

Glacier Energy Silk AX48120 Flange Facing Machine

Overview:

This SILK AX48120 is currently the largest internally mounted machine in our range. It can mount inside flanges having 1219mm (48") bores and can machine out to over 3048mm (120") in diameter.

The machine may also be surface mounted, where it is commonly used for crane pedestal and tube sheet refurbishment work. Like all Silk machines, it is of modular design and operates easily in any orientation.

The standard bore mounting base has eight ram type jaw assemblies, four of which have unique levelling device attachments used to assist with the setting-up operations. Power is provided by two 3kW (4 hp) pneumatic motors which produce high torque and maximum cutting power.

The same continuous feed gearbox utilised on the AX2872, AX1445 and FXB630 machines minimises the need for spare parts. Optional extras include a hydraulic drive conversion kit, tube sheet mounting and machining kits, grinding and milling kits and an outside diameter mounting kit.



Silk AX48120 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 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



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The AX 48120 machine consists of four main modules:

Mounting Base

The Mounting Base is an eight-ram radial clamping chuck. Adjustable clamping jaws on four of the rams are adjusted by an integral rack and pinion arrangement, operating in a similar fashion to a conventional four-jaw chuck. Sectional box lengths bolt together for the appropriate I.D. arrangement

Turntable

The Turntable provides a rigid support for the slide arm and incorporates two pneumatic motors and a right angle feed gearbox. It bolts directly to the base after the base model has been levelled and radially positioned. Using the two pneumatic motors enables the torque to be evened out and also acts as a backlash eliminator. Air input to the motor units is via the centre hub manifold

Cutting Arm

The Cutting Arm, mounted to the turntable, provides a rigid structure to which the toolpost is secured. Feed in and out is provided by a leadscrew, driven by the gearbox pick-up gear. Feed is selected at the gearbox.

The cutting arms assembly permits cuts to a maximum depth of 0.079" (0.5mm) with flange holes. A variety of tools can be fitted to the toolpost according to the finish and cut required.

Drive

The Drive Gearbox is mounted to the turntable and provides a variety of cutting feeds for different machining applications. Drive input to the gearbox is derived from the hub transfer gear. Four feed rates can be selected by means of a push/pull selector with three positions, traverse IN, traverse OUT and neutral (N).

Optional Accessories

- Tube Sheet Mounting Kit
- Tube Sheet Back Facing Kit
- O.D. Mounting Kit
- Orbital Mounting Kit
- Hydraulic Conversion Kit

Specifications

Weight of Turntable (case 1) 2.800lbs (681kg)

Weight of Base (case 2) 1,362lbs (526kg)

Total Shipping Weight 4,180lbs (1,445kg)

Case Dimensions (1) 96 x 24 x 51inches

(2,438 x 610 x 1,295mm)

Case Dimensions (2) 51 x 13 x 51 inches

(1,295 x 330 x 1,295mm)

Flange Range 135 inches (3,429mm) Max O.D

48 inches (1,219mm) Min Bore 120 inches (3,948mm) Max Bore

Power Output (2) 3.5hp (2.6kw) motors

Air Supply Requirements 90psi@140cfm



