

# Flange Facing AX024

## Technical documentation

### AX024

A portable flange facing and grooving machine designed for machining full faced, raised face and grooved flanges up to 23 3/4" (603mm) diameter.

The Silk AX024 flange facing and grooving machine is constructed from the highest quality materials. It is designed to give machine shop accuracy combined with portability and ease of handling for work on flanges from 0" - 23" diameter. The machine consists of three modules:

#### Base Ring Assembly

Eight separate adjustable clamp blocks are provided. These can be positioned on the base ring to suit the size of flange being machined. The arrangement enables the machine to be locked in position and centred relative to the flange using adjustable screws on the clamp blocks.

#### Drive Ring

The drive ring module, incorporating the bearing assembly, provides the drive for the saddle via a work, worm wheel and internal gear arrangement. Power driving the machine is provided by two 1.55 hp pneumatic power units mounted on the drive ring.

#### Saddle

The saddle is mounted on the drive ring and bearing assembly and provides a rigid structure to which the toolpost is fixed. With drive provided through the drive ring internal gear arrangement and saddle pick-up gear, the saddle and support bearings rotate around the internal gear in a planetary motion.

Toolpost in and out is provided by a lead screw driven by the saddle gear train. Traverse is selected by a traverse selector.

The machine can achieve cuts to a maximum of 0.39" (1mm) without flanged holes and 0.020" (0.5mm) with flanged holes.

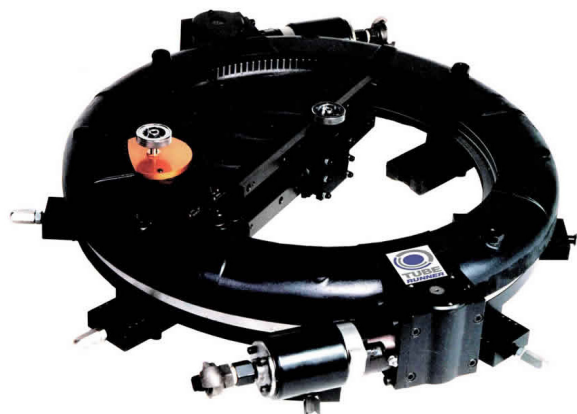
Alternative tool posts can be fitted to be saddle depending on the machine application.

#### 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](http://www.patriot-int.com)

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<b>Principal Dimensions</b>	
Overall diameter (inc motors)	40" (1016mm)
Height	7" (179mm)
Rotational diameter	23" (584mm)
Toolpost traverse (min/max)	0-16" (0-406mm)
Toolpost vertical travel	1 1/2" (38 mm)
Weights	
Net weight (less case)	387 lbs (176Kg)
Total shipping weight	495 lbs (225Kg)
Case Dimensions	
Length	38 1/2" (980mm)
Height	18 1/2" (470mm)
Width	31 1/2" (800mm)
General Information	
Flange range dia. (with crank tool)	0-23 1/4" (0-603mm)
Gripping range (min/max)	12-23" (306-584mm)
Drive motors (Two)	1.55 hp each
Minimum air supply requirement	90 psi @ 96 cfm
Final rotational speed	46 rpm

### Features

- Compact
- Portable
- Externally Mounted
- Operates in any Position
- Cuts 'O' Ring Grooves, vertical grooves, "V" grooves, lens ring facings, weld preparations
- Achieves surface finishes from 250 CLA to 63 CLA (6.3 um Ra to 1.6 um Ra) when turning and from 63 CLA to 32 CLA (1.6 um Ra to 0.8 um Ra) when polishing
- Pneumatic drive permits use in hazardous areas
- Provided in own transportable case

**Table of Surfacing Feeds**

Selector Position	Feed 'inches'	Feed 'mm'
In	0.032	0.81
Out	0.008	0.20
Hand held	0.002	0.05

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