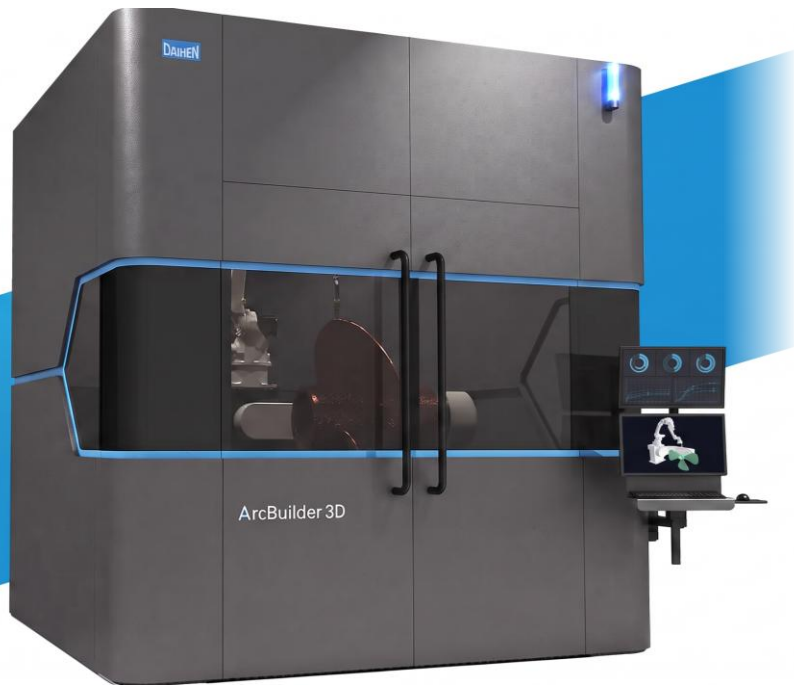




Large-Scale Metal 3D Printer Using Arc Welding

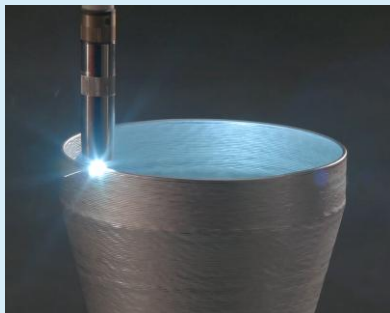
ArcBuilder 3D



Metal 3D printer combining
Daihen's extensive **welding know-how**
with **robot control technologies**

Uses **WAAM** technology to manufacture
large, complex shapes impractical with
conventional cutting or casting

3D forming



- Reduces the cost of procuring and managing molds compared to casting and forging.
- Reduces waste material volumes compared to cutting.

VS

Casting



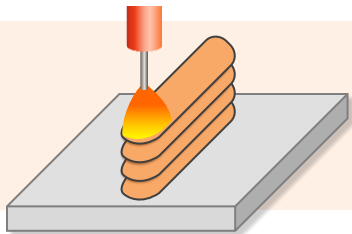
Cutting



The 3D forming manufacturing method allows the free creation of shapes without molds or waste.

WAAM 3D Forming Technology Using Arc Welding

DAIHEN



WAAM

Wire Arc Additive Manufacturing

Metal 3D forming technology that builds shapes by layering arc welding beads

Forming large components



* 10,000 times speed

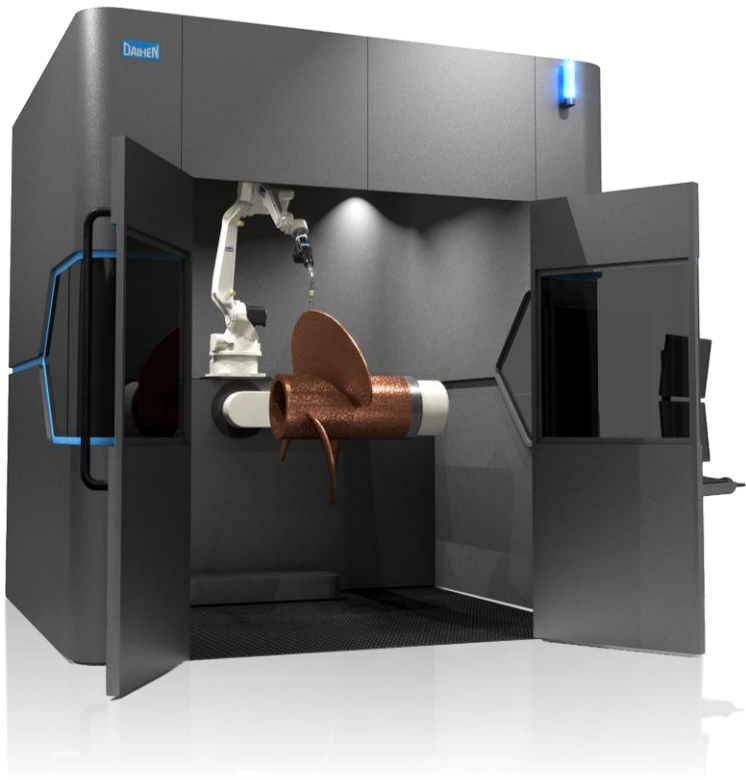
Forming a screw on a pipe



Features

- **Rapidly** forms **large** components.
Over 5 times faster than PBF
- Forms onto **existing parts**.
- **Reduces** initial and operating **costs**.

ArcBuilder 3D Standard Model



26 kg capacity, robot with integrated cables + dedicated positioner

Supports large parts of up to 1.5 m square.

WB-W350AM AC welding power supply for WAAM

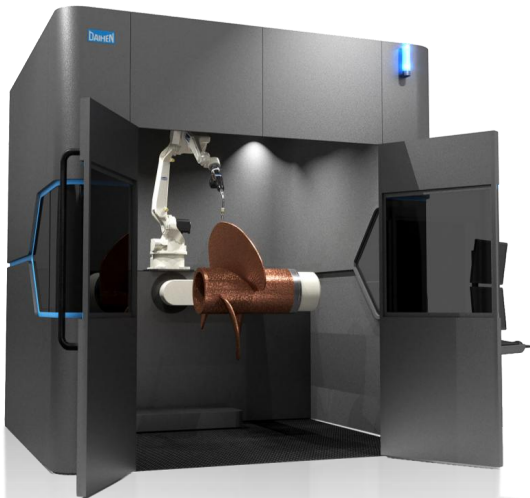
AC synchro feed for WAAM ensures smooth forming surface with minimal melt collapse.

AdaOne 3D printer path generation software

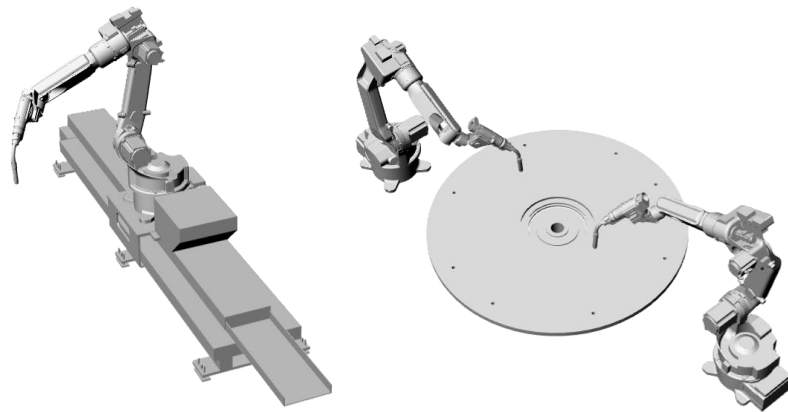
Easily generates robot programs even for complex shapes.

Solutions to Suit Customer Requirements

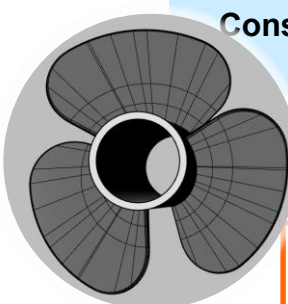
**Standard cell package
eliminating need to examine
specs**



**Custom-designed system
to suit requirements**



Contract forming service for validation before equipment introduction and for small-lot production



Specialist engineers design optimal forming conditions
to provide high-quality products from 3D data.



Wide Range of Samples Available

Aluminum tank

Material Hard
aluminum



Rocket nozzle

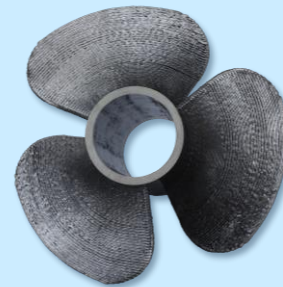
Material Mild
steel

High-density
forming eliminating
internal porosity



Propeller

Material Mild
steel



Screw

Material Mild steel



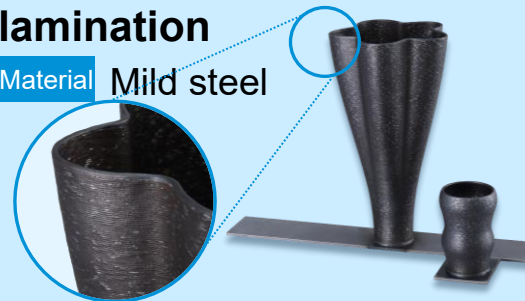
Manifold

Material Stainless steel



High smoothness lamination

Material Mild steel



DAIHEN