps on tubes, tube fittings, elbows, ferrules and thin wall pipe from .50" (12.7mm) through 2.50" (63.5mm) O.D., with wall thickness up to .120" (3mm).



TFS 4.5

## TFS 4.5

Wachs TFS 4.5 (Tube Fitting Squaring) is designed to produce square, high quality end preps on tubes, tube fittings, elbows, ferrules and thin wall pipe from .50" (12.7mm) through 4.50" (114mm) O.D., with wall thickness up to .120" (3mm). Also available is the TFS 2.5/4.5 kit, which includes both the 2.5 and 4.5 clamping heads.



TQ 1.0

## TQ 1.0

E.H. Wachs TQ 1.0 Weld Sampling portable machine tool is a two axis milling saw uniquely designed to perform precise destructive coupon cutting. The TQ will quickly and accurately "butterfly" autogenously welded tube samples from .125" to 1.0" (3.18 - 25.4mm) O.D. with a minimum loss of weld area.



WELD SAMPLE

## HIGHLY VERSATILE

Interchangeable clamping heads provide maximum flexibility with minimal required clearance. A removable bench stand is standard on the TFS Series.

TFS CLAMPING HEADS






WACHS GENUINE TOOLING  
MULTIPACK SET

Wachs Genuine Tooling is the smart choice for Wachs High Purity machine tools.

Available to fit other popular brands, Wachs tooling, bits, and saw blades fit better, last longer and are available in multipack sets for superior value.



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