

# Engraving Pen EP-100

## 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.

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## Technical data

Length	132 mm	
Weight	0,16 kg	
Frequency of Strokes	350 Hz	
Maximum air Flow	0,7 l/s	
Air Pressure	6-6.5 bar	
Maximum Air Pressure	7 bar	
Maximum Air Temperature	35° C	
Hose Coupling	1/4 inch	
Size of Hose Recommended	3-5 mm	
Vibration Level according to ISO 28927-9	2,4 m/s <sup>2</sup>	Uncertainty 0,7 m/s <sup>2</sup>
Sound Pressure Level according to ISO 15744	65 dB (A)	Uncertainty 3 dB (A)
Sound Power Level according to ISO 15744	76 dB (A)	Uncertainty 3 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 Engraving Pen / Air Scribe EP-100 is an advanced, actively vibration-dampened tool with remarkable performance, (System IPT). It is the only engraving pen that features both excellent control and industrial strength power. The tool has a very low vibration level and the noise level when idling is also low. The tool operates so smoothly that you use the same stylus for both soft and hard materials. No need for buying a different and sharper stylus to be able to engrave in harder materials. 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.

The EP-100 is designed for engraving.

## 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 stylus 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 7 bar pressure. Use a regulator set to 6 to 6,5 bars.
- ⚠ Power tools are not insulated for encountering electric power sources.
- ⚠ Power tools shall not be used in explosive atmospheres.
- ⚠ Use only accessories designed for this tool.
- ⚠ Do not use a bit that is cracked or deformed.
- ⚠ 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 EP-100 Engraving Pen 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.

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 engraving pen is designed to operate at an air pressure of 6 to 6.5 bar but will tolerate some variations without much change in performance. Do not exceed 7 bar pressure, as this may damage the tool. Use a regulator set to 6.5 bar. The EP-100 comes with a 3 mm ID tubing with an ¼ inch fitting at the end. Connect this to ¼" hose or larger. 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, and in-line lubrication is recommended. Where this is unavailable, please apply some oil in the tool's air connection inlet (22) at the end of the tubing, every 2 to 4 hours of use.

## Operation

Pushing the green end of the valve stem starts the EP-100, and pushing the black end will stop it. If the tool's compressed air supply is interrupted, push the black end. Restart the tool when the air supply is reestablished. Note that when the tool is not operating, the stylus is hidden inside the housing to avoid accidental breakage from the impact of a drop or hitting the tool against something. The tool works well in many different materials, from soft to very hard. You would typically press very lightly in mild steel, aluminum, and other soft materials to avoid making a too-large mark. The EP-100 has such a low vibration level that controlling the tool's impact is easy. In general, you should not bear down excessively on any material as the tip of the stylus might get damaged. Find the best angle and the optimal force for smooth operation.

## Changing the stylus

NOTE: Always disconnect the tool from the compressed air line when changing the stylus.

See the assembly drawing at the end of these instructions. The Housing (4) is connected to the Rear (15) via a threaded connection. They can easily be separated from each other. Work over a workbench.

The Housing part will contain the Piston (7) with Piston Ring (8), Spring (6), and Stylus (1). By gently tapping the housing on the workbench, these parts will come out, and the new stylus can be fitted into the spring and the piston (there is no right or wrong end of the spring). Ensure the piston ring is in its groove and put this "assembly" into the housing. If required, tap the housing several times for the parts to find their place. See also separate instructions included with each spare stylus.

## Maintenance

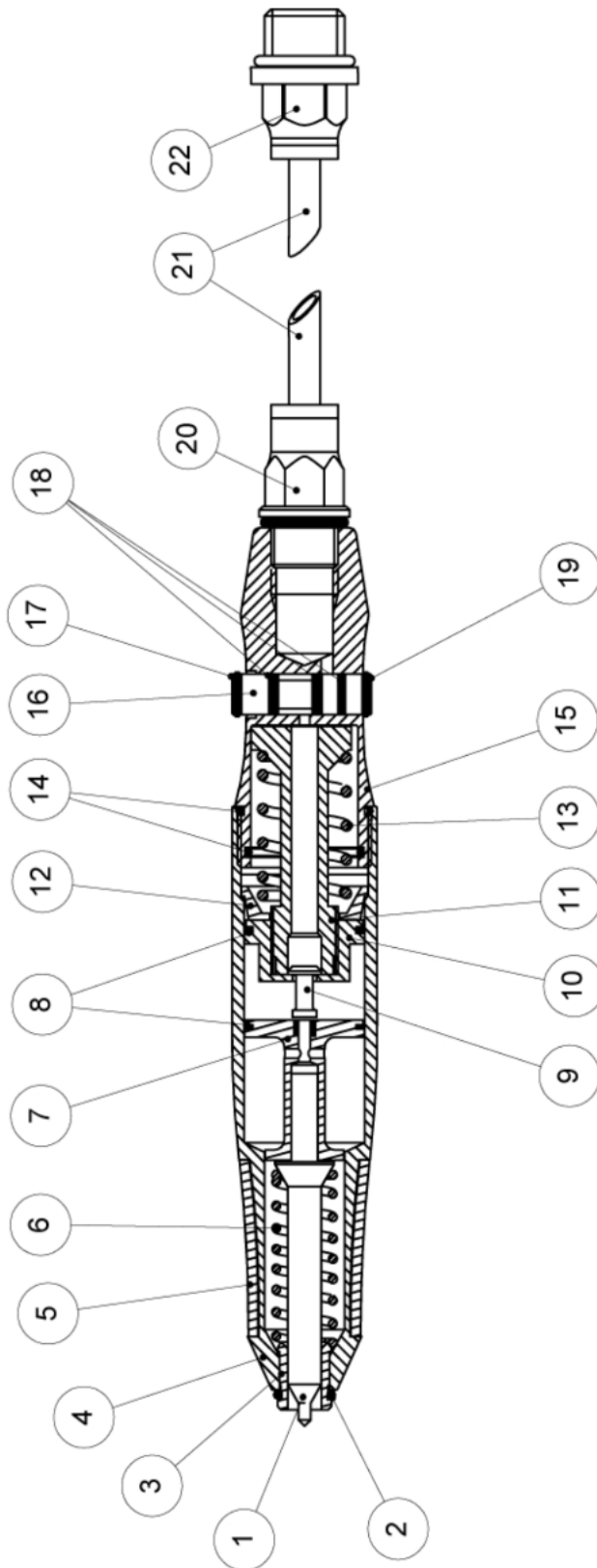
EP-100 does need to be lubricated; see the general information in the section instructions for use.

## 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 want to recycle it for any reason, please dismantle it completely, degrease it, and send the different materials separately for recycling according to local laws and regulations.

## 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. EP-01 Stylus / Bit               | 9. EP-09 Valve                  | 17. EP-17 O-ring Green          |
| 2. EP-02 O-ring                     | 10. EP-10 Balance               | 18. EP-18 O-ring (3 pcs needed) |
| 3. EP-03 Guide                      | 11. EP-11 Balance Extension     | 19. EP-19 O-ring Black          |
| 4. EP-04 Housing                    | 12. EP-12 Support Ring          | 20. EP-20 Inlet Coupling        |
| 5. EP-05 Grip Cover                 | 13. EP-13 Rear Spring           | 21. EP-21 Tubing                |
| 6. EP-06 Forward Spring             | 14. EP-14 O-ring (2 pcs needed) | 22. EP-22 R ¼" Air Connection   |
| 7. EP-07 Piston                     | 15. EP-15 Rear                  |                                 |
| 8. EP-08 Piston Ring (2 pcs needed) | 16. EP-16 Valve Stem            |                                 |