Innovative Manufacturing for Creating Large and Complex Parts Wire Arc Metal 3D Printer : WAAM

参考出展
Reference

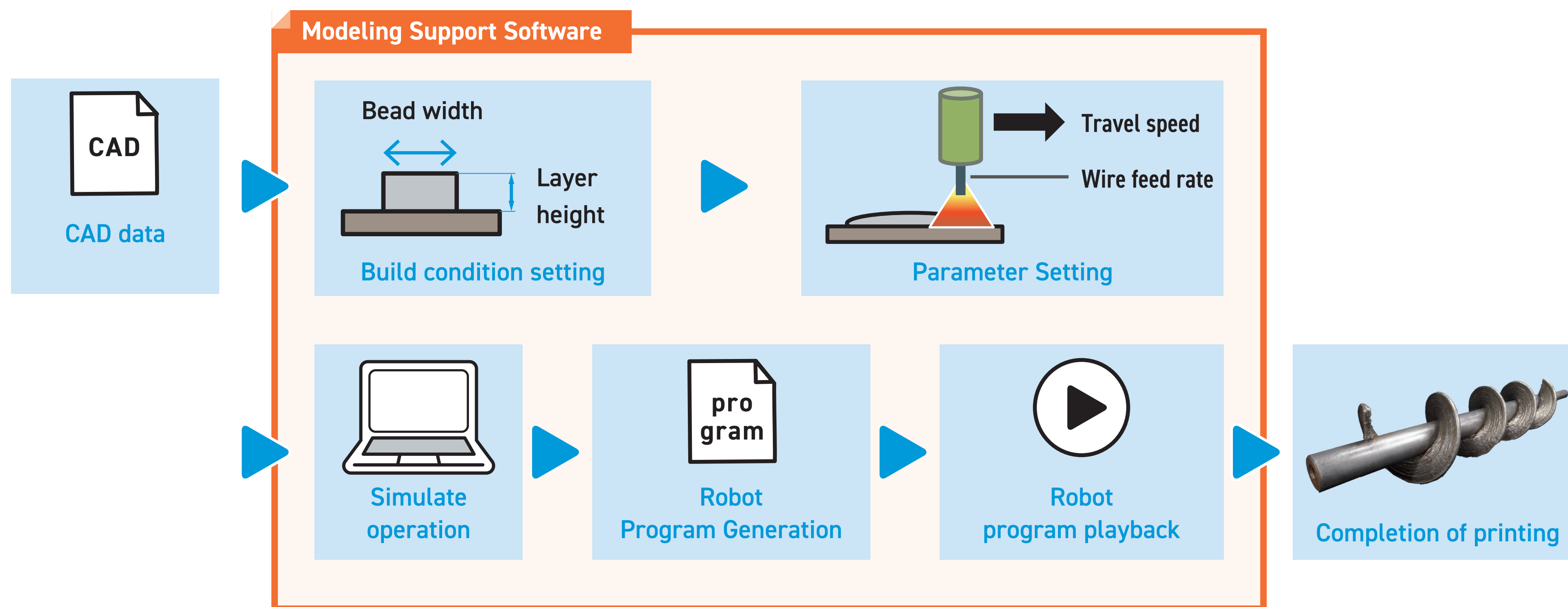# Modeling Support Software

Robot Program Generation

- Input CAD data and a few conditions
- Run the robot program and the operation is complete

Easy Condition Setting

- No complicated setup required
- Automatic adjustment to optimal parameters

Modeling Support Software

CAD

CAD data

Bead width

Layer height

Build condition setting

Travel speed

Wire feed rate

Parameter Setting

Simulate operation

pro gram

Robot Program Generation

Robot program playback

Completion of printing

参考出展
Reference

Monitoring and Automatic adjustment of WAAM conditions

measure the WAAM process to monitor printing success

- Measure the temperature of the printing object, build height and molten pool

Feedback control to prevent melt deformation

- Automatic adjustment of conditions without stopping WAAM process
- Controls heat input without changing the print speed by feedback to the AC process, which is unique to DAIHEN

Line sensor

Image camera

Thermo-camera
↑ 443.8°C

Adjust condition

Feed Back

OFF   ON

Target Shape

Feedback control