

Mactech Europe



SILK AX321 FLANGE FACER

At 26.5kg (58lbs.), the AX321 is the lightest flange facing machine in the Silk range. It is bore mounted and covers a range of flanges from 75mm (3") internal diameter to 533mm (21") external diameter. Depending on the flange bore size, rapid and effective internal mounting is achieved via a unique system of collets, or by a spigot base for the larger diameters. The cutting tool feed assembly consists of four rails and a crosshead with a swiveling tool post that are supported by precision linear bearings, providing both rigidity and extreme accuracy. The feed gearbox provides two cutting tool feed rates and is supplied with an additional lead screw to provide a total of four feeds. The machine is driven by a 630W (0.85hp) pneumatic motor mounted either vertically or horizontally, if space is restricted.



Silk AX321 Features

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

SILK AX321 FLANGE FACER - Internally Mounted



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SILK AX321 FLANGE FACER



The Silk AX321 is a compact, lightweight machine, which can be carried and operated by one man. It is constructed from the highest quality materials and designed to give finishes of machine shop accuracy on flanges with a diameter range of 3-21 inches.

Mounting Systems

For bore diameters up to 6 inches a unique system of collets is used, permitting very rapid and precise mounting. Fine adjustments can be made both vertically and radically.

For bore diameters between 6 inches and 10 inches the collets are replaced by a triangular extension base. Adjustable clamps are fitted to the corners, or alternatively to the straight faces of the triangular base. These permit fast centering in the bore before the machine is mounted.

Drive Unit

The machine is driven by a 0.85 hp pneumatic motor. This fits vertically to the drive hub, which provides direct drive input to the gearbox.

Feed System

The feed assembly consists of four feed rails and a crosshead supported by precision linear bearings, which assure a high degree of rigidity and accuracy. The tool post can be fitted to either side of the crosshead.

Finishes

By using two gear ratios and two interchangeable lead screws, four distinct finishes can be achieved. Intermediate finishes can be obtained by varying the cutting tools.

Quality

All Furmanite Silk 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.



Cutting Feed (Per Rev)	Course Settings	Fine Setting
Course Leadscrew	0.039 (1.00mm)	0.010" (0.25mm)
Fine Leadscrew	0.026" (0.66mm)	0.006" (0.16mm)

Minimum depth for collet mounting 5.12" (130mm)

Specification

Principle Dimensions		
Height (excluding air motor)	12"	(305mm)
Rotational Diameter (including air motor)	21.85"	(555mm)
Maximum Swing	21"	(533mm)
Minimum Swing	14.25"	(360mm)
Tool Post Travel	2"	(50mm)
Arm Clearance	1.88"	(48mm)
Weights		
Weight Less Base	58lbs	(26.5kg)
Mounting Collet Assembly	9.5lbs	(4.26kg)
Extension Base	16.5lbs	(7.5kg)
Net Weight (Less wooden case)	105lbs	(48kg)
Total Shipping Weight	172lbs	(78kg)
Transportable Wooden Case Dimensions		
Length	23"	(590mm)
Height	16"	(406mm)
Width	20"	(510mm)
General Information		
Gripping Range		
Small Collet	3" - 4"	(Ø 75mm - Ø 100mm)
Medium Collet	4" - 5"	(Ø 100mm - Ø 125mm)
Large Collet	5" - 6"	(Ø 125mm - Ø 150mm)
Extension Base	6" - 10"	(Ø 150mm - Ø 250mm)
Flange Range	3" - 21"	(Ø 75mm - Ø 533mm)
Drive Motor 0.85hp: Minimum Air Supply Requirements 80 PSI / 80 CPM		
Drive Motor Output Speed 350RPM: Final Rotational Speed 40RPM(approx.)		

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