SiMT
TECHNOLOGY TO GROW YOUR BUSINESS

SOUTHEASTERN INSTITUTE of MANUFACTURING and TECHNOLOGY

ADDITIVE MANUFACTURING CENTER

The SiMT provides world class services to businesses, organizations, educational institutions, entrepreneurs, inventors, and governmental entities. Our additive manufacturing capabilities include the ability to build with an array of materials: durable plastic and metal parts and prototypes suitable for real-world testing. Our additive technologies offer a new set of solutions to swiftly improve conventional manufacturing, prototyping, and product development.

FARSOON 403P

SLS printer with the ability to handle medium-sized projects, utilizing a wide range of nylon powders.

Build Area: 14.76"x 14.76" x 16.9"

FARSOON EFORM

Designed to have the functionality and power of an industrial additive manufacturing (AM) machine.

Build Area: 8.6" x 8.6" x 12.6"

STRATASYS CONNEX 500

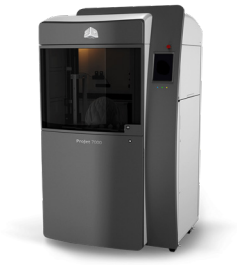
Ability to build a fully assembled part with multiple materials at the same time, combining both rubber and rigid polymers.

Build Area: 19.7" x 15.7" x 7.9"

3D SYSTEMS iPRO 9000

Delivers superior part accuracy and surface quality achievable only with stereolithography (SLA) additive manufacturing technology.

Build Area: 25" x 29" x 21"



3D SYSTEMS PROJET 7000HD

Delivers part accuracy and surface quality superior to our larger SLA machines.

Build Area: 15" x 15" x 10"

3D SYSTEMS ProX 800

Delivers part accuracy and surface quality equal to the iPro 9000, with a more advanced material.

Build Area: 25" x 29" x 21"

EOS M290

Create sintered parts from a wide range of metals.

Build Area: 9.8" x 9.8" x 11.8"

STRATASYS FORTUS 900MC

Quickly build strong, accurate tools and prototypes using real world thermoplastics.

Build Area: 36" x 24" x 36"

866-304-SIMT (7468) | Quotes@simt.com | SIMT.sc.gov

ADDITIVE MANUFACTURING EQUIPMENT AND MATERIALS

EOS M290 (DMLS)

Material	Appearance	Tensile Strength	Elongation at Break (%)	Hardness
EOS StainlessSteel 316L	Metallic	540-640 MPa	40-50%	85 HRB
EOS Aluminum AlSi10Mg	Metallic	440-480 MPa	7-11%	114-124 HBW

Stratasys Connex 500

Materials (Rigid)	Appearance	Tensile Strength	Elongation at Break	Heat Deflection	Water Absorption %
VeroWhite Plus	White	7,250-9,450 PSI	15-25%	113-122 F	1.1-1.5%
VeroBlack Plus	Black	7,250-9,450 PSI	15-25%	113-122 F	1.1-1.5%
Vero Blue	Blue	7,250-8,700 PSI	15-25%	113-122 F	1.5-2.2%
Vero Gray	Gray	7,250-9,450 PSI	15-25%	113-122 F	1.1-1.5%
Rigur	White	5,800-6,500 PSI	20-35%	120-129 F	
VeroClear	Clear	7,250-9,450 PSI	10-25%	113-122 F	1.1-1.5%
RGD 525	Ivory	10,000-11,500 PSI	10-15%	167-176 F	1.2-1.4 %
ABS-Like	Green/Beige	8,000-8,700 PSI	25-40%	198-203 F	Not for Water
Med610 (FDA Approved)	Clear				

Materials (Rubber-like)	Appearance	Tensile Strength	Elongation at Break	Shore Hardness	Special Notes
Tango Plus	Yellow-Clear	115-220 PSI	170-220%	26-28 Shore A	
Tango Black Plus	Black	115-220 PSI	170-220%	26-28 Shore A	*Combining these materials with a rigid plastic can yield multiple Shore A Values*
Tango Black	Black	115-350 PSI	45-55%	60-62 Shore A	
Tango Gray	Grey	435-725 PSI	45-55%	73-77 Shore A	

3D Systems iPro 9000 (SLA)

Material	Appearance	Tensile Strength	Elongation at Break (%)	Heat Deflection	Hardness
Accura 25	Beige	5,540-5,570 PSI	13-20%	136-145 F	80 Shore D

3D Systems ProX 800 (SLA)

Material	Appearance	Tensile Strength	Elongation at Break (%)	Heat Deflection	Hardness
Accura Xtreme	Grey	2,450-2,900 PSI	25-30%	97-100 F	70-74 Shore D

3D Systems Projet 7000HD

Material	Appearance	Tensile Strength	Elongation at Break (%)	Heat Deflection	Hardness
Accura ABS Black	Black	6,525-6,815 PSI	6-13%	124 F	86 Shore D

Farsoon 403P (SLS)

Material	Appearance	Tensile Strength	Elongation at Break (%)	Heat Deflection
FS3300PA	White	6,671 PSI	36%	295 F

Farsoon Eform (SLS)

Material	Appearance	Tensile Strength	Elongation at Break (%)	Heat Deflection
FS3401GB	Gray	6,381 PSI	9.3%	306 F

Stratasys Fortus 900MC (FDM)

Material	Appearance	Tensile Strength	Elongation at Break	Heat Deflection	Hardness
ABS	Ivory-Black	5,200 PSI	4%	204 F	R 109.5
Polycarbonate	White	9,800 PSI	5%	280 F	R 115
PC-ABS	Black	5,900 PSI	6%	230 F	R 110
Nylon 12	Black	7,000 PSI	30%	206.6 F	
PPSF	Tan	8,000 PSI	3%	372 F	M86
Ultem 9085	Tan	10,400 PSI	6%	307 F	