



Build Share[®]

TITANIUM 6AL-4V EBM

Program Benefits

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Build Share[®]

Democratizing Additive Manufacturing[™]

Each Member decides their part geometry and quantity.

Build Share[®] controls the quality.

Hummingbird Additive (HBA) developed the Build Share[®] program for our members to bring Additive Manufacturing (AM) production to companies of all sizes. We partnered with Zenith Tecnica (ZT) to provide a turn-key solution for printing with Titanium.



Why Build Share[®]?

- Start production *faster* at a *lower cost*
- Distribute costs to manage and maintain manufacturing capabilities
- Sharpen your team's proficiency with AM Production through team training
- Bring new capabilities to market

HBA saves **TIME**

ZT builds **QUALITY**

HBA+ZT bring **EXPERIENCE**



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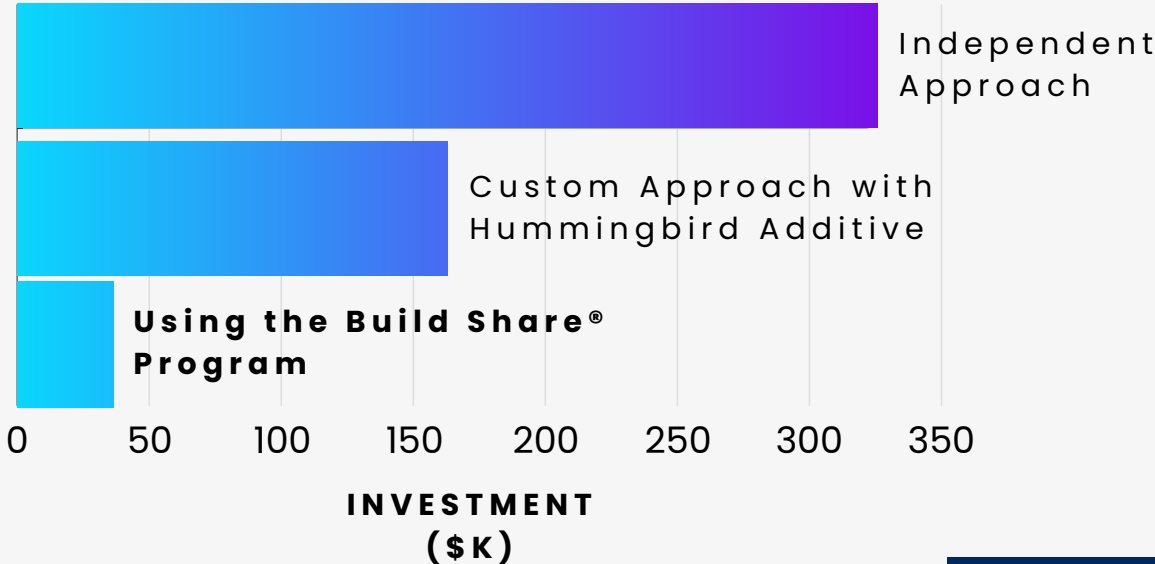
Build Share[®] provides **FLEXIBILITY**

Start Production

Up to 6X Faster



Up to 90% Savings

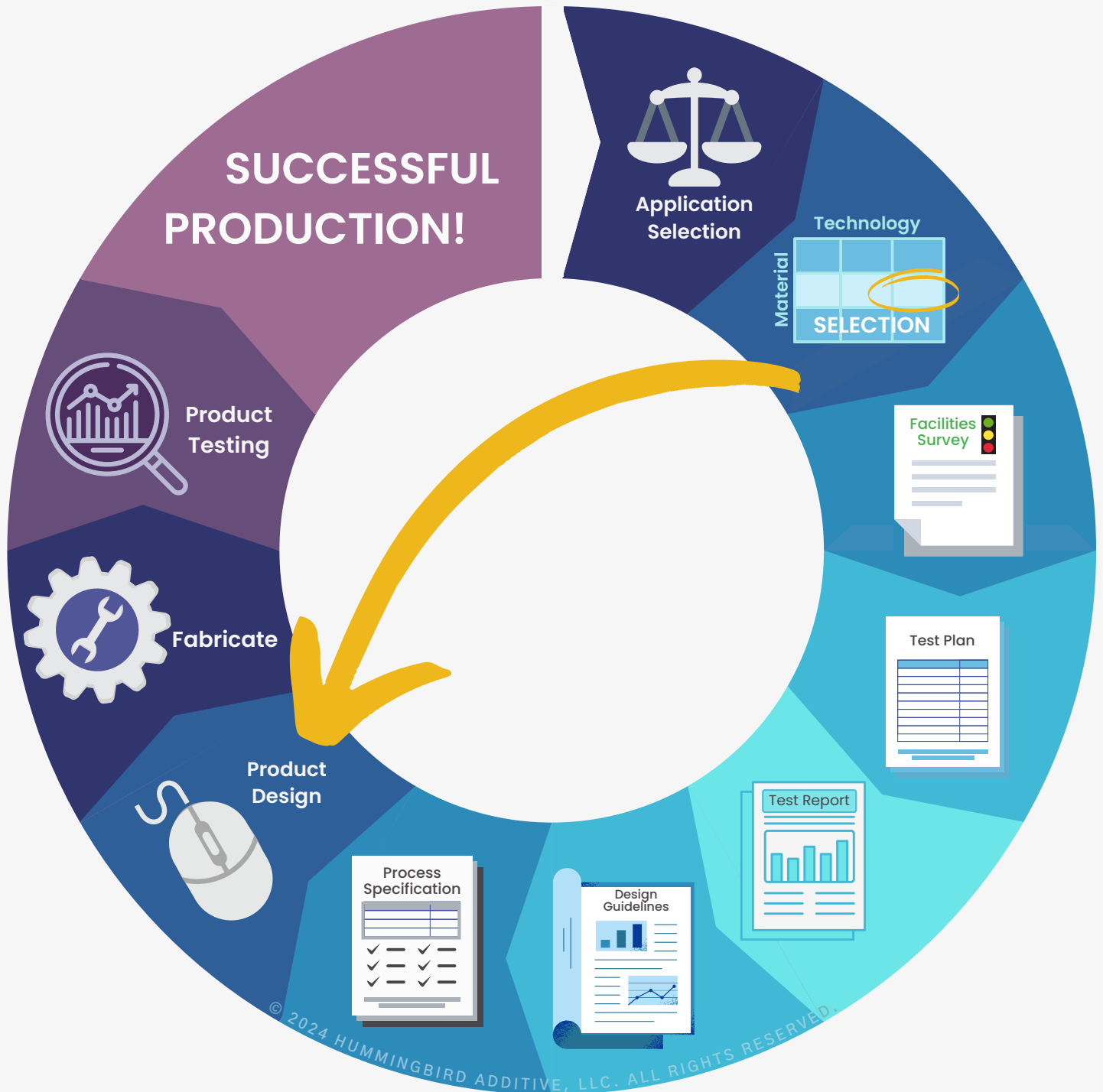


Each additive manufacturing production process has hundreds of variables to control, and it takes time and effort to validate the process quality and repeatability. Having the hard work completed by AM experts saves time and money, while providing peace of mind.

Reliable
Repeatable
Quality

Estimated values. Excludes Member's internal application qualification budget and schedule.

Jump into Design



Reduce your Time and Risk

A Powerful Pair

Why Titanium 6Al-4V? This high strength-to-weight ratio alloy is corrosion resistant with great dimensional stability over a wide range of operating temperatures. These attributes make it well suited for multiple industries and challenging environments.

Why EBM? Electron Beam Melting is a type of powder bed fusion which requires a vacuum chamber to operate, resulting in a clean process with reduced residual stress.

**Pairing Ti 6Al-4V with EBM
enables a broad set of
capabilities and designs.**



Build Share[®]

Program Tier Structure



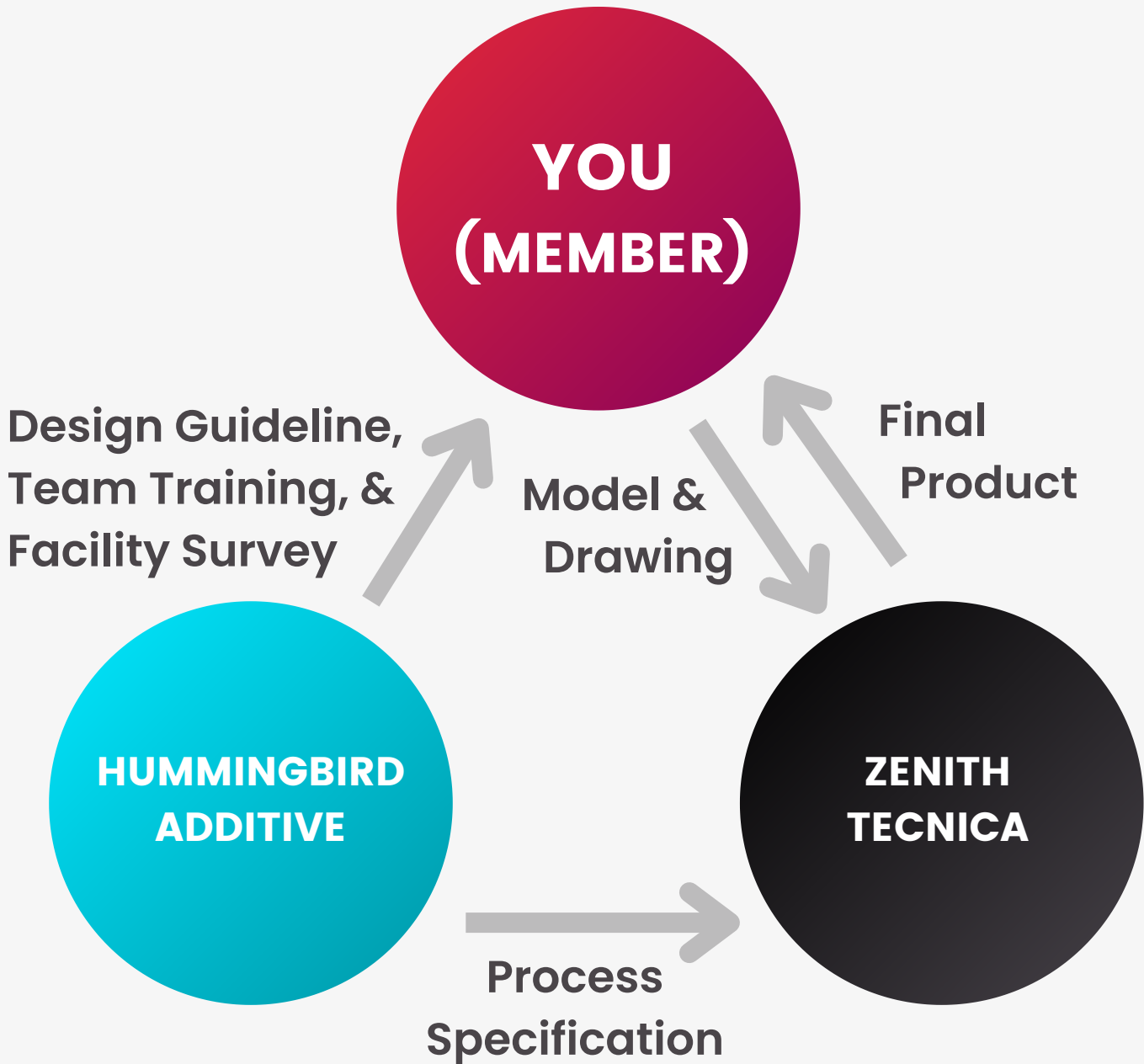
At Hummingbird Additive, we crafted 3 *Production Tiers* to address your unique business needs. The Build Share[®] Program cost is based on the selected Tier and includes a nominal print fee.

	Lean	Lean+	Certified
Intended Loading	Tension	Complex Static	Cyclic
As-Printed Design Values (cumulative)	Tension, Surface Roughness	Thin Tension, Compression, Shear	HIPPED Mechanical Values
Build Acceptance Criteria	Chemistry, Mechanical	Chemistry, Mechanical	Full ASTM Chemistry, Mechanical
Team Training	10 hours of interactive onboarding	10 hours of interactive onboarding	10 hours of interactive onboarding
Program Fee*	Starting at \$18k	Starting at \$24k	Upon Request

*Subject to change

Note: Tier availability dependent on Program start date.

How does it work?



What's Included?



DESIGN GUIDELINE

The Design Guideline jump starts the product development cycle. It includes size and shape limitations, material properties, and thin wall guidance (with Lean+ and Certified Tiers).

TEAM TRAINING

Hummingbird Additive provides 10 hours of interactive onboarding for your team (up to 12 participants) to unlock the value of Titanium Electron Beam Melting.

USE OF HUMMINGBIRD ADDITIVE'S SPECIFICATION

Building to our proprietary specification saves you the cost and time of developing a process on your own. It offers a repeatable and verifiable manufacturing process by locking key print parameters, establishing quality control requirements, and co-fabricating witness coupons. Membership includes a 12 month license to manufacture to this specification. A Certificate of Conformance (CoC) will be provided with every build.

FACILITY SURVEY REPORT

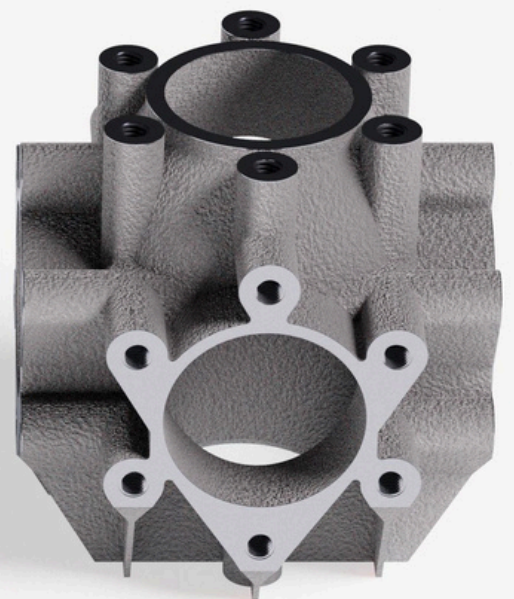
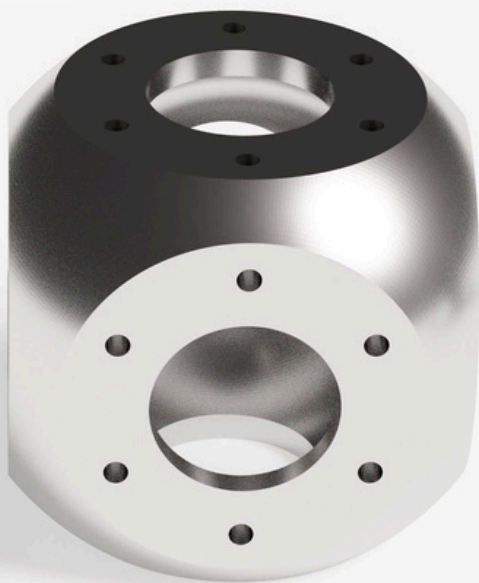
The Facility Report summarizes the facilities, operations, personnel, and equipment used by the manufacturer Zenith Tecnica so you can be confident in the people and practices manufacturing your product.

Team Training

Includes:

- What applications make sense
- How to build a business case
- Capabilities and limitations of EBM
- Design guidelines for production
- Dimensional tolerancing strategies
- Tips for presenting to stakeholders

Team Training is also available as a stand-alone package as part of our [3D in 3Days™](#) offering



What do you need to start?

Successful implementation starts with:

- Project vision and company goals
- A small group of motivated colleagues
- Management support and resources

Internal Resources and Capabilities

- Product Engineering (Scope and Requirements)
- Designers (Models and Drawings)
- Manufacturing (Schedule and Assembly)
- Purchasing (Business Case Definition)
- Management (Decision Authority)



Get started with Build Share[®]

Let's have a conversation to see how Build Share[®] can support your business!

info@HummingbirdAdditive.com

[Schedule a discovery call](#)



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Contact us today!

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