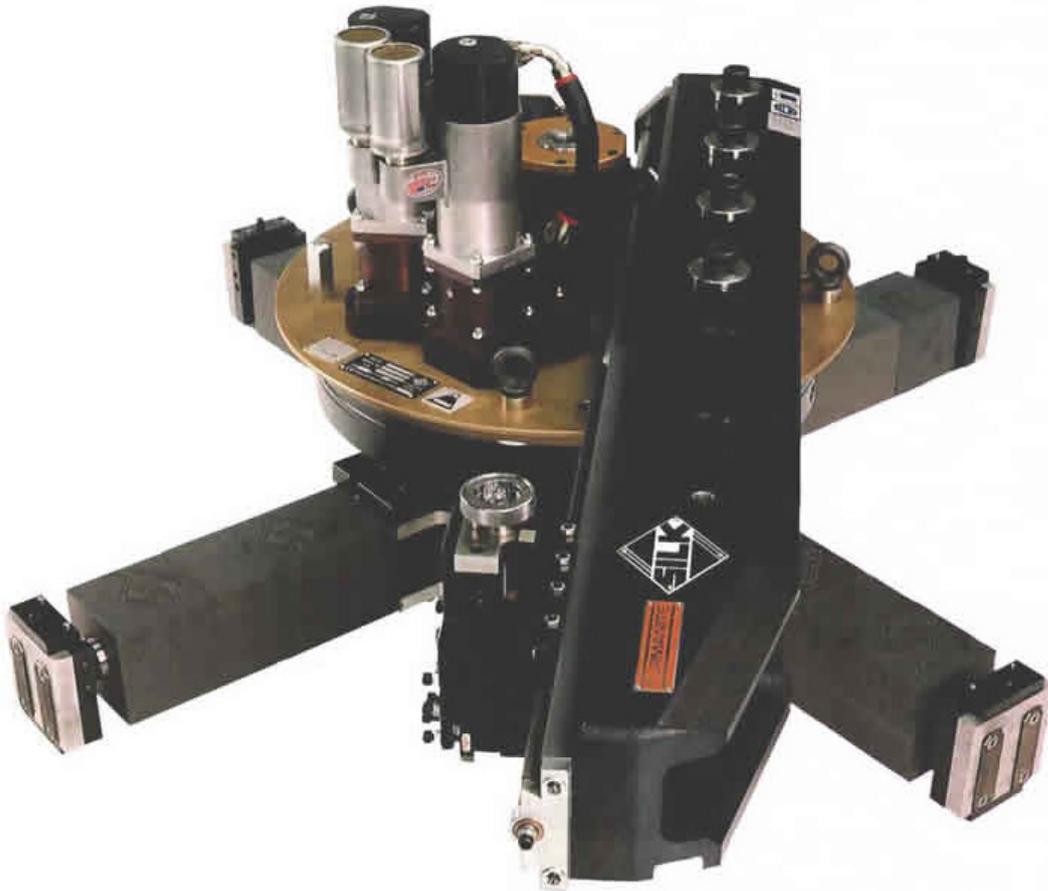


Flange Facing SX2872

Technical documentation



SX2872

A lightweight, portable, flange facing, grooving and weld preparation machine full faced, raised face and grooved flanges from 711mm - 1829mm (28" -72").

Typical Applications

- Tube Sheet Machining
- Recessed Gasket Grooves
- Hub Profiles

Optional: Extra Reach Tool Post

The Silk SX2872 is constructed, as the rest of the range, from the highest quality materials. It is designed to give machine shop accuracy, combined with ease of handling and portability in the flange range of 711 mm (28") to 1829mm (72"). Spur gears engage directly on the drive ring, keeping power requirements and losses to a minimum and allowing maximum torque at the cutting tool. When the machine is used in the vertical plane, balancing is greatly reduced.

The machine may be used horizontally, vertically or overhead.

Mounting Base

The mounting base assembly enables the machine to be installed in the centre of any flange from 711mm (28") to 1829mm (72") in diameter. It consists of a cruciform body provided with four adjustable clamping jaw assemblies. The mounting base is installed and aligned prior to the turntable installation.

Turntable Assembly

This provides a rigid support for the air motors, gearbox and surfacing arm assembly. The upper part of the assembly provides the rotational movement for surfacing, whilst the lower part remains stationary, held in position by the mounting base assembly.

Drive Arrangement

The machine is driven by two pneumatic motor units, mounted directly into the ring gear, which in turn is mounted on the mount bearing. The use of two motors enables the overall machine height to be reduced, evens out the torque and also acts as a backlash eliminator and cushion drive.

Feed Gearbox

The drive gearbox is mounted on the turntable assembly providing a variety of cutting feeds for different applications.

Drive input to the gearbox is derived from the mast transfer gear. The gearbox provides four different feed rates selected by a push/pull selector. Traverse is also engaged by a push/pull selector. Traverse is also engaged by a push/pull selector, which gives traverse IN, traverse OUT and neutral. The neutral N position is used for manually positioning the toolpost.

Cutting Arm Assembly

This is mounted on the turntable assembly and provides a rigid structure to which the toolpost is fixed. Feed in and out is provided by a lead screw, driven by the gearbox. Material, tooling and conditions permitting, the cutting arm assembly can achieve cuts to a maximum depth of 2mm (0.079") without flange holes and 0.5mm (0.02") with flange holes.

Alternative tools can be fitted to the post depending on the finish and cut required.

Quality

All TEAM Engineering activities are conducted in strict conformance to the ISO9001 quality system.

Silk Design Department

All Silk machines are used by our on-site service technicians and over the years, we have modified and designed attachments to enable the Silk range of machine tools to undertake many specialist applications. Can we help you? Comprehensive CAD facilities operated by qualified design engineers and experienced project engineers are able to meet your exact requirements.

Integrated Solutions to Piping Problems | www.patriot-int.com

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Principal Dimensions	
Machine height	534mm (21")
Mounting base thickness	167mm (6 1/2")
Minimum mounting base diameter	660mm (26")
Minimum rotational diameter	1300mm (51")
Toolpost travel standard	40mm (1 1/2")
Toolpost travel optional	100mm (4")
Toolpost reach optional	130 mm (5 1/8")
Weights	
Machine weight (less base)	214kg (470lbs)
Base weight (minimum diameter)	87kg (191lbs)
Base weight (maximum diameter)	128kg (282lbs)
Nett weight (less wooden case)	485kg (1069lbs)
Total shipping weight	552kg (1412lbs)
Transportable Wooden Case Dimensions	
Length	1400mm (55 1/2")
Height	650mm (25 1/2")
Width	840mm (33 1/2")
General Information	
Power output	3kw (4hp)
Gripping range:	
Minimum recommended bone	711mm (28")
Maximum recommended bone	1727mm (68")
Facing range:	
Minimum diameter	711mm (28")
Maximum recommended diameter	1829mm (72")
Depth of flange required to set the base using standard parts	259mm (10")
Final rotational speed	20 rpm
Drive Motors (2 off)	1.5kw (2hp)
Recommended air supply requirements	6 bar 2.69m/min
	(90psi 95cfm)
Drive motor output speed	275rpm

Features

- Compact, lightweight
- Bore mounted
- Operates in any position
- Cuts 'O' ring grooves, vertical grooves, 'V' grooves, lens ring seats, and weld preparations
- Achieves finishes from 1.6um (32 CLA to 63 CLA) when polishing
- Pneumatic drive permits use in hazardous areas
- Fitted transportable case

Gearbox selector position	Feed	Feed (inches)
1	0.18	0.007
2	0.25	0.010
3	0.46	0.018
4	0.84	0.033

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