



SLS[®] - Thermoplastics and Composites

DuraForm™ PA

Material: Nylon 12 polyamide

Description: Rigid but flexible, durable, good detail and surface finish capabilities, natural color is white, mimics molded nylon, ABS, polypropylene and other plastics, usually 2-4 WD lead-time with standard finish

Applications: Functional prototypes, durable show models, end-use production parts, casting patterns, manufacturing fixtures, low-temp molds

DuraForm™ GF

Material: 33% glass-filled nylon 12 composite

Description: Rigid, impact resistant, durable, good detail and surface finish capabilities, natural color is light gray, mimics molded GF nylon, polycarbonate, Delrin and other thermoplastics, usually 2-4 WD lead-time with standard finish

Applications: Functional prototypes, durable show models, end-use production parts, manufacturing fixtures, low-temp molds

DuraForm™ EX

Material: Nylon

Description: Rigid but very flexible, very durable with good detail, mimics injection-molded ABS and polypropylene, usually 4-6 WD lead-time with standard finish

Applications: Functional prototypes, durable show models, end-use production parts, manufacturing fixtures

Fine Nylon/Fine Nylon FR

Material: Nylon 11 polyamide

Description: Rigid but very flexible, very durable with good detail, mimics flexible injection molded plastics, usually 4-6 WD lead-time with standard finish. Also available as a fire retardant material able to pass 60 second vertical burn testing

Applications: Functional prototypes, end-use production parts, manufacturing fixtures

SLS[®] - Thermoplastic Elastomer

SLS Flex

Material: Thermoplastic elastomer infiltrated with urethane

Description: Rubber-like, ~45A durometer, or ~70A durometer, highly flexible, moderate elasticity, detail, and surface finish capabilities, can be dyed different colors, usually 2-4 WD lead-time with standard finish.

Applications: Functional prototypes (seals, gaskets, hoses, boots, etc.), end-use production parts



SLS[®] - Metal

LaserForm™ A6

Material—60:40 A6 stainless steel/bronze

Description—Dense metal, good wear resistance and durability, good detail, good surface finishing capability, silver or bronze in color, usually 1 week lead-time with standard finish

Applications—Functional prototypes, end-use parts and injection mold inserts for non-cosmetic parts

SLS[®] - Investment Casting Patterns

CastForm™ PS

Material—Low-density Polystyrene infiltrated with low-temp wax

Description—Low-ash, organic, non-reactive, autoclavable, moderate detail and accuracy, capable of good surface finishing, 2-4 WD lead-time with standard finish

Applications—Substitute for molded wax patterns for investment casting

SLA[®] - Photopolymers

Somos 11122 WaterShed XC

Material—Photopolymer

Description—Rigid but flexible, moderately durable, excellent detail and surface finish capabilities, normally clear or frosted with slight blue hue, mimics molded ABS, nylon and other molded plastics, usually 2-4 WD lead-time with standard finish

Applications—Aesthetic show models, patterns for casting, functional prototypes, low-temp molds

Somos 18420 White

Material—Photopolymer

Description—Rigid but flexible, moderately durable, excellent detail and surface finish capabilities, natural color is opaque white, mimics molded ABS, nylon and other molded plastics, usually 2-4 WD lead-time with standard finish

Applications—Aesthetic show models, patterns for casting, functional prototypes, low-temp molds

Somos 9420 Flex White

Material—Photopolymer

Description—Rigid but flexible, moderately durable, excellent detail and surface finish capabilities, opaque white in color, mimics molded polypropylene, polyethylene and other similar molded plastics, 2-4 WD lead-time with standard finish

Applications—Aesthetic show models, patterns for casting, functional prototypes, low-temp molds



SLA[®] - Photopolymers Cont'd.

Accura[®] 25

Material—Photopolymer

Description—High flexibility with excellent shape retention, durable & functional, outstanding detail and surface finish capabilities, excellent combination of mechanical properties and aesthetics, white in color, mimics molded polypropylene, usually 2-4 WD lead-time with standard finish

Applications—Aesthetic show models, patterns for casting, functional prototypes, snap fit assemblies, simulate injection molded parts

Accura[®] 55

Material—Photopolymer

Description—Durable and functional with look and feel of molded ABS, shows good memory after flexing, outstanding detail and surface finish capabilities, white in color, usually 2-4 WD lead-time with standard finish

Applications—Aesthetic show models, patterns for casting, functional prototypes, snap fit assemblies

Accura[®] 60

Material—Photopolymer

Description—Rigid, mimics polycarbonate, excellent detail and surface finishing capabilities, normally frosted off-white in color but can be clear if requested, usually 2-4 WD lead time with standard finish

Applications—Aesthetic show models, patterns for casting—ideal for QuickCast patterns, functional prototypes

Somos DMX-SL 100

Material—Photopolymer

Description—Durable, flexible and functional with high impact resistance and toughness. Engineered to mimic ABS and Polypropylene. Excellent detail and surface finish capabilities, off-white in color

Applications—Aesthetic show models, light-duty functional prototypes

SLA[®] - High-Temp Photopolymers

Somos NanoTool

Material—Photopolymer Composite

Description—High-temperature tolerant, rigid and impact resistant, good detail and surface finish capabilities, natural color is opaque white, normally 3-5 WD lead-time with standard finish

Applications—Hi-temp prototypes, and aesthetic show models, low-temp molds, patterns for casting

Somos ProtoTool 20L

Material—Photopolymer Composite

Description—High-temperature tolerant, rigid and impact resistant, water and solvent resistant, moderately durable, good detail and surface finish capabilities, natural color is light gray, normally 3-5 WD lead-time with standard finish

Applications—Functional prototypes, high-temp and aesthetic show models, low-temp molds, patterns for casting



SLA® - Investment Casting Patterns

QuickCast (“Honeycomb”)

Material—Photopolymer

Description—Lightweight, honeycombed interior (hollow skeleton with a thin skin exterior), nice detail and surface finish capabilities, off-white or amber in color, 3-5 WD lead-time with standard finish

Applications—Investment casting patterns, light weight and low stress models

Cast Reproductions

Cast Urethanes

Material—Quickset urethanes

Description—Urethanes that mimic a wide variety of production materials, from soft rubber to rigid thermoplastics, with moderate durability, good detail and surface finish capabilities, broad spectrum of colors, some UV stable resins, lead-times normally range from 1 to 3 weeks

Applications—Aesthetic show models, functional prototypes, end-use production parts

Cast Metals

Material—A variety of ferrous and non-ferrous metal alloys

Description—Fully dense metal objects, formed in hand-pour and vacuum processes, standard and exotic metals, from small to large size, processes include: investment, plaster, sand and spin casting, lead-times normally range from 1-4 weeks

Applications—Functional prototypes, end-use production components, manufacturing fixtures and tooling

CNC Machined Plastics & Metals

Material—A variety of plastics and metals

Description—Durable thermoplastics, thermosets and metals, small and large objects, tight tolerancing, good detail and surface finish capabilities, variety of colors, 3-5 axis machining systems utilized, normal lead-times of 1-3 weeks for most parts

Applications—Functional prototypes, end-use production parts, low-volume manufacturing, manufacturing fixtures

3D Prints

Material—ABS, polycarbonate, polyphenylsulfone, acrylic photopolymer and wax

Description—3D objects ranging in mechanical properties, detail and surface finishing capabilities and coloration from molten material that is deposited layer-upon-layer by inkjet or extrusion nozzle processes such as FDM, MJM, Object, Thermojet and SolidScape

Applications—Concept models, functional prototypes, casting patterns