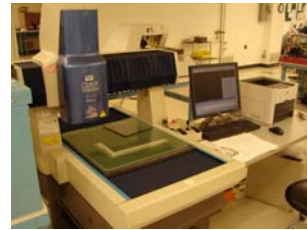


Anaren Space & Defense Unit
Thick film equipment list -- Salem NH facility



Housed within our 65,000 sq. ft. ceramics-focused R&D and manufacturing facility located in Salem, New Hampshire -- Anaren offers complete etched thick film services to customers requiring either build-to-print or turnkey "design-through-delivery" support. The facility is, in turn, supported by Anaren's worldwide resources – which include 800+ employees worldwide (20% of which are degreed engineers), 160,000 sq. ft. headquarters manufacturing facility, 76,000 sq. ft. plant in Suzhou, China, and five worldwide sales offices.



Thick film infrastructure located at Salem, NH facility:

<i>Process</i>	<i>Equipment</i>	<i>Model</i>
Ceramic machining	Ceramic laser	EDI Slow Flow CO2 Laser EDI Diamond Laser
Ceramic annealing	Annealing oven	Nabertherm LH 60/13 Deltech DT-2S-TH-101010-C
Paste viscosity	Viscometer	Brookfield DV-II+
	Temp bath	Brookfield TC-501
Paste mixing	Paste mixer	Thinky AR-500

Screen exposing	Screen imager	NuArc MSP 2125
Hole filling	Hole-fill equipment	Pacific Trinetics VF1000
Screen printing	Screen printer	AMI 9156 CWP MC212
Paste drying	Oven	Blue M SPX
	Belt dryer	AMI MCD-2400
Firing	Furnace	BTU TFF252 BTU TFF142 BTU TFF91
Furnace profiler	Furnace profiling equipment	Datapaq 9000 Data Logger
Paste height measurement	Laser height measurement	Cyberscan Vantage
Mechanical measurement	CMM	MicroVu Excel 4220 Mitutoyo Quick Vision Marlin
Continuity testing	Net tester	Seica S22MT
Resistor trimming	Laser trimmer	GSI Lumonics W670 GSI LT2100
Singulation	Dicing saw	ADT 7100
	Wafer taping	USI UH114-8
	UV tape release	USI UH102-8 V-Tek TM-6000
Plating	Electro plating equipment	Technic SBE Plating System
Plating analysis	X-Ray fluorescence	Fischerscope XM-1500 X-Ray Coating Thickness
Mechanical analysis	X-Ray	Nicolet NXR-1400
	Wirebond analysis	Mechel 827 Gold wire bonder Unitek MicroPull III Wire Bond Pull Station
	Die shear	Keller Tech BondTest 30 Die Shear Station
	Cross-sectioning	Leco GPX200 Sample Grinding Wheel Leco VC-50 Sample Saw Leica DML High Power Microscope w/ computer interface
Environmental testing	Temperature cycling	Espec TSE-11 Temperature Cycling System
	Hermeticity tester	Leybold L200 Hermeticity Tester
Soldering	Vacuum solder	SST MV 2200 Vessel Soldering System
	Reflow solder	Novastar Tech 1800HT Reflow Oven
Cleaning	Vapor cleaning	Branson SPC-B450 Ultrasonic Cleaning System
Packaging	Tape & reel	V-Tek TM-8000

For a plant tour or project review, contact one of our Space & Defense Unit business development specialists at 315.432.8909 (toll-free: 800.544.2414).

