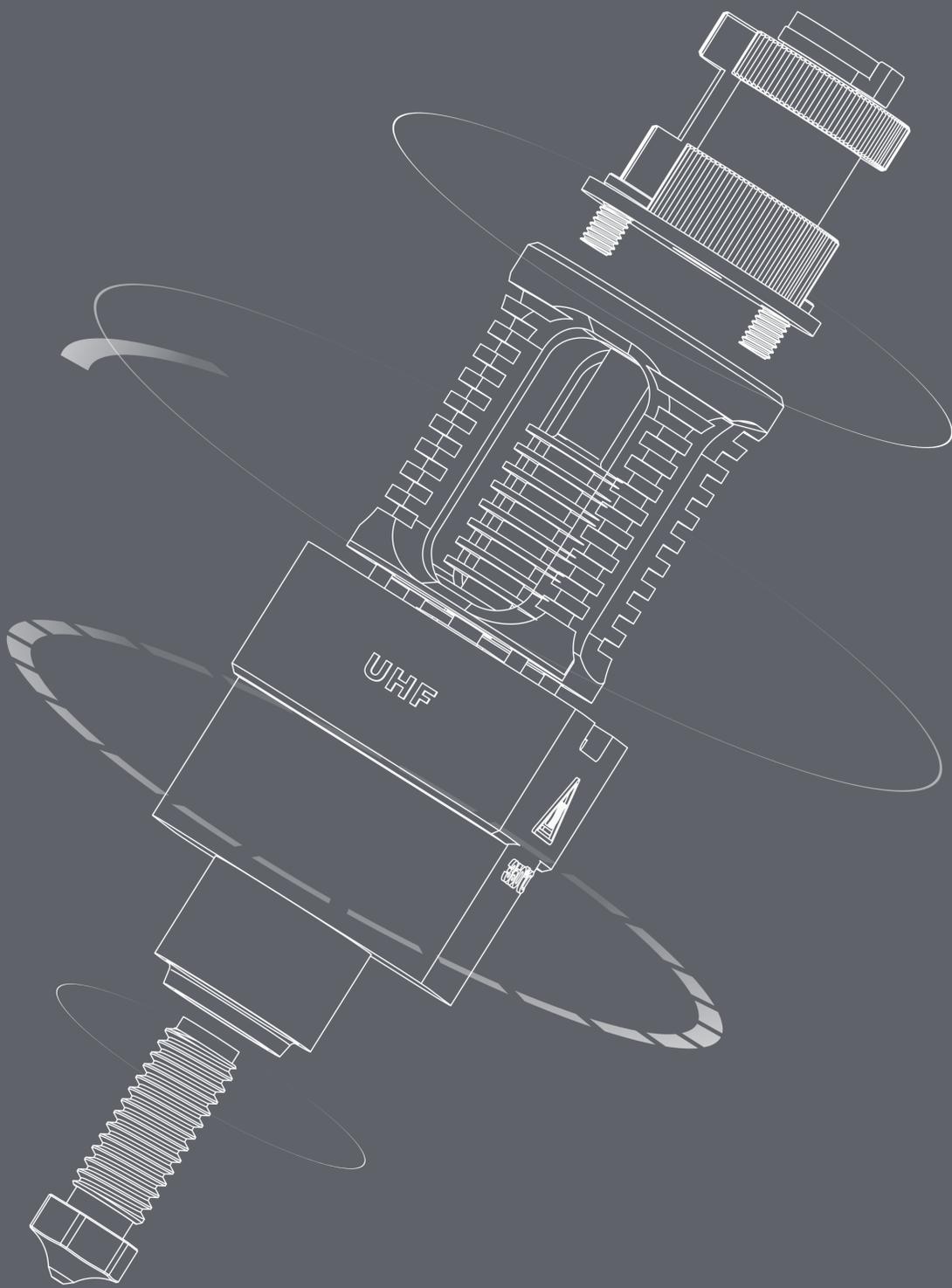


**Phæetus®**

# **Dragon UHF Hotend® Instructions**



Please read and keep this manual carefully before using  
our products properly

# Product Appearance

## Born For Enthusiasts



Thank you for buying Phaetus' Dragon UHF Hotend.

# Product Features

All - metal  
high - temperature  
resistant

One - handed  
nozzle change

Ultra - high  
speed printing

Convenient flow  
rates switching

# Compatible Filaments

Compatible with all thermoplastic filaments, including but not limited to typical composite fiber filaments such as PLA, ABS, PETG, TPU, PP, PC, PA, PEEK, PEI and PLA-CF, ABS-CF, PETG-CF, PA-CF/GF, as well as composite filaments such as steel, wood, boron carbide, tungsten and fluorescence

# Specifications

Product Name: Dragon UHF Hotend

Product Size: 81.6mm\*24.5mm\*22.3mm

Nozzle Diameter: Can be matched arbitrarily

Color: Blue / Black

Product Net Weight: 61.2g

# Parts & Accessories



M3×2 flat head screw \*3

M1.4×5 hexagon socket cylindrical head screw \*5

Hexagon socket cup head screw \*4

H1.27 / H1.5 / H2.0 hexagon rod \*1,

H7.0 / H10.0 open - ended wrench \*1

Brass sleeve \*1

Conversion nut \*1

Thermal grease \*1

Silicone sock \*1

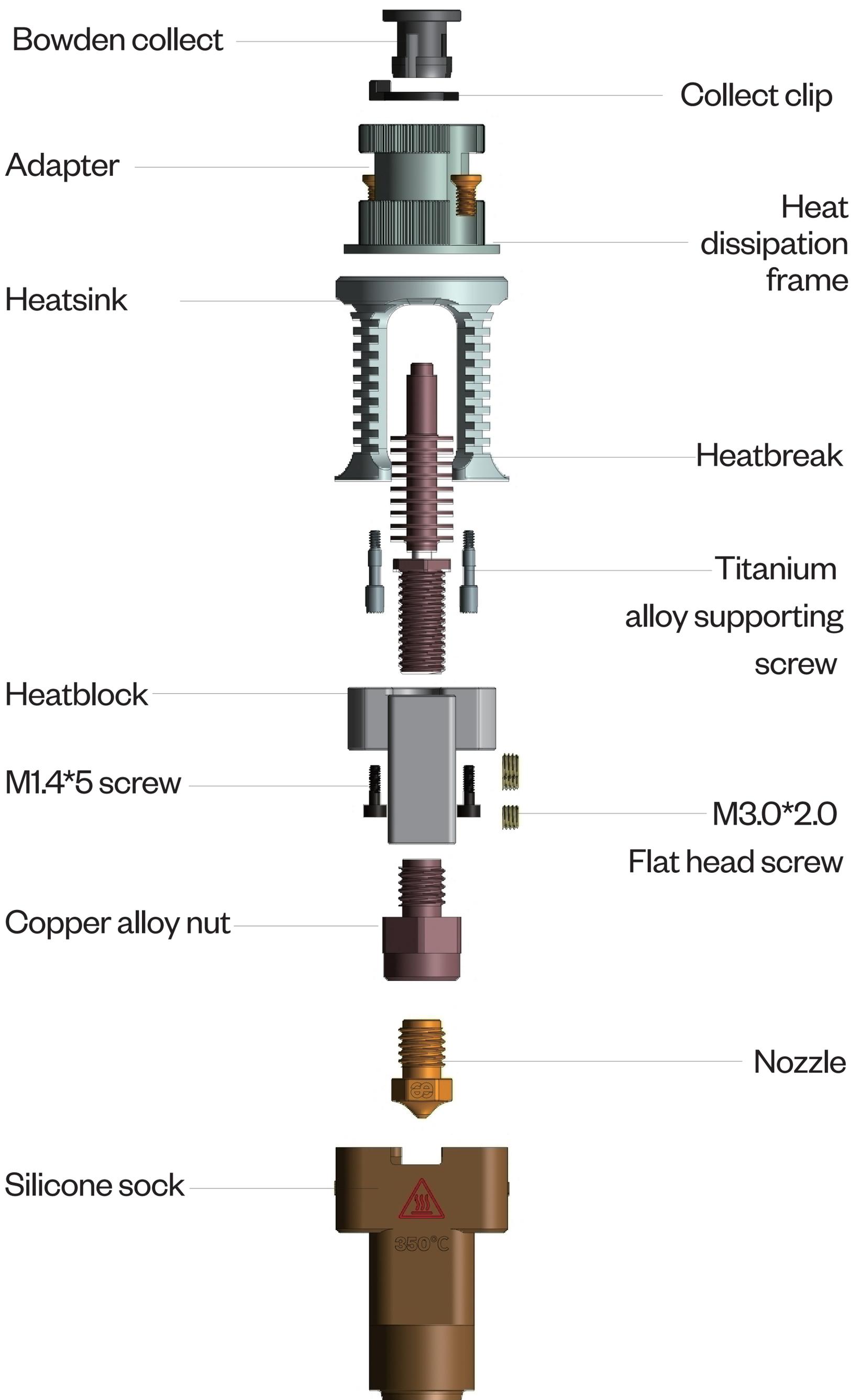
Collect clip \*1

Bowden collect \*1

Adapter \*1

Adapter screw \*4

# Product Exploded View



# Product Exploded View

- Lengthened plated copper heatblock and filaments melting section, meet the requirements of high temperature and high speed printing.
- Heatbreak of 0.25mm wall thickness, nice heat insulation, reduce filaments clogging.
- Titanium alloy heatbreak, extremely low heat conduction and nice heat insulation, reduce filaments clogging.
- Titanium alloy support screw, high strengthened extremely low heat conduction, under the premise of ensuring low heat conduction to meet the function of changing nozzle with one hand.
- The nozzle is compatible with a variety of specifications of flows, use with ease.
- Copper plated / Hardened steel nozzle selection, meet high temperature, wear-resistant filaments printing.

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# Phæetus®

欢迎使用

Welcome

Bienvenu

Willkommen

Bienvenida

Välkommen

This user guide helps you get started using Dragon UHF Hotend  
And discover all the amazing things it can do on a 3D printer

# Assembly Steps

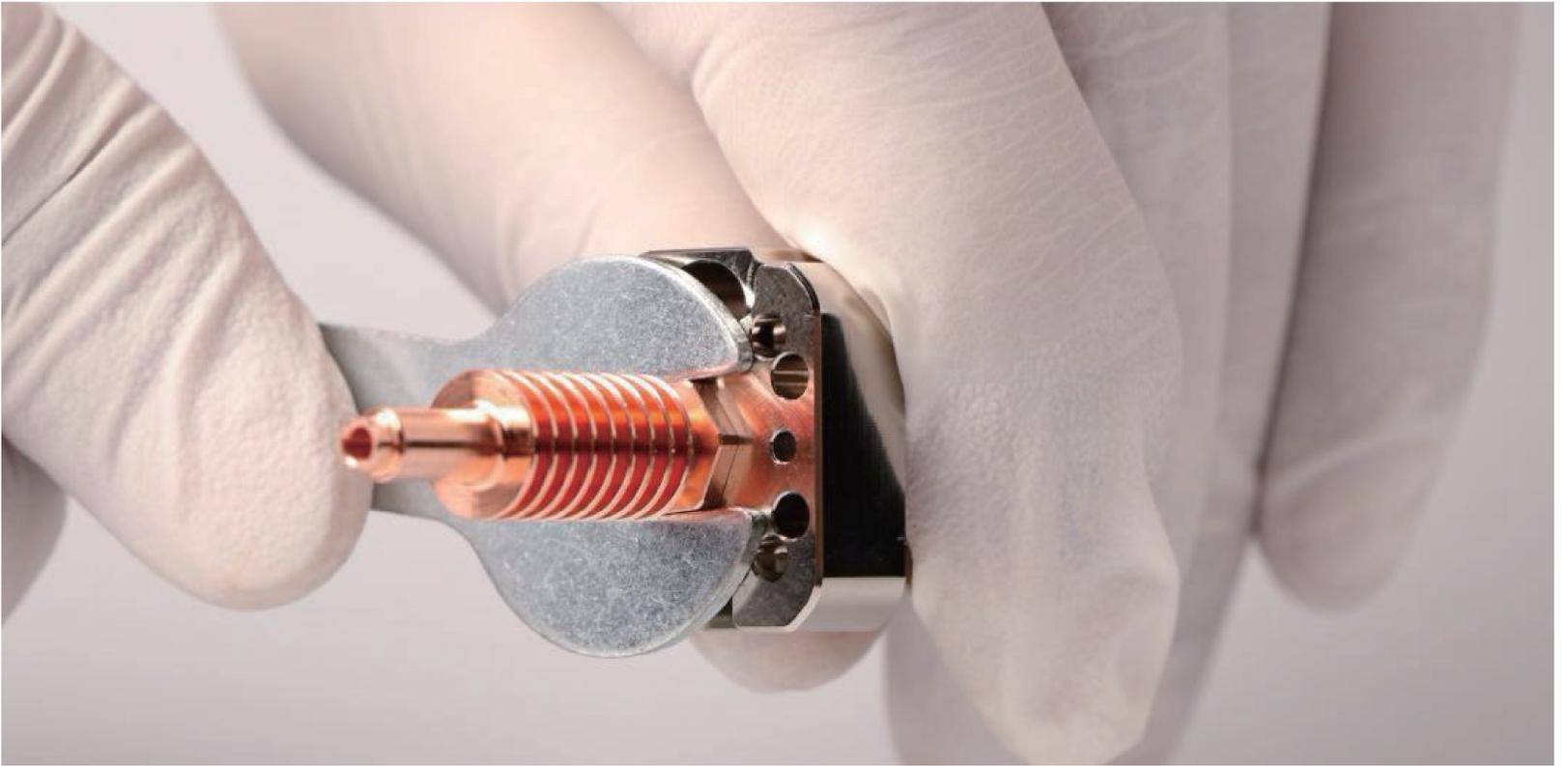
1. Insert the bowden collect into the top of the adapter, then insert the collect clip between the bowden collect and the adapter to fix the bowden collect.



2. Install the adapter on the heatsink through the M2.5\*5 screws.



3. Tighten the heatbreak to the heatblock using the H7 wrench.



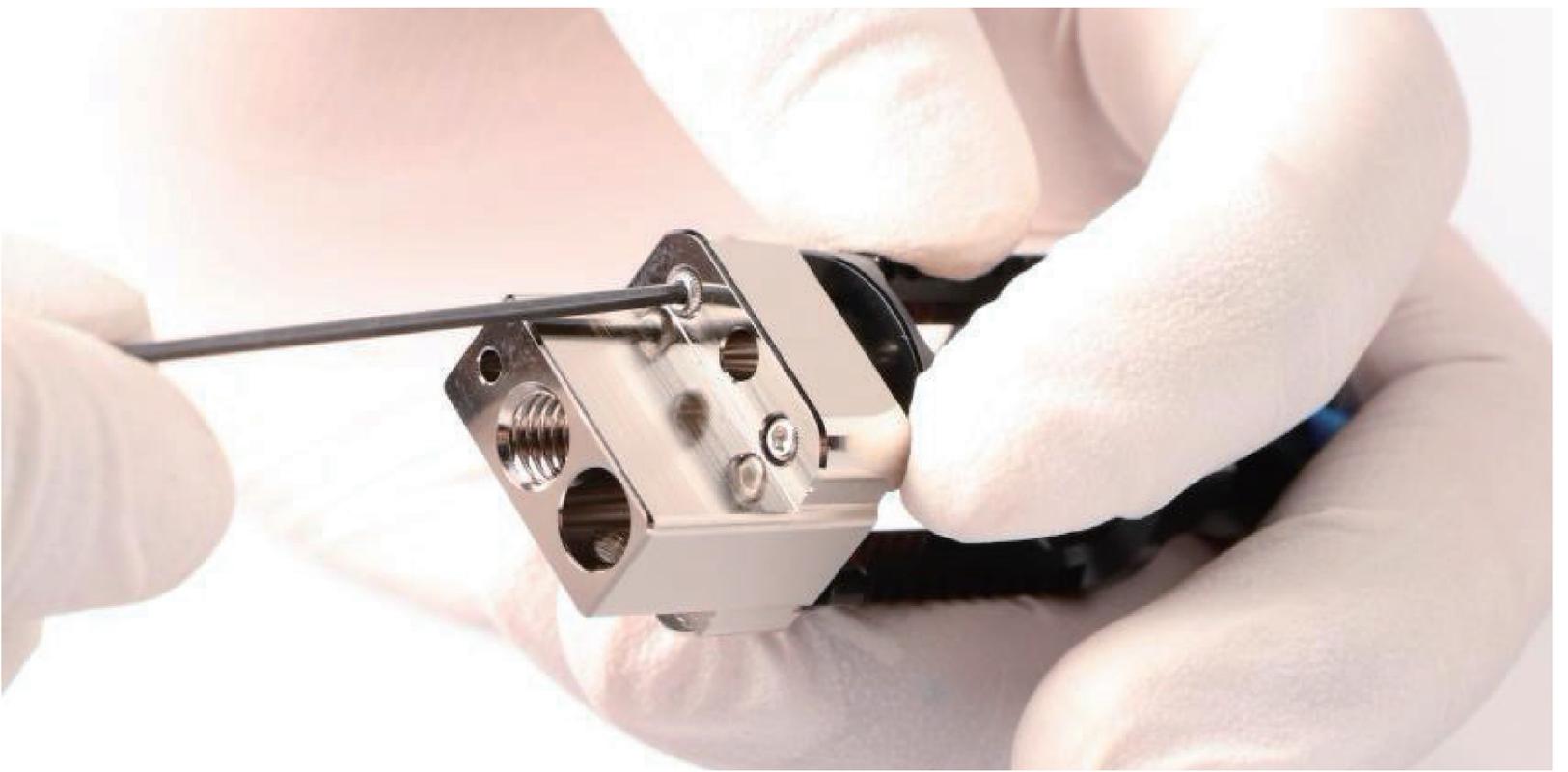
4. Screw the four M1.4\*9.5 titanium alloy screws into the four M1.4 threaded holes at the bottom of the heatsink using the flat - head screwdriver.



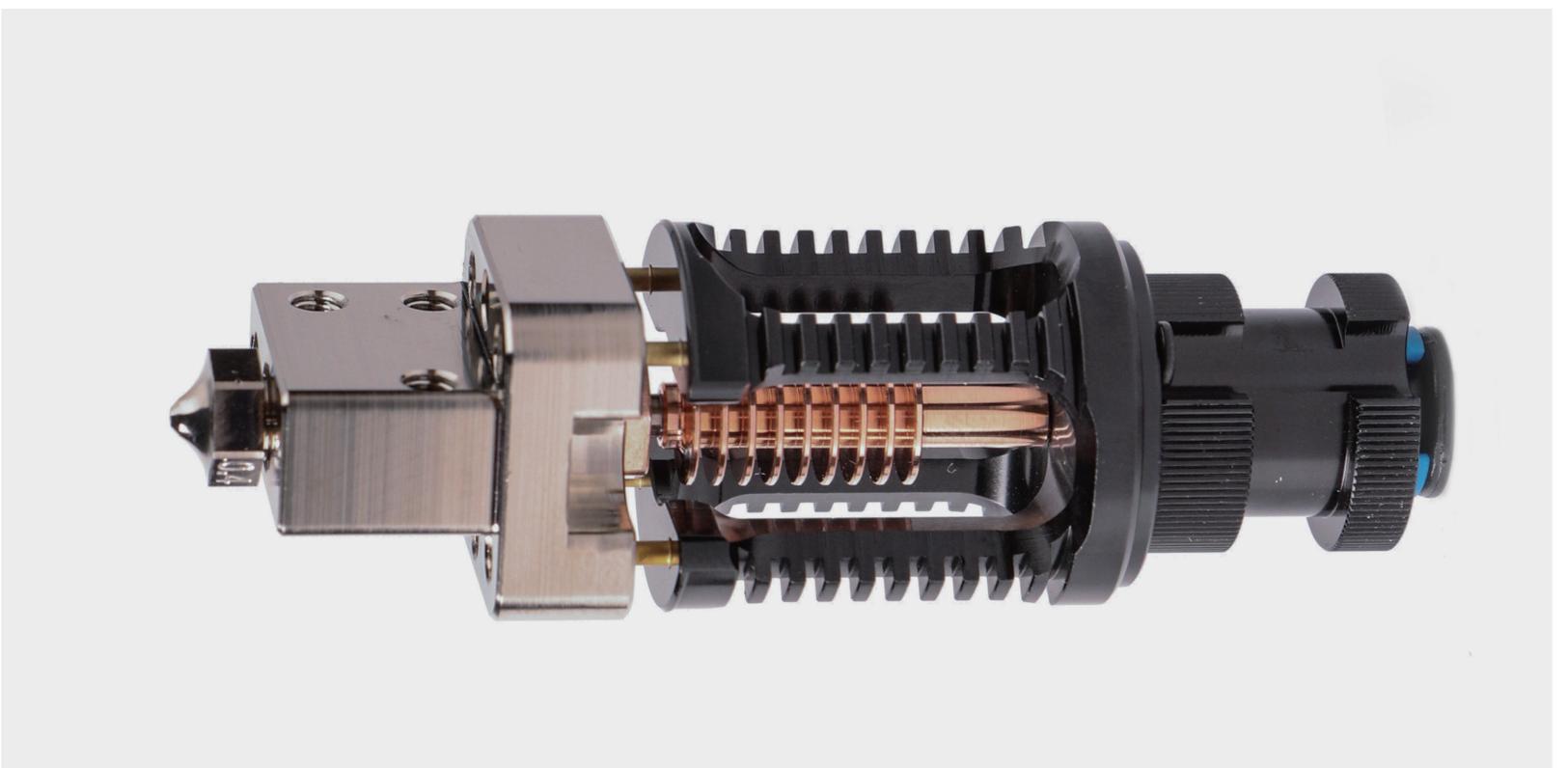
5. Insert the bowden collect into the top of the Adapter, then insert the collect clip between the bowden collect and the Adapter to fix the bowden collect.



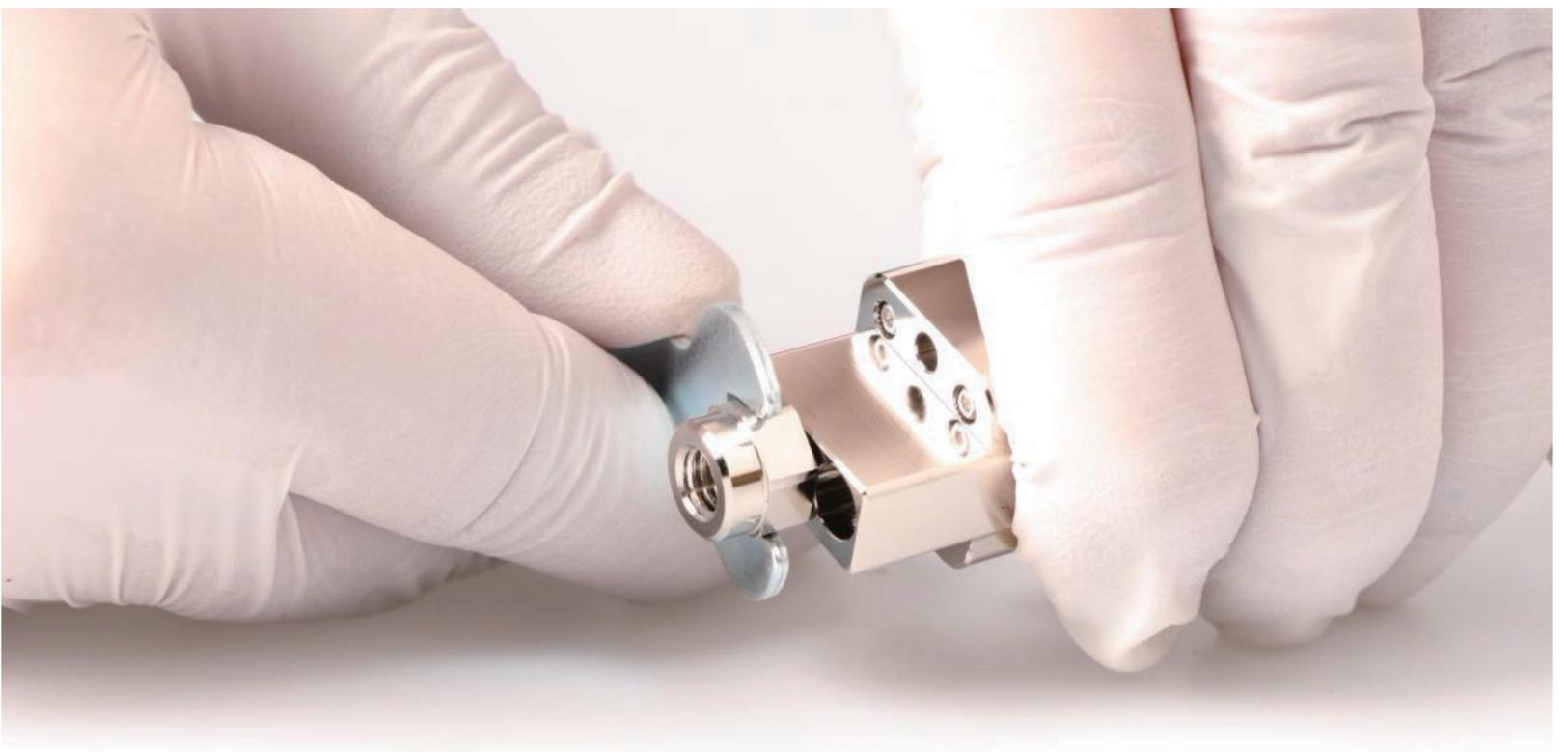
6. Tighten 4 holes with M1.4\*5 hexagon socket cup head screws.



7. Install the nozzle in a hot - tightening manner.



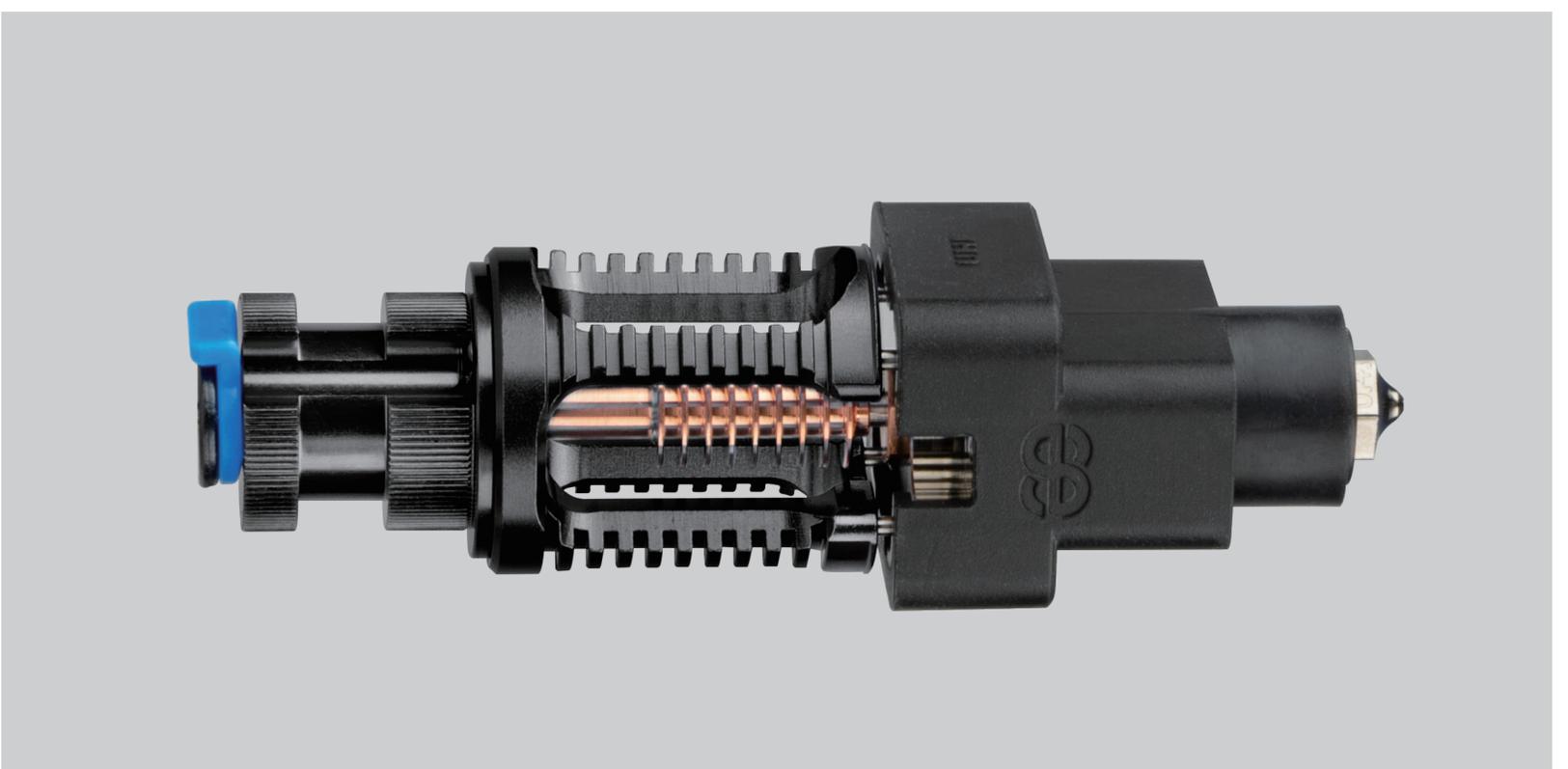
8. Based on the assembly steps of Dragon UHF Mini Hotend, install copper alloy extended nut using the H10 open - ended wrench.(this step can be omitted for mini version)



9. Then install the copper alloy nozzle in a hot-tightening manner.



10. Finally, install the silicone sock on the heatblock.



11. If you are using a glass ball thermocouple, first install the thermocouple into the brass sleeve in the accessories kit (the brass sleeve is shown below), seal the port with the thermal grease in the accessories kit, then put it into the heatblock and lock it with the head screw.



# Hot - Tightening

1. Hot - tightening is the last mechanical step before Dragon UHF Hotend is ready! It is essential for the sealing of the nozzle and heatbreak to ensure that molten filaments do not leak out of the hotend during use.
2. Using the printer's control software (or LCD screen) to set the hotend's temperature to 285°C. Wait one minute after its temperature reaches 285°C to equalize the temperature of all components.
3. Gently tighten the nozzle while fixing the heatblock with a wrench, and finally tighten the nozzle with a smaller 7.0mm wrench. This will keep the nozzle close to the heatbreak and ensure that the hotend does not leak.
4. The tightening torque of the hot nozzle is about 2.5Nm, which is about the pressure applied by one finger on the small wrench.

*ATTENTION: Do not touch the hotend directly with your hands during heating and within a period of time after heating.*



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