

## SERCO TU 1100 - Portable High Powered Flange Facing & Boring Machine

### OVERVIEW

The TU series is our greatest achievement. Used with success for over 30 years in the Nuclear Maintenance and Oil & Gas Industries, the TU machines were designed for facing directly on site with an 1/100 mm accuracy.

Using a TU machine is the guarantee of perfect machining in any circumstance with great accuracy within a minimum amount of time.

### DESCRIPTION

The TU 1100 has its axial and radial feed driven by a motor. When the machine is set up, the machining is completely automatic. Its low weight and dimensions allows it to access to the most difficult areas while machining with an 1/100 mm accuracy.

It is possible to add the Kit FC 745 Clamping Chain Device in order to set up the machine around the workpiece.

### SETUP & OPERATION

All TU machines work on the same principle.

They are set up and mounted, thanks to a column/arm system which is bound to the workpiece. An optional chain system can be used to bound the TU machine around the workpiece, even if no attachment possibility is available.

The TU machine setup is fast and easy.

The design allows adjusting the concentricity independently of the squareness with a 1/100 mm accuracy.

The machining accuracy is in the order of 1/100 mm and a surface finish of Ra = 1,6.

### APPLICATIONS

The TU machines are designed for reparation work, maintenance and prefabrication on site.

They are mainly used for the machining of valves and flanges of any dimension and any material.

The applications are wide and our clients come from very different industries where the machining accuracy is crucial. The most demanding industry fields are:

- Nuclear
- Petrochemical
- Aerospace
- Shipbuilding
- Biochemistry
- Boiler-making
- Defence Industry
- Offshore
- Oil & Gas



### TECHNICAL FEATURES

• MACHINING Ø (MM):	Ø 0 – 1100 MM
• CLAMPING:	Ø 280 – 1210 MM
• AXIAL STROKE:	150 MM
• AXIAL AUTO-FEED(MM/MIN):	0 – 24
• RADIAL STROKE:	100 MM
• RADIAL AUTO-FEED (2 SPEEDS ):	0.062 / 0.186 MM PER REV
• AUTOMATIC RAPID RETURN:	1.24 MM/REV
• PNEUMATIC MOTOR (BAR 6):	570 W
• AXIAL FEED MOTOR:	150W
• WORKING AIR PRESSURE (BAR):	5 - 7
• AIR CONSUMPTION (L/MIN):	1450
• WEIGHT:	120

THE MACHINE IS SHIPPED IN 2 POLYESTER RESIN CONTAINERS WITH 4 ROLLERS

#### CONTAINER 1:

• DIMENSIONS:	700 X 500 X 540 MM
• WEIGHT WITH MACHINE & FIXING ARMS:	145KG

#### CONTAINER 2:

• DIMENSIONS:	700 X 500 X 540 MM
• WEIGHT WITH COLUMNS & COMPONENTS:	155 KG