

▼ FF120



- Refacing made easy — hand-operated machine tool can be set up anywhere without the need for air, electric or hydraulic power support
- Lightweight and portable — easily transported to remote locations for increased productivity
- Adjustable cutting range for flange diameters between 1-12 inches [25,4-304,8 mm]
- Interchangeable collets for ID mounting range from 1-6 inches allowing the user to work on many different flanges with minimal time between set-ups
- Interchangeable lead screws suitable for refacing damaged raised-face (RF) or flat-face (FF) joint flanges
- Tool body with expanding collets centers itself providing real concentric operation

▼ The Enerpac FF120 used to face a pipe flange.



## Safe, Efficient and Accurate Refacing of Flat Pipe Flange Surfaces



### Complete In-Wheeled Carrying Case

The FF120 comes as portable set 33 lbs. (15 kg). Can be transported,

easy set-up and operated by a single technician.

Set includes:

- **FFL**-kit with locators, O-Rings and extensions
- **FSS**-kit with feed screw and nut ½"-20 UN for surface roughness Ra 64 - 96 µin.
- **FSF**-kit with feed screw and nut ½"-11 UNF for surface roughness Ra 125 - 250 µin.



### Joint Separation Tools FSC, FSH and FSH-Series

parallel wedge spreaders provide quick and easy joint separation using hydraulic or mechanical force.

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### Flange Alignment Tools

The ATM-Series provide safe and high-precision flange alignment tools that fit most commonly used ANSI, API, BS and DIN flanges.

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### Controlled Tightening and Loosening

Use Enerpac Bolting Tools to seal the joint to the precise torque or tension required: torque multipliers, torque wrenches and hydraulic bolt tensioners.

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# Quick Face, Mechanical Flange Face Tool



## Mechanical Flange Face Tool

Portable, hand powered tool makes even the hardest to reach pipe flanges resurfaceable in a safe and convenient way.

### Makes Refacing Easy

A simple and cost effective solution – the FF120 turns a two man operation with heavy equipment, compressors and portable generators into a one man job.

The FF120 has interchangeable lead screws that make it suitable for resurfacing damaged flat-faced, raised-face or lens-ring joint flanges to the high safety standards required. After selecting the correct lead screw for the operation, the tool body is inserted in the pipe end and centres itself with adjustable locators to provide real concentric operation.

The tool arm is then rotated by hand using a worm-gear mechanism to provide a perfect spiral “gramophone” finish.

The tool can be adjusted with a calibrated slide to define cut depth and the correct finish.

### Surface Finish and Accuracy

A serrated finish with 30-55 grooves per inch and a resultant roughness of between Ra 125-492 micro inches (3,2-12,5 µm).

The FF120 has same precision and quality of finish as a lathe.

### Cost-effective Solution

Small and portable enough to be a permanent addition to your equipment range, Enerpac’s FF120 is the perfect solution to all of your small diameter facing problems.

**For more portable machining tools, see page 379.**

## FF Series



Pipe Flange Cutting Diameter Range:

**1 - 12 inch (25-305 mm)**

Internal Pipe Mounting Diameter Range:

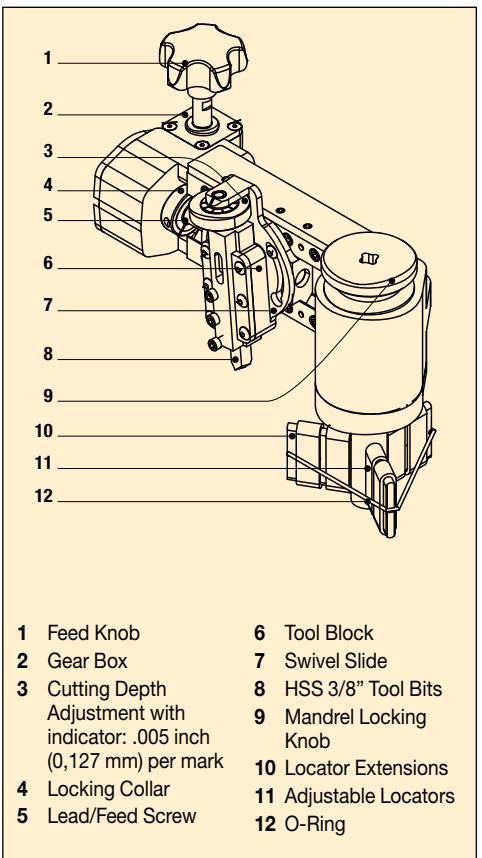
**1 - 6 inch (25-152 mm)**

Average Roughness:

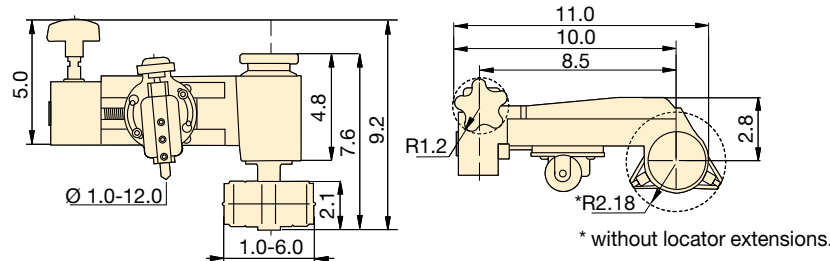
**125 - 492 µin (3,2-12,5) µm**



- 1 Hand-operated cold work tool – no need for external power and hot work permits.
- 2 Calibrated cross slide for accurate cutting control.
- 3 Adjustable cutting head for reface of flat flange surfaces of pipes with flange OD facing range  $\phi$  1-12 inch [25,4-304,8 mm].
- 4 Interchangeable lead screws enable selection of surface finish between Ra 125-492 µin.
- 5 Utilizes standard 3/8 inch or 10 mm tool steel.
- 6 Range of interchangeable collets allow the tool to accommodate  $\phi$  1 - 6 inch [25,4 - 152,4 mm] pipe ID.
- 7 Tool body with expanding collets centers in the bore ensuring concentric and accurate set-up.



Dimensions shown in inches.



### ▼ TOOL SELECTION CHART

Pipe Flange Cutting Diameter Range		Internal Pipe Mounting Diameter Range		Cutting Result Roughness (Ra µ)		Model Number	Wt. (lbs)
(in)	(mm)	(in)	(mm)	(in)	(m)		
1.0 - 12.0	25,4 - 304,8	1.0 - 6.0	25,4 - 152,4	125 - 492	3,2 - 12,5	<b>FF120</b>	15

▼ The Enerpac FF120 Quick Face has same precision and quality of finish as powered machines.

