

Overview:

The SILK SX 2872 Flange Facing machine is normally bore mounted but is equally at home when surface mounted and being used for refurbishing heat exchanger gasket surfaces.

The Silk SX2872 machine covers a range of flanges from 711 mm (28") internal diameter to 1829mm (72") external diameter. The turntable incorporates twin 1.7kW (2.3hp) pneumatic motors, which are designed to compensate for the backlash normally found in spur gear drive systems.

The bore mounting base has four sectional legs that ensure precise adjustment while maintaining proper rigidity, even when fully extended.

The modular design also makes the SX2872 easy to set up with any of the optional tube sheet and outside diameter mounting kits, which are available on request.



Typical Applications

- Tube Sheet Machining
- Recessed Gasket Grooves
- Hub Profiles

Silk SX2872 Features

- Precise and robust
- Compact and portable
- Internally mounted
- Operates in any orientation
- Cuts "O" Ring grooves, RT J and other V grooves, standard and compact flange facings, weld preparations, etc.
- Achieves surface finishes from 6.3mm Ra to 1.6mm Ra (250min Ra to 63min Ra) when turning and from 1.6mm Ra to 0.8mm Ra (63min Ra to 32min) when polishing
- Pneumatic drive permits use in hazardous areas
- Optional hydraulic drive is available on request
- Provided in own transportable case

Glacier Machining Solutions

Unit 603 Clyde Gateway East
London Road
Glasgow, G32 8RH

+44 (0) 141 763 1516
gms@glacierenergy.com
www.glacierenergy.com

The SILK SX2872 is constructed, as is 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 711mm (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.

Mounting Base

The mounting 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 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

This machine is driven by two pneumatic motor units, mounted directly into the ring gear, which in turn is mounted on the main 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, 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.

Specifications

Principal Dimensions

Machine Height	21 inches (534mm)
Mounting Base Thickness	6.18 inches (157mm)
Minimum Mounting Base Diameter	26 inches (660 mm)
Minimum Rotational Diameter	51 inches (1300mm)
Tool Post Travel Standard	1.57 inches (40mm)
Tool Post Travel Optional	4 inches (100mm)
Tool Post Reach Optional	5.11 inches (130mm)

Weights

Machine Weight (Less Base)	470lbs (214kg)
Base Weight (Minimum Diameter)	191lbs (87kg)
Nett Weight (Less Wooden Case)	1069lbs (486kg)
Total Shipping Weight	1412lbs (552kg)

Transportable Case Dimensions

Length	55.5 inches (1400mm)
Height	25.6 inches (650mm)
Width	33.1 inches (840mm)

General Information

Power Output	4 hp (30kw)
--------------	-------------

Gripping Range

Minimum Recommended Bore	28 inches (711mm)
Maximum Recommended Bore	68 inches (1727mm)

Facing Range

Minimum Diameter	10 inches (259mm)
Maximum Recommended Diameter	72 inches (1829mm)
Depth of Flange Required to Set the Base Using Standard Parts	10 inches (259mm)
Final Rotational Speed	20 rpm
Drive Motors (2 off)	3.5hp (2.61KW)
Recommended Air Supply Requirements	6 bar 2.69m2 /min (90psi 95cfm)
Drive Motor Output Speed	275 rpm



Optional:
Extra Reach Tool Post