

COMPANY PROFILE 2026

TERRAWORKS

Industrial Metal 3D Printing
for Customer-Specific Manufacturing Solutions

Customized Metal AM Equipment · Control Software · Process
Engineering · Production

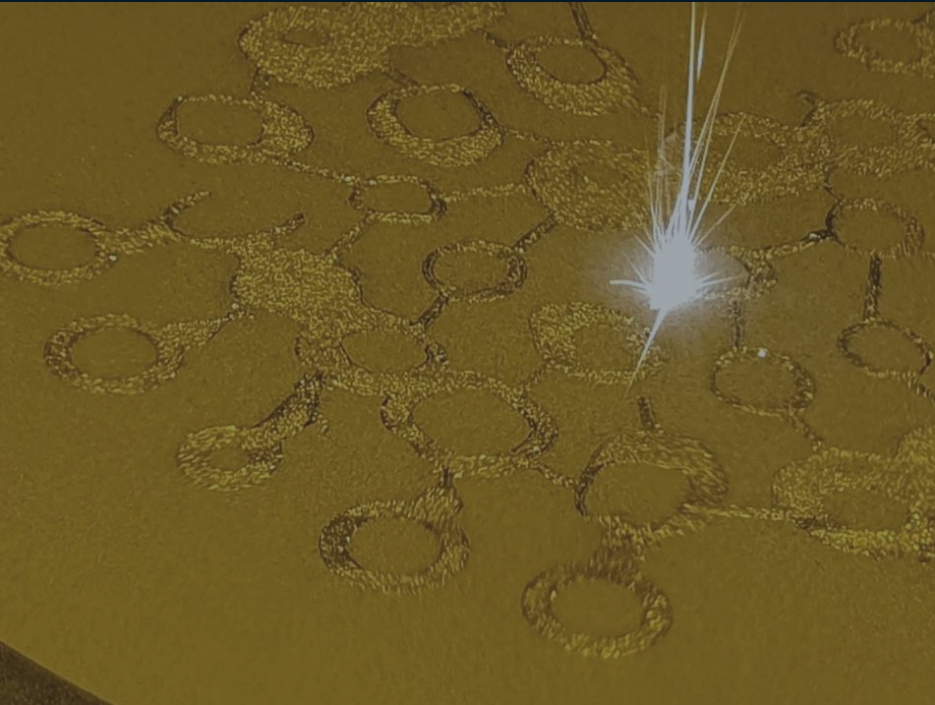
Industrial Additive Manufacturing Company Based in
Daejeon, Korea



Core Company Message

TERRAWORKS is not a simple printing service provider, it is a Metal AM solution company that solves industrial manufacturing problems.

By connecting in-house equipment, control software, process development, calibration, and parts production in one team, Terraworks delivers verified manufacturing results—not just printed parts.



01

In-house PBF
Equipment

02

In-house Control
Software

03

Process Optimization

04

Production Support

Company Overview

TERRAWORKS, Specialized at custom Metal AM solution.

Company Information

TERRA WORKS Co., Ltd.
12, Gukjegwahak 12-ro, Yuseong-gu, Daejeon, Korea
042-933-5221 / terraworks@terraworks.co.kr

Main Business

Metal PBF equipment development and sales
In-house AM control software
Process development and calibration
Industrial parts production and production support



Ø270x250mm

TERRA270PX2 build volume

20–50µm

Layer thickness range

7 M/s

Max Scanning Speed

300W

Yb-fiber laser

Company Summary

2020

Founded / Based in Daejeon,
Korea

900,000+

Cumulative 3D Sipe/Kerf
deliveries

40,000/mo

Monthly capacity for PCR
applications

TERRA 250P

TERRA 270P

TERRA 270PX2

Core Positioning

TERRAWORKS provides custom Metal PBF equipment, in-house control software, process development, and production support as an integrated industrial AM solution provider.

Proven Application Base

Repeated production of 3D Sipe/Kerf parts for tire molds provides a practical foundation for expansion into EV molds, aerospace/defense, semiconductor, medical, and dental applications.

Core Message

Metal AM capability already applied in industrial manufacturing—not just a possible technology

SECTION 01 / COMPANY

**More than technology,
integrated execution matters.**

TERRAWORKS connects equipment, control software, process optimization, and production experience within one AM-focused organization.

High-value manufacturing requires more than printing capability

Customers increasingly require complex geometry, shorter lead times, repeatable quality, and application-specific manufacturing processes.

01 Geometry Complexity

Complex geometry that conventional methods cannot easily produce.

Internal channels · ultra-thin patterns
fine features · integrated structures

02 Lead-Time Reduction

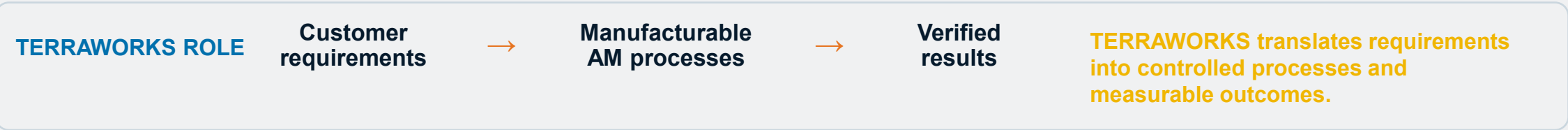
One connected workflow from prototype review to verified output.

Process setup · post-processing
inspection · application feedback

03 Process Reliability

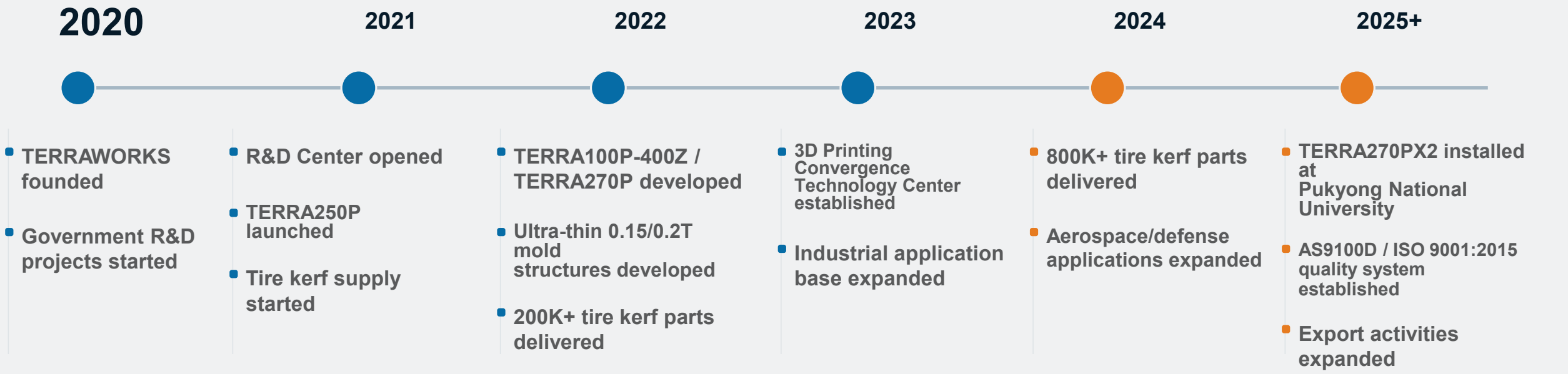
Repeatability is improved through data-driven setup and feedback.

Equipment setup · scan conditions
material data · measurement feedback



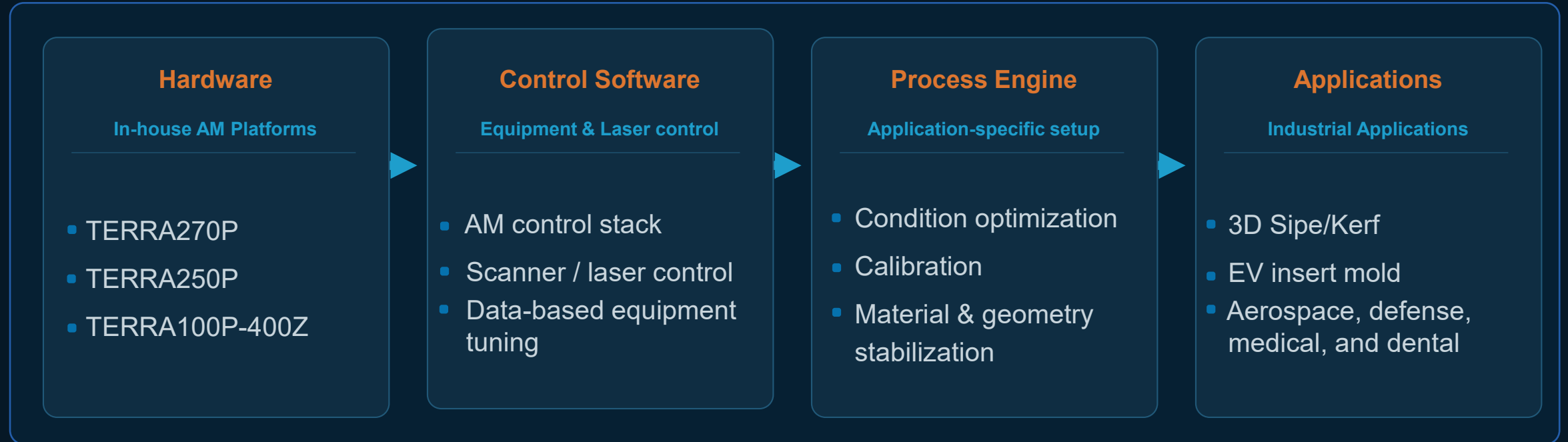
Milestones

From equipment development to repeated industrial production



Product development → repeated delivery → application expansion → quality & export readiness

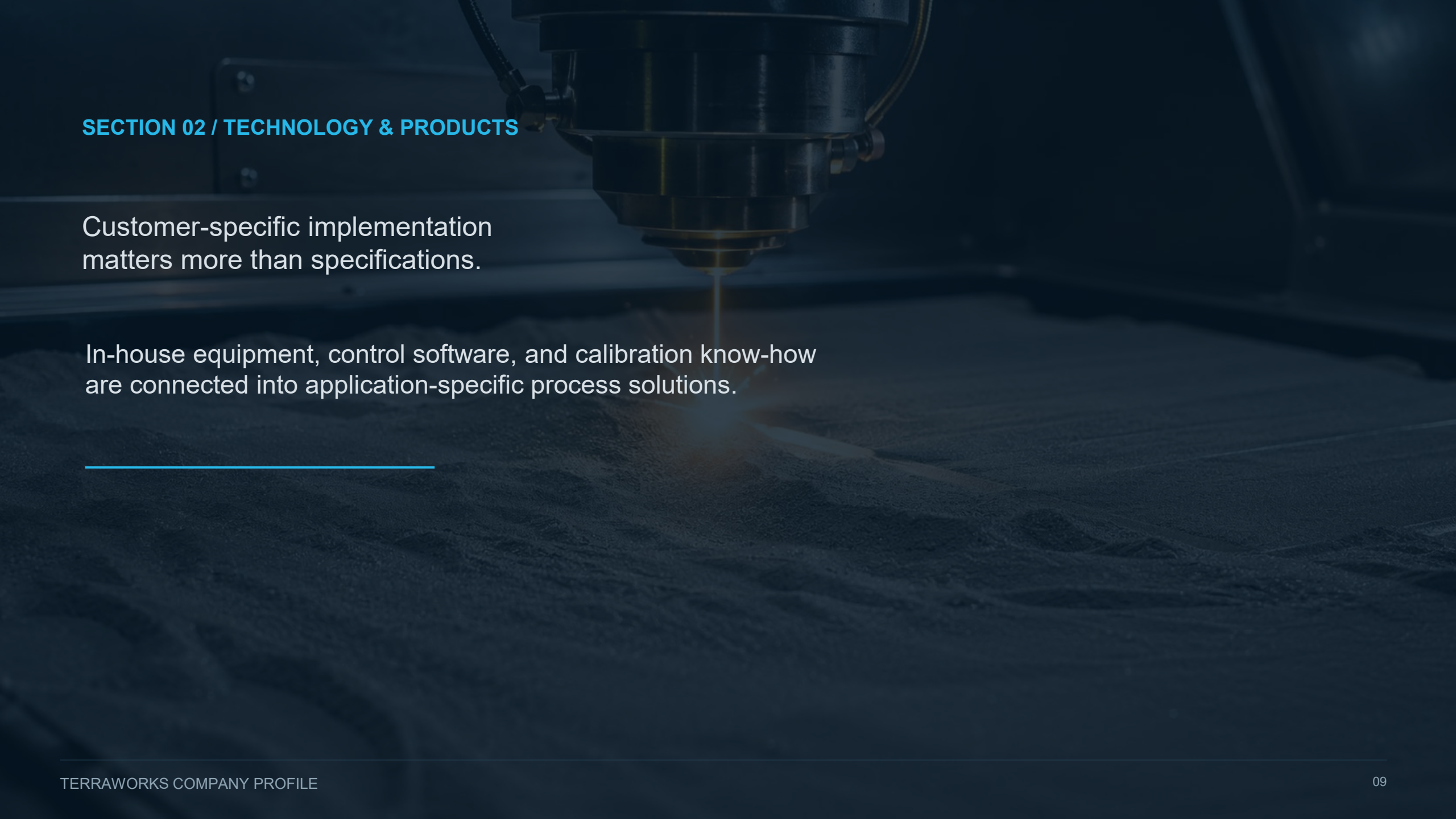
TERRAWORKS's Integrated AM Capability



What This Enables



In-house equipment + software + process engine connect customer requirements to verified AM manufacturing results.



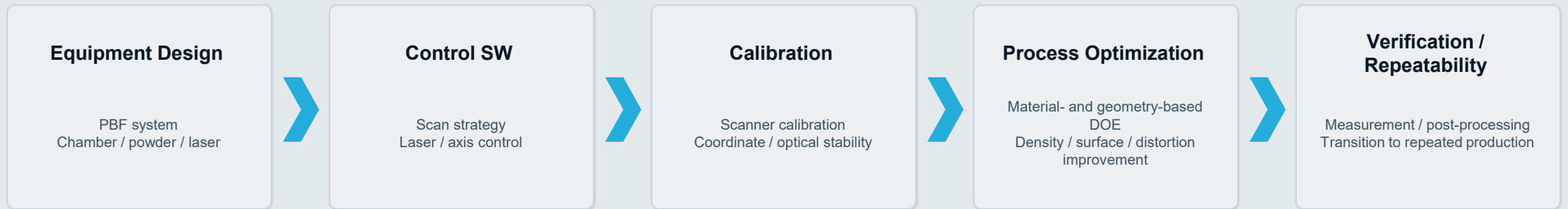
SECTION 02 / TECHNOLOGY & PRODUCTS

Customer-specific implementation matters more than specifications.

In-house equipment, control software, and calibration know-how are connected into application-specific process solutions.

Core Technology Architecture

Equipment, control, process engineering, and verification are connected in one workflow.



Customer Value Complex geometry · shorter lead time · repeatable quality · customer-specific equipment and process support

Product Lineup

TERRA systems are configured based on customer geometry, material, and production goals.

TERRA 250P

Compact general-purpose PBF platform for R&D and production trials

Φ250×200 mm / 20–50 μm / 200 or 300 W

TERRA 270P

Single-laser productivity-focused platform for metal parts and mold applications

Φ270x250 mm / 20–50 μm / 300 or 400 W

TERRA 270PX2

Dual 300 W lasers for higher throughput and shorter delivery times

Φ270x200 mm / 20–50 μm / 300 W x2

Options: Dust collector · powder sieving system · industrial vacuum · furnace

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TERRA 250P

Metal Powder Bed Fusion System



Build Envelope (Laser)

- $\Phi 250 \text{ mm} \times 200 \text{ mm}$



Layer Thickness (Laser)

- $20 \mu\text{m} - 50 \mu\text{m}$



Laser Type

- Yb-fiber laser 200 W / 300 W (CW)
- Max. scanning speed $\sim 7 \text{ m/s}$



Inert Gas Supply

- N_2 / Ar
- Integrated filter system



System Software

- Magics / Netfabb slicer
- AM control system

— ADVANCED METAL ADDITIVE MANUFACTURING PLATFORM —

TERRAWORKS

TERRA 270P

Metal Powder Bed Fusion System



Build Envelope (Laser)

- $\Phi 270 \text{ mm} \times 200 \text{ mm}$



Layer Thickness (Laser)

- $20 \mu\text{m} - 50 \mu\text{m}$



Laser Type

- Yb-fiber laser 300 W or 400 W (CW)
- Max. scanning speed $\sim 7 \text{ m/s}$



Inert Gas Supply

- 1 gas connection provide / Nitrogen or Argon



Filter System

- Integration
- Compatible with magicsandprusa(netfabb) slicer S/W
- Self-production AM control system (S/W)

※ It is possible to develop customized equipment.

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TERRA 270P X2

Metal Powder Bed Fusion System



Build Envelope (Laser)

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- Dual Yb-fiber lasers $300 \text{ W} \times 2$
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Filter System

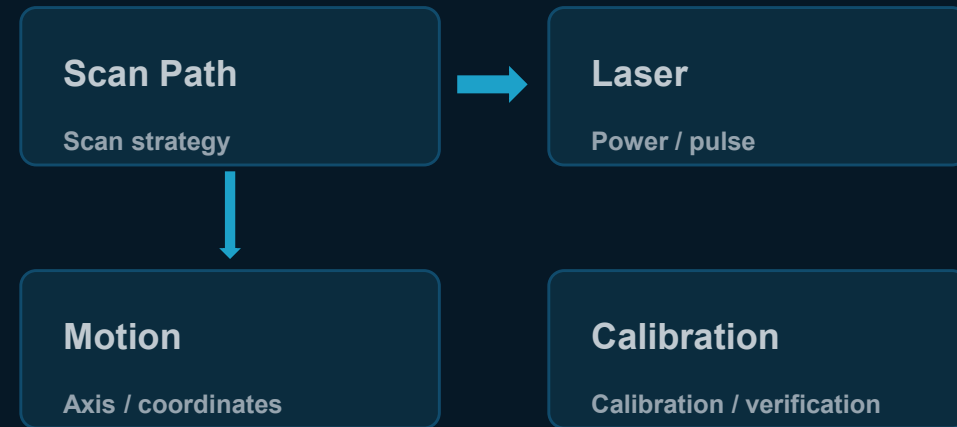
- Integration
- Compatible with magics and prusa (netfabb) slicer S/W
- Self-production AM control system (S/W)

※ It is possible to develop customized equipment.

Software & Calibration

In-house control logic enables process tuning and repeatable quality after equipment delivery.

Control Architecture



TERRA Craft V2 UI



Operational Benefits

- Quickly adjusts equipment and scan conditions for customer-specific geometries
- Manages positioning accuracy and repeatability through laser-scanner calibration
- Uses material DOE and production data to reduce setup time for future projects
- Extends customer support through process development, maintenance, and parts production

Software & Calibration

In-house control logic enables process tuning and repeatable quality after equipment delivery.

Scan Path

Scan strategy

Laser

Power / pulse

Motion

Axis / coordinates

Calibration

Calibration / verification

- Quickly adjusts equipment and scan conditions for customer-specific geometries
- Manages positioning accuracy and repeatability through laser-scanner calibration
- Uses material DOE and production data to reduce setup time for future projects
- Extends customer support through process development, maintenance, and parts production

Commercial Execution

Repeated production experience supports TERRAWORKS's manufacturing reliability.

200K+

2022 kerf milestone

800K+

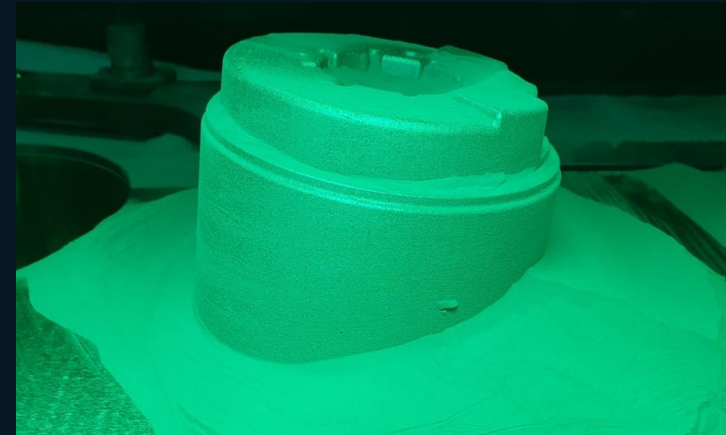
2024 kerf milestone

900K+

Cumulative deliveries

40K/mo

Production capacity for PCR applications



TERRAWORKS

Repeatedly supplies parts to multiple industrial customers, including tire manufacturers and mold makers in Korea and overseas.

Case Study 01 — 3D Sipe / Kerf

Fine blades for tire molds are a practical example of industrial AM application.



Customer Requirements

Complex patterns
Lead-time reduction
0.2–0.4 mm ultra-thin kerf
Repeat order response

Terraworks Value

PBF-based complex geometry
Process optimization
Post-processing
Up to 40,000 parts/month

Our Value

3D Sipe/Kerf is not a technology demo.

It is an industrial manufacturing case with repeated delivery and expansion potential.

Application Expansion

Starting from tire molds, Terraworks expands into high-precision and high-reliability manufacturing applications.

Tire Mold

3D Sipe/Kerf for tire molds
Repeated production and
overseas customer
response

EV / Mold

Motor housing /
die-casting molds
Cooling channels
Complex geometry

Aero / Defense

Aerospace / defense /
energy applications
Quality system
verification data

Precision

Semiconductor guide rings
Shower heads
Dental and precision
small parts

Expansion Logic

Process knowledge from fine features, post-processing, and quality control in tire molds reduces technical risk when expanding to adjacent precision applications.

Infrastructure & Execution Capacity

Execution capacity is demonstrated through equipment, process, and verification infrastructure.



17+

Total equipment units

4

Metal PBF printing systems

5

FDM / SLA printing systems

9

Testing / analysis equipment

Post-processing & verification system

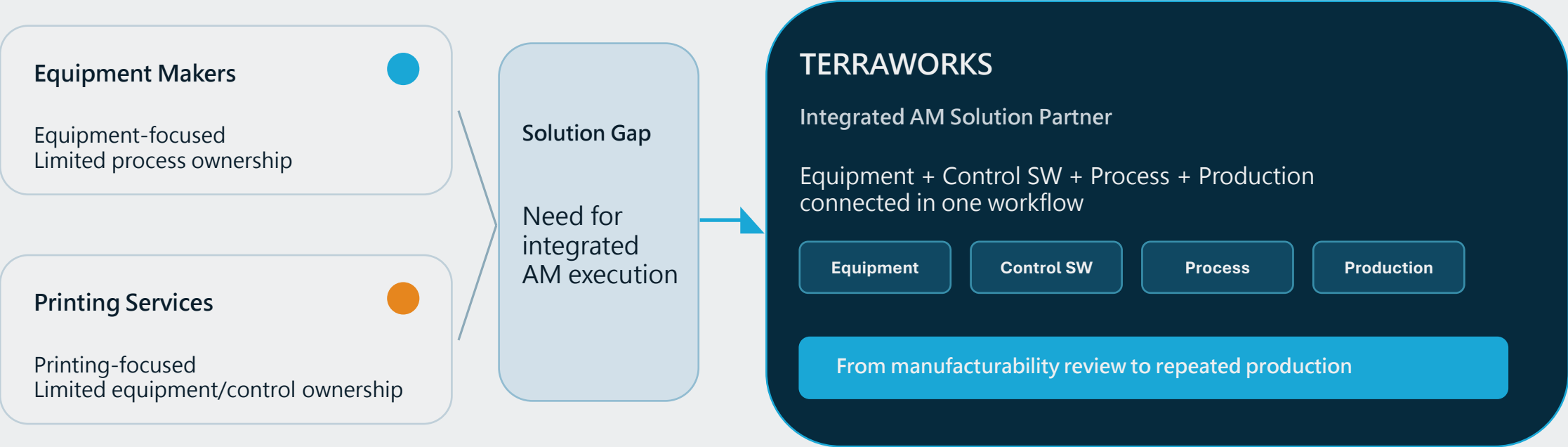
Integrated workflow for metal AM, plastic printing, post-processing, heat treatment, measurement, and verification.

Turning technology into manufacturing results.

Beyond equipment supply or printing services, Terraworks works with customers to design manufacturing solutions aligned with their products and process requirements.

Integrated AM Solution Partner

Terraworks connects equipment, control software, process engineering, and production into one customer-facing workflow.



Positioning Summary

Terraworks is an integrated AM execution partner focused on solving customer manufacturing problems.

Business Model

Terraworks supports customers across equipment, process engineering, parts production, and lifecycle support.

Customized Equipment

Metal PBF equipment supply
Installation / setup / options

Engineering / Process

Process development
Calibration
Material / geometry DOE

Parts Production

Prototype parts
Repeated production support

After-sales / Data

Maintenance
Operation support
Process improvement

Lifecycle Support

After equipment delivery, Terraworks can continue supporting process tuning, maintenance, options, and parts production.

Why TERRAWORKS

- In-house Metal PBF equipment and control software
- Proven by 900,000+ delivered 3D Sipe/Kerf parts
- Integrated printing, post-processing, and inspection capability
- Expandable to high-precision industrial applications
- Focused on solving real manufacturing challenges

FDM and SLA capabilities for faster product development.

In addition to Metal PBF, TERRAWORKS operates engineering-plastic FDM and high-resolution SLA systems to support prototypes, jigs, fixtures, master models, and functional validation.

FDM

Engineering plastics for functional parts, jigs, fixtures, housings, and heat/ESD-resistant components.

SLA

High-resolution resin printing for visual prototypes, fit checks, master models, molds, and precision parts.

Integrated Support

Metal AM, polymer AM, post-processing, measurement, and verification are connected in one workflow.

FDM Capability

Engineering plastic printing for functional prototypes, fixtures, and production-support parts.

Materials & Systems

PEEK / PEEK-CF, PA-CF, PC, ASA, ABS, PETG and other engineering plastics can be selected based on strength, heat resistance, chemical resistance, or ESD requirements.

Typical Applications

Jigs and fixtures, inspection tools, machine covers, large housings, lightweight brackets, assembly aids, and end-use trial parts.

Customer Value

Rapid design iteration, lower tooling dependency, functional validation before metal or mold investment, and faster response to custom industrial parts.

Design Review → Material Selection → FDM Printing → Post-processing → Fit / Function Check

SLA Capability

High-resolution resin printing for precise prototypes, molds, and small-feature validation.

Resin Platform

- Grey / Grey Pro
- Tough 2000
- Rigid 10K
- Silicone 40A
- Application-specific resins

Prototype Validation

High-resolution models for design review, assembly checks, and customer approval before mass production.

Mold & Master Support

Master patterns, mold-related parts, silicone-product development, and small-feature geometry review.

Precision Applications

Dental, medical mock-ups, small precision parts, transparent/rigid concepts, and functional resin-based evaluation.

AM Development Link

SLA reduces risk by verifying shape, assembly, and user requirements before FDM, Metal PBF, or mold production.

Metal + Polymer AM Support

TERRAWORKS combines Metal PBF, FDM, and SLA to select the right process for each development stage.

Metal PBF

Spine/Kerf, mold inserts, high-precision metal parts, internal channels, and repeated production applications.

FDM

Engineering plastic parts, jigs, fixtures, housings, ESD/heat-resistant components, and production support tools.

SLA

High-resolution prototypes, master models, molds, dental/precision parts, and small-feature validation.

One partner for process selection, sample production, post-processing, measurement, and manufacturing consultation.

Connecting Additive Manufacturing to Tangible Results

Customized Metal 3D Printer · AM Control Software
Process Development · Production

CONTACT

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COLLABORATION SCOPE

- From manufacturability review to process proposal
- Support for sample printing, post-processing, and measurement verification
- Consulting on metal PBF equipment and production conditions
- Discussion on customized manufacturing collaboration