

## Turbocharge your Time to Market by 50%!

Case Study: From Concept to Flight Simulator Finished Component

### Objective

Production of robust composite parts for Full-Flight Simulator (FFS).

### RAKU® TOOL Products

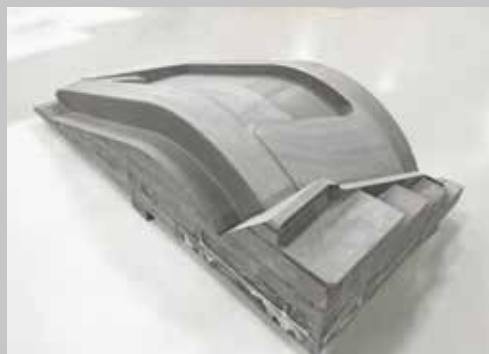
- > Tooling Board WB-0801 0.8 g/cm<sup>3</sup> density
- > Gelcoat EG-2105 / EH-2950-1
- > Resin Infusion Systems EI-2500 / EH-2973 and EI-2524 / EH-2994

### Key Advantages of RAMPF Process

- > Turnkey solution for pattern creation, tooling and production ready parts
- > Fast and high-precision production of master patterns through direct milling from CAD data
- > Effortless and fast milling process
- > Dimensional stability: patterns crafted with stability, ensuring consistent dimensions
- > High-quality surface finishes for visually appealing results after machining
- > Density and hardness matched adhesives, no transfer of bonding lines to mold

All products are compliant with RoHS. Our recommendations on the use of the material are based on many years of experience and current scientific and practical knowledge. They are, however, provided without any obligation on our part and do not relieve the buyer of the need for suitability tests. They do not constitute a legal relationship, nor are any protected third party rights whatsoever affected thereby. The technical data overview is not a specification but contains indicative values. No liability accepted for misprints.

Some of the products mentioned in this case study may only be available in Canada or USA.



## Turnkey Solution: Slash Time to Market in Half!

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### Production Process

#### Pattern:

Direct milling of master pattern using RAKU® TOOL WB-0801. Application of sealer and release agent.

#### Mold:

Gelcoat application RAKU® TOOL EG-2105 / EH-2950-1 followed by skin coat. Once cured, structural tooling lay-up and then resin infusion with RAKU® TOOL EI-2500 / EH-2973.

#### Parts:

Final flight simulator composite parts produced via resin infusion with RAKU® TOOL EI-2524 / EH-2994. Compliant with UL94 flammability requirements of the application.

### Key Advantages of RAKU® TOOL

#### WB-0801

- > High heat deflection temperature
- > High mechanical strength with low density
- > Dimensionally stable
- > Fast machinability
- > Excellent surface finish

#### EI-2500 / EH-2973

- > Heat resistant Epoxy Resin Infusion System
- > No brittleness during room temperature cure overnight, easy to demold
- > Good wetting properties

#### EG-2105 / EH-2950-1

- > Polishable gelcoat
- > Excellent styrene resistance
- > Good heat resistance

#### EI-2524 / EH-2994

- > Excellent infusion characteristics
- > Excellent work life

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