



## 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



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

Case Study: From Concept to Flight Simulator Finished Component

### 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

### RAMPF Advanced Polymers GmbH & Co. KG

Robert-Bosch-Straße 8–10 | 72661 Grafenberg | Germany  
T +49.7123.9342-0 | E [advanced.polymers@rampf-group.com](mailto:advanced.polymers@rampf-group.com)  
[www.rampf-group.com](http://www.rampf-group.com)

### RAMPF Composite Solutions Inc.

5295 John Lucas Drive | Units 3-5 | Burlington, Ontario L7L 6A8 | Canada  
T +1 905 331 8042 | E [composite.solutions@rampf-group.com](mailto:composite.solutions@rampf-group.com)  
[www.rampf-group.com](http://www.rampf-group.com)