

# Polishing / Filing Machine PRV-70

## PRODUCT INSTRUCTIONS & SAFETY INFORMATION



### Warning

Failure to follow the safety warnings and instructions may result in **serious injury**. Remember to save these warnings and instructions for future reference.

## Table of Contents

Technical data .....	3
Thank you for choosing a tool from IPT Technologies.....	4
Intended use .....	4
Important safety notes .....	4
Warnings .....	4
Warranty .....	5
Instructions for use .....	5
Maintenance .....	7
Disposal.....	7
Accessories.....	7
Spare Parts.....	7

## Technical data

Length	190 mm
Weight	0,3 kg
Frequency of Strokes	117 Hz
Stroke length	2 mm
Maximum air Flow	0,5 l/s
Air Pressure	6.5 bar
Maximum Air Pressure	8 bar
Maximum Air Temperature	35° C
File shank size	Up to 4 mm
Hose Coupling	1/4 inch
Size of Hose Recommended	3-5 mm
Vibration Level according to ISO 8662-1	2 m/s <sup>2</sup>
Sound Level according to ISO 7574 / 2	71 dB (A)

**Warning.** Declared values obtained from lab testing according to standards can help compare tools. However, they are insufficient for accurate risk assessments. Actual exposure and risk of harm depend on additional factors.

# Thank you for choosing a tool from IPT Technologies

The PRV-70 polishing / filling machine is an advanced, actively vibration-dampened machine with a low noise level (System IPT). The low weight and very low vibration level make it perfect for high-precision work without tiring the operator. Following these simple instructions will ensure a long life of excellent operation.

## Intended use

This tool is intended for professional use only. Neither the tool nor its accessories must be modified in any way. If the product or accessories have sustained damage, do not use them. Installation, operation, and servicing should be carried out exclusively by qualified personnel. Safety and adherence to these guidelines are paramount.

This product is designed for different types of fine filing and polishing.

## Important safety notes

All local safety rules regarding installation, operation, and maintenance shall always be followed. Always use adequate personal protective gear, such as safety goggles, noise protection, gloves, etc., as appropriate.

Always disconnect the tool from the air line before changing the file or making other adjustments.

Carefully blow the compressed air hose clean before connecting the tool to ensure there is no accumulation of water or dirt. The compressed air should be dry and clean. A filter unit should always be used.

## Warnings

- ⚠ Do not exceed 8 bar pressure. Use a regulator set to 6,5 bars.
- ⚠ Power tools are not insulated for encountering electric power sources.
- ⚠ Power tools shall not be used in explosive atmospheres.
- ⚠ Do not use files that are broken, cracked, or deformed.
- ⚠ Use only accessories designed for this tool.
- ⚠ Stored compressed air may cause a hazard.
- ⚠ Long hair or loose clothing may be drawn in or trapped by the power tool.
- ⚠ Make sure that any sparks emitted are directed so as not to cause a hazard.
- ⚠ Be aware of the risk of a whipping compressed air hose.
- ⚠ Use a facemask or respirator if the work creates dust.

## **Warranty**

The PRV-70 air file is warranted for 12 months from the date of purchase against faulty workmanship or materials, provided the tool has not been opened by unauthorized persons and has always been lubricated and connected to a filtered air supply of the recommended pressure.

Please return any defective tool to your authorized supplier.

This warranty does not include repair or replacement required because of misuse, abuse, or normal wear and tear on wear parts.

Note that this hand tool is intended for fine mechanic work in clean surroundings, typically for an average use of a few hours per day. For such service, the major parts of the tool will last for years, and wear parts should last for a year or more. However, the life of wear parts depends on the conditions that the tool is operated under (weight of files, air pressure, lubrication, air filtration, and/or several hours of daily use).

Use only original IPT spare parts for any replacement. Other parts may result in hazardous conditions, decreased performance, and increased maintenance and wear.

## **Instructions for use**

### **General Information**

The machine is designed to operate at an air pressure of 6.5 to 7 bar but will tolerate some variations without much change in performance. Do not exceed 8 bar pressure. Use a regulator set to 6.5 to 7 bar.

The machine comes with flexible tubing of 3 mm I.D. and a ¼ inch threaded connector.

Ensure there is no accumulation of water or dirt in the hose by carefully blowing the hose clean before connecting the tool. The compressed air should be dry and clean. A filter unit should always be used.

## Operation

The PRV-70 is excellent for polishing with stones, filing, and other work in mold-making shops. Lightweight clamps and accessories are available. For smooth operation, the total weight of the inserted tool should not exceed 50 grams and should be close to the center line. The PRV-70 accepts tools with shank sizes of 4 mm or less.

**NOTE:** It is important to let the file do the work to ensure optimum performance. Do not force it down; guide it only. Make sure the tool is installed correctly.

The machine is started by gently pushing on the valve cap (16) to move the valve all the way to the open position. To stop, push in the opposite direction. If the compressed air supply to the tool is interrupted, move the valve to the stop position. Restart the tool when the supply is reestablished.

The exhaust can be directed as desired by turning the ring (19). Be sure to direct it so it doesn't cause any harm.

## Changing the inserted tool

**NOTE:** Always disconnect the machine from the compressed air line when removing or attaching files or other tools.

Use the hex key (23) to loosen the lock screw (1). Insert the tool to a depth consistent with the shank geometry. Orient the tool as desired and tighten the screw securely by hand and ensure the tool is properly clamped.

## Maintenance

Lubrication is recommended, but only a minor amount of quality air tool oil is used. Disconnect the tool from the air line and apply one or two drops of oil at the air connection. If the compressed air already contains some oil, extra lubrication will generally be unnecessary.

Note: Do not open the tool; it will void the warranty!

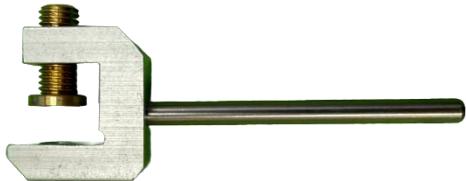
## Disposal

This tool is designed and manufactured to last a long time if properly maintained, and all parts are available as spare parts. If you wish to recycle it for any reason, please dismantle it completely, degrease it, and send the different materials separately for recycling, in accordance with local laws and regulations.

## Accessories

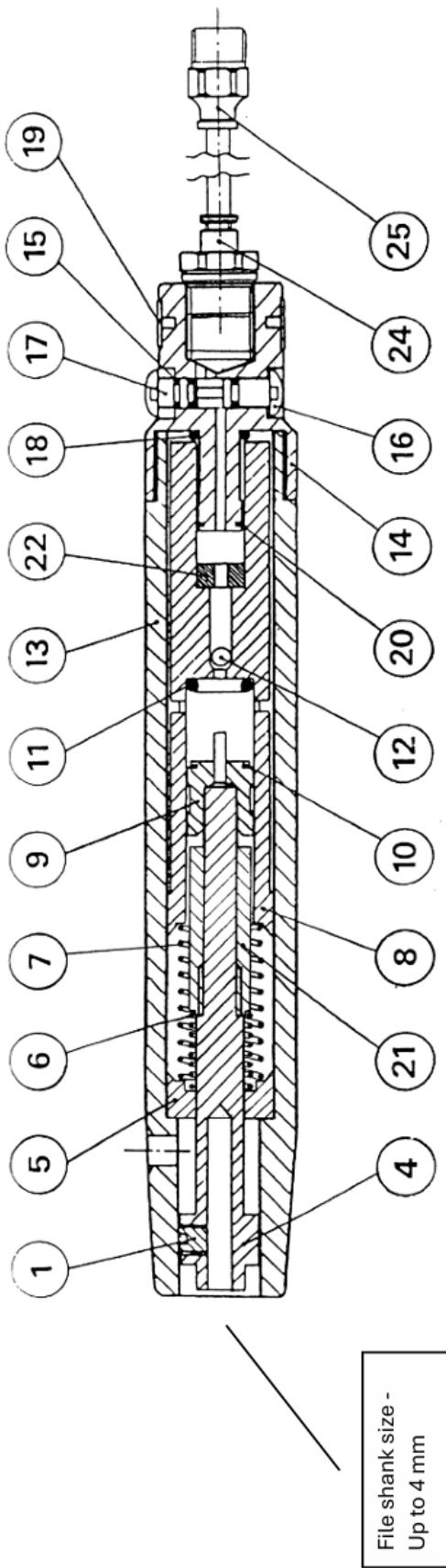
PRV-70 is delivered without a tool, allowing you to select the optimal one for your specific job.

Stone clamp P-70-50 is a lightweight clamp designed to hold a stone or another polishing or filing tool you want to use in your polishing / file machine.



## Spare Parts

Use only original IPT spare parts for any replacement! Other parts may result in hazardous conditions, decreased performance, increased wear, and damage to the tool.



1. P-70-01 Lock Screw
4. P-70-04 Piston Extension
5. P-70-05 Support
6. P-70-06 Spring
7. P-70-07 Spring
8. P-70-08 Cylinder
9. P-70-09 Piston
10. P-70-10 Piston Ring
11. P-70-11 Limit Ring
12. P-70-12 Ball
13. P-70-13 Housing
14. P-70-14 Rear
15. P-70-15 O-ring (3 pcs needed)
16. P-70-16 Endcap (2 pcs needed)
17. P-70-17 Valve Stem
18. P-70-18 O-ring
19. P-70-19 Ring
20. P-70-20 Seal Ring
21. P-70-21 Spring Support
22. P-70-22 Stop Ring
23. P-70-23 Hex Key (Not shown)
24. P-70-24 Inlet Fitting
25. P-70-25 Tubing with fitting