

# STRATASYS Dimension SST1200es



## Dimension SST 1200es

Brugervenlig 3D printer til produktion af avancerede og stærke emner som f.eks. funktionelle prototyper, arkitekturmodeller, opspændings fixturer og hjælpeværktøjer.

**Teknologi:** FDM (Fused Deposition Modeling)

**Byggechamber:** 254 x 254 x 305 mm.

**Lagtykkelse:** 0,254 mm. og 0,330 mm.

**Mindste godstykkelse:** 1,27 mm.

**Tolerance:** op til 50 mm:                      Pr. efterfølgende 50 mm:

$X / Y = +/- 0,15$

$X / Y = +/- 0,3\%$

$Z = + 0,2$  mm.

**Modelmateriale:** ABSplus™

**Standard farver:**

Hvid     Sort     Grå     Rød     orange

**Farver mod tillæg:**

Ivory     Blå     Olivengrøn     Gul

**Supportmateriale:** SST Soluble Support Technology

( Maskinen kan KUN bygge i ABS, dog i 9 forskellige farver )

**Fordele:**

- ABS-materiale - som ABS-termoplast, der bruges til sprøjttestøbning.
- Billige modeller (afhængigt af antal, sammenlignet med SLS)
- Hurtigere end SLA og SLS

**Ulemper:**

- "grov" overflade på bund og top.

## Div. egenskaber:

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
		XZ AXIS	XZ AXIS
<a href="#">Tensile Strength, Ultimate (Type 1, 0.125", 0.2"/min)</a>	ASTM D638	4,700 psi	33 MPa
<a href="#">Tensile Strength, Yield (Type 1, 0.125", 0.2"/min)</a>	ASTM D638	4,550 psi	31 MPa
<a href="#">Tensile Modulus (Type 1, 0.125", 0.2"/min)</a>	ASTM D638	320,000 psi	2,200 MPa
<a href="#">Tensile Elongation at Break (Type 1, 0.125", 0.2"/min)</a>	ASTM D638	6%	6%
<a href="#">Tensile Elongation at Yield (Type 1, 0.125", 0.2"/min)</a>	ASTM D638	2%	2%
<a href="#">IZOD Impact, notched (Method A, 23°C)</a>	ASTM D256	2.0 ft-lb/in	106 J/m

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH		METRIC	
		XZ AXIS	ZX AXIS	XZ AXIS	ZX AXIS
<a href="#">Flexural Strength (Method 1, 0.05"/min)</a>	ASTM D790	8,450 psi	5,050 psi	58 MPa	35 MPa
<a href="#">Flexural Modulus (Method 1, 0.05"/min)</a>	ASTM D790	300,000 psi	240,000 psi	2,100 MPa	1,650 MPa
<a href="#">Flexural Strain at Break (Method 1, 0.05"/min)</a>	ASTM D790	4%	4%	2%	2%

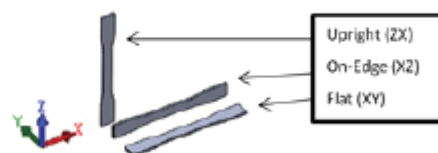
THERMAL PROPERTIES <sup>2</sup>	TEST METHOD	ENGLISH	METRIC
<a href="#">Heat Deflection (HDT) @ 66 psi</a>	ASTM D648	204°F	96°C
<a href="#">Heat Deflection (HDT) @ 264 psi</a>	ASTM D648	180°F	82°C
<a href="#">Glass Transition Temperature (T<sub>g</sub>)</a>	DSC (SSYS)	226°F	108°C
<a href="#">Melting Point</a>	-----	Not Applicable <sup>3</sup>	Not Applicable <sup>3</sup>
<a href="#">Coefficient of Thermal Expansion</a>	ASTM E831	4.90x10 <sup>-6</sup> in/in/°F	8.82x10 <sup>-6</sup> mm/mm/°C

Orientation: See *Stratasys Testing white paper* for more detailed description of build orientations.

XZ = X or "on edge"

XY = Y or "flat"

ZX = or "upright"



ELECTRICAL PROPERTIES <sup>4</sup>	TEST METHOD	VALUE RANGE
<a href="#">Volume Resistivity</a>	ASTM D257	2.6x10 <sup>15</sup> - 5.0x10 <sup>16</sup> ohm-cm
<a href="#">Dielectric Constant</a>	ASTM D150-98	2.3 - 2.85
<a href="#">Dissipation Factor</a>	ASTM D150-98	0.0046 - 0.0053
<a href="#">Dielectric Strength</a>	ASTM D149-09, Method A, XZ Orientation	130 V/mil
<a href="#">Dielectric Strength</a>	ASTM D149-09, Method A, ZX Orientation	290 V/mil

OTHER <sup>2</sup>	TEST METHOD	VALUE
<a href="#">Specific Gravity</a>	ASTM D792	1.04
<a href="#">Flame Classification</a>	UL94	HB (0.09", 2.50mm)
<a href="#">UL File Number</a>	-----	E345258
<a href="#">Rockwell Hardness</a>	ASTM D785	109.5