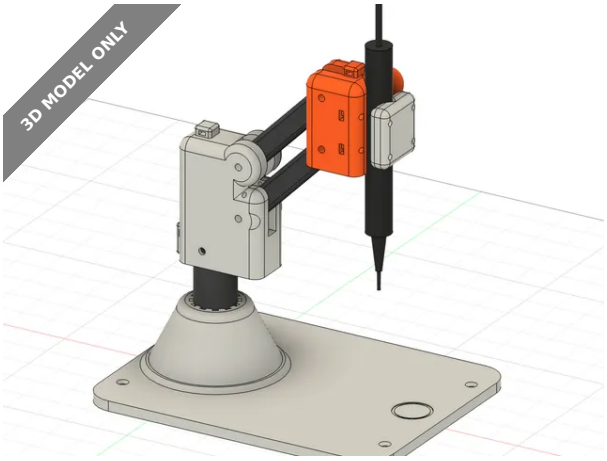


3D Printed Heat Set Insert Press – No Springs, No Bearings!

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VIEW IN BROWSER

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Summary

3D printable heat insert press with a parallelogram mechanism for perfectly straight inserts.

Hobby & Makers > Tools

Tags: tool 3dprinting engineering workshop heatsetinsert heatinsert diytools solderiron heatinsertpress heatsetinserttool diytool mechanicaldesign

Tired of installing heat-set inserts crooked? I designed this fully 3D printable press to make installing threaded inserts easier, more precise and repeatable.

The press features a **parallelogram linkage mechanism** that keeps the heating tool perfectly vertical throughout its movement, helping you install inserts straight and consistently.

Features

- Fully 3D printable mechanical structure.
- Parallelogram mechanism keeps the heating tool vertical.

- Adjustable clamp compatible with different soldering irons and heating tools.
- No springs, linear rods, bearings or complicated mechanisms.
- The arm stays in position when released.
- Simple assembly using only a handful of screws.

Files included

- STL files for all printable components.
- Detailed step-by-step assembly guide.
- 1:1 screw reference page to easily identify the required hardware.

Assembly Instructions

A complete illustrated assembly guide is included in **both English and Italian**.

The guide covers the assembly process step by step, including component positioning and screw identification.

Printing

All structural components are designed to be 3D printed. You can find the recommended print settings and material information in the project files.

How it works

Simply position the threaded insert over the hole, lower the heating tool and let the parallelogram mechanism guide it vertically into the printed part.

No more crooked inserts or ruined prints!

Made by Darkstar Engineering

This is an original design developed, designed and tested in my own workshop.

If you print and build one, I’d love to see your make! Feel free to share your results and leave a comment.

Instagram: @darkstar_engineering
darkstar-engineering.com

Model files



wrist.stl



link.stl



moving-jaw.stl



column.stl



shoulder.stl



base.stl

Other files

heat-set_insert_press_assembly_guide_en.pdf

pressa_inserti_a_caldo_guida_montaggio_it.pdf

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