

# News Release

## Solid Concepts Announces Next-Generation Fire Retardant SLS Material Ideal for Commercial Aircraft Components

VALENCIA, CA – Solid Concepts Inc. has introduced an exceptional new SLS material to its' SLS materials offering.

NyTek 1100 FR is a new Selective Laser Sintering (SLS) material that meets FAR 25.853 Fire Retardant Certification requirements. The new polymer is a quantum leap in SLS materials technology for use in the production of aerospace parts without tooling. According to ASTM 638 testing, representative tensile specimens produced by the SLS process from this material average 38% elongation to break in X build orientations and 19% in Z build orientations. Tensile strength is 6,300 psi in X build orientations and 5,400 psi in Z build orientations. SLS processing has shown the capability to produce parts down to 0.030" thickness dimensions. The material has been tested for flame retardancy in accordance with FAR 25.853 which requires that the material passes a 60 second vertical burn test with considerable margins of safety. Extinguish times are less than 1 second with 15 seconds allowed and burn lengths are less than 4 inches with 6 inches allowed. Tests were performed by Delsen Laboratories of Glendale, California. The material has also passed the NBS Smoke and Toxicity testing per FAR 25.853 (a-1). The material is not listed as banned or being investigated in either the US or Europe.

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*Founded in 1991, Solid Concepts supplies rapid prototyping, direct digital manufacturing, tooling and injection molding services. Solid Concepts has grown steadily to a five-facility, multiple technology company known to be a solutions provider with project management and engineering expertise. Capabilities in PolyJet™ high precision 3D printing, Stereolithography (SLA) models and patterns, HDSL (High Definition Stereolithography), Selective Laser Sintering (SLS), Direct Digital Manufacturing, CNC models and patterns, and QuantumCast™ advanced urethane castings, allows for low-volume production of plastic, urethane, and metal components directly from design data, resulting in significant time and cost savings. Capabilities in tooling and injection molding make Solid Concepts a one-stop source to bring concepts from prototype to finished product ready for market. ISO 9001:2008 and AS9100 Rev. B certified.*

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