

# ENDER ALUMNI WORKFLOW

## **Direct Drive**

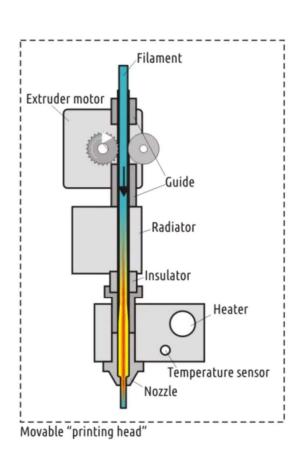
July 2023

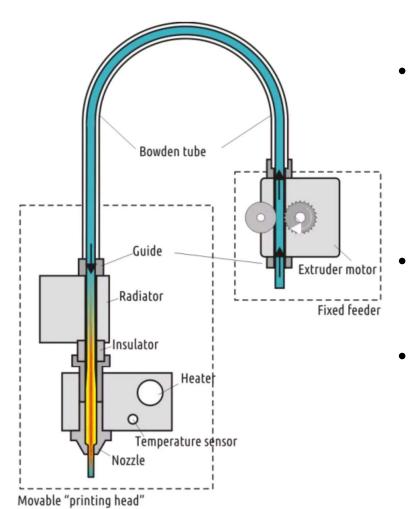
Many Options: Thingiverse, Brackets, Ender 3 S1, Micro Swiss



#### Direct vs. Bowden

- Short
   Path
   pincher
   to
   hotend
- Good for flexibles
- Extra weight in the moving mass





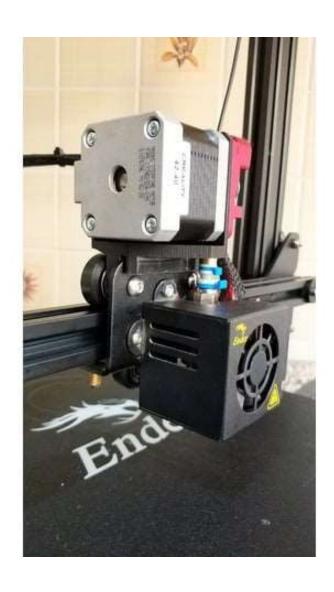
Long
springy
Path
pincher
to
hotend
Good
for
speed

Less
weight
in the
moving
mass

SOURCE:https://howto3dprint.net/direct-drive-vs-bowden-extruder-comparison-guide/



## Inexpensive option for Direct







### **Pricey Direct Drive Option**

Reuses:

Fans

Heater

Cartridge

**Thermistor** 

V rollers





Micro Swiss NG<sup>™</sup> Direct Drive Extruder for Creality CR-10 / Ender 3 Printers INSTALLATION INSTRUCTIONS

"Dual drive", "All metal hotend!"