HTA3D

WORKSHOP SHEET / FDM 3D PRINTING

Extrusion calibration

Use one sheet per printer, nozzle and filament. Keep the validation 3MF.

Printer and extruder

Hotend / nozzle (mm)

Date

Filament / colour / batch

Profile and slicer version

01 Feeding and extruder travel

Check the feed path, grip and first layer. Measure if feeding is inconsistent or the setup has changed.

Requested travel (mm)

Measured travel (mm)

E-steps or rotation distance

02 Profile settings

Temperature (°C)

Flow at first defects (mm^3/s)

Chosen limit (mm^3/s)

Pressure advance / K

Initial / final flow ratio

Method / modifier

Retraction (mm and mm/s)

Cooling and observations

03 Validate a representative part

□ Closed top surfaces □ Clean corners □ Consistent walls □ Test repeated

Part / orientation / service conditions

Result, dimensions and next adjustment

Reference formulas

Marlin: new E = old E × requested ÷ measured Klipper: new RD = old RD × measured ÷ requested

Orca YOLO: old ratio + modifier Two passes: old ratio × (1 + modifier ÷ 100)