

Considering Composites?

This guide helps you select the right production technology.



1. What is the size of your part?

- A) Small (50–300 mm)
- B) Medium (300–1000 mm)
- C) Large (1000–3000 mm)
- D) Extra-Large (3000+ mm)

2. What is your required production volume?

- A) Prototype / Small Batch (1–50 units)
- B) Low Volume (51–500 units)
- C) Medium Volume (501–5,000 units)
- D) High to Mass Production (5,001–200,000+ units)

3. What level of mechanical performance does your part need to achieve?

- A) Standard – Good structural integrity, but not performance-critical
- B) Enhanced – Needs higher stiffness or strength under stress
- C) Advanced – Critical performance under repeated or sustained stress

4. How complex is your geometry?

- A) Simple (flat)
- B) Moderate (single-curved)
- C) Complex (double-curved, varied cross-sections)

5. How important is recyclability or sustainability?

- A) Not important
- B) Somewhat important
- C) Very important (same-application recyclability preferred)

6. What is your acceptable cost range per 1,000 parts (approximate)?

- A) € (Cost-sensitive: limited budget, value matters most)
- B) €€ (Balanced: willing to pay for performance and scalability)
- C) €€€ (Premium: high performance or niche use cases justify higher spend)

Interpret your answers on the next page and find your technology →

Answer Matrix:

METHOD	PART SIZE	PRODUCTION VOLUME	MECHANICAL PERFORMANCE	GEOMETRY COMPLEXITY	SUSTAINABILITY	COST
IFP	A/B (Small-Medium)	B/C/D (1-200,000+ units)	C (Advanced)	A/B (Simple/Moderate)	C (Important)	B (€€)
Wet Layup	A/B (Small-Medium)	A (1-50 units)	A (Standard)	A (Simple)	A/B (No/some importance)	C (€€€)
Prepreg	A/B/C (Small-Large)	A/B (1-500 units)	C (Advanced)	C (Complex)	A/B (No/some importance)	C (€€€)
AFP	B/C (Medium-Large)	A/B (1-500 units)	C (Advanced)	C (Complex)	A/B (No/some importance)	C (€€€)
ATL	C/D (Large-Extra Large)	A/B (1-500 units)	B (Enhanced)	A/B (Simple-Moderate)	A/B (No/some importance)	C (€€€)
TFP	A/B (Small-Medium)	A/B/C/D (1-200,000+ units)	B (Enhanced)	B (Moderate)	B (Some importance)	B (€€)

Additional Context:

- **IFP** (Holy Technologies): Optimized for fiber-level design freedom, sustainability, fast turnaround, and high-quality repeatability at scale.
- **Manual Wet Layup**: Optimized for low-cost prototyping or one-off parts, where lower performance, slow cycles, and high manual effort are acceptable.
- **Manual Prepreg Layup**: Optimized for high-performance, cosmetically clean parts in low volumes, using skilled labor and accepting some material waste.
- **AFP**: Optimized for mature, high-performance parts with complex geometries where design precision is critical and high setup costs are acceptable.
- **ATL**: Optimized for large, relatively flat or gently contoured parts at industrial volumes, where speed and consistency outweigh geometric flexibility.
- **TFP**: Optimized for custom fiber orientation and weight optimization in low-volume production, where a multi-step workflow is manageable.

Think your part is a match for IFP?

Upload your CAD file and book a free technical assessment. We will validate fit, performance potential, and recyclability, no strings attached.

Free Tech Assessment