

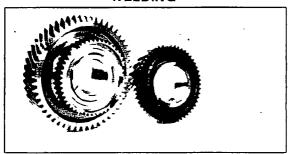


RELIABILITY

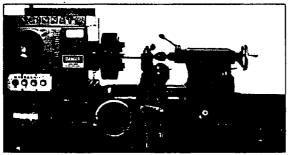


SPECIALTY PROCESSING

ELECTRON BEAM WELDING



SPECIAL MACHINING



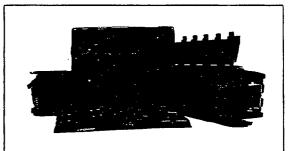
LIGHT MACHINING & ASSEMBLY



VACUUM IMPREGNATION



PLASTIC DUNNAGE WASHING



HAND DEBURR





ELECTRON BEAM WELDING

- HAMILTON STANDARD MODEL EBW 626264 7.5 KW OUTPUT 150 KV 50 MILLIAMPS CHAMBER 5' HIGH × 5' DEEP × 8' LONG
- EXTREMELY LOW HEAT DISTORTION
- NO CONTAMINATION OR OXIDATION SINCE WELDING IS CARRIED OUT IN A HARD VACUUM
- ABILITY TO JOIN METALS VARYING IN THICKNESS FROM THOUSANDTHS OF AN INCH TO THREE INCHES
- ABILITY TO WELD MANY DISSIMILAR METAL COMBINATIONS RANGING FROM 1% CARBON STEELS TO MANY NONFERROUS MATERIALS

SPECIAL MACHINING

- MACHINING FACILITIES INCLUDE LATHES, MILLS, SURFACE GRINDING AND DRILLING EQUIPMENT (SEE FACILITIES LIST)
- WE SPECIALIZE IN LOW VOLUME WITH TOLERANCES TO .0002"
- COMPLETE QUALITY AND INSPECTION CAPABILITIES (SEE FACILITIES LIST)
- ALL TYPES OF METALS AND MATERIALS
- CERTIFIED U.S. GOVERNMENT/MILITARY SUBCONTRACTOR

LIGHT MACHINING & ASSEMBLY

. . . .

- WE CAN MACHINE AND ASSEMBLE PER YOUR SPECIFICATION
- LARGE AND SMALL QUANTITIES
- COMPLETELY FLEXIBLE PROCESSING

OFFERS THE FOLLOWING SPECIALTY PROCESSING SERVICES:

VACUUM IMPREGNATION

- CERTIFIED USER OF LOCTITE CORPORATION ANAEROBIC RESIN PRODUCTS
- SEALS POROSITY IN ALL TYPES OF METAL CASTINGS AS WELL AS POWDERED METAL
- ABILITY TO IMPREGNATE CASTINGS BEFORE OR AFTER MACHINING
- LARGE AND SMALL BATCH SIZES
- PART SIZE FROM A FRACTION OF A CUBIC INCH UP TO A MAXIMUM OF 2.4 CUBIC FEET
- ALSO SEALS ELECTRICAL AND ELECTRONIC COMPONENTS, WELDMENTS, FIBERGLASS, COMPOSITES AND CERAMICS

PLASTIC DUNNAGE WASHING

- WE SPECIALIZE IN WASHING ALL TYPES AND SIZES OF PLASTIC TRAYS, TOTES, SKIDS AND DIVIDERS
- HIGH PRESSURE/TEMPERATURE WASH (1500 PSI/500 DEGREES)
- HIGH PRESSURE RINSE AND AIR BLOWOFF WITH BATCH DRYING
- SYSTEM IS COMPLETELY FLEXIBLE TO MEET YOUR QUALITY AND QUANTITY REQUIREMENTS

HAND DEBURR

- WE SPECIALIZE IN ALL TYPES AND SIZES OF CASTINGS AND FORGINGS
- NO JOB IS TOO BIG OR TOO SMALL
- LARGE AND SMALL QUANTITIES



PLASTIC DUNNAGE WASHING

SHEGALTY PROGESSING

Over the last few years, many large manufacturing companies have switched from using cardboard dunnage to plastic dunnage for cost and environmental reasons. The costs of cardboard and landfill disposal have risen dramatically. Permanent plastic dunnage has been industry's answer to these increased costs. Molded plastic trays and totes made of high impact, temperature resistent plastics have proven to be nearly indestructable in normal plant use. The longlasting capability of the plastic has led to significant cost reductions in the non-value added function of material handling. In the future, more and more companies will implement plastic dunnage programs as they try to control costs and compete in the world marketplace.

A major characteristic of plastic dunnage often overlooked by material handling planners is that the plastic becomes contamininated with oils, chips and plain dirt after repeated plant use. Do your customers often comment that the quality of your product is excellent but then complain that the parts arrived contaminated from oil or grease from your dunnage? How about in-process dunnage? Would you want your customer to see his or her product being transported through your process on contaminated trays? At best, contaminated dunnage may be costing you money for extra cleaning steps or rework. At worst, you may lose an existing or potential customer because of contamination.

ANIONICS has the answer to your contamination problem. We offer a complete Plastic Dunnage Washing service featuring a high volume but flexible washing system designed to meet your toughest cleaning problems. Listed below are some of the advantages we offer.

- Cost Effective. The highly automated system gives us a cost advantage over other more labor intensive washing processes. We pass this savings along to you in the form of low unit costs.
- Quality. The automated fast rack washing machine provides for a consistent wash every time. Parameters are monitored to ensure that the wash process is in control.
- Flexibility. The controls are variable. We can design and implement a washing program to meet your specific needs.
- Service. We provide rapid turnaround times so your dunnage inventory is clean and in constant use, not sitting in a warehouse waiting for wash.

Let ANIONICS help you satisfy your final or in-plant customers with clean plastic indunnage washed by our automated process. Give us a call today at (315) 736-0891.



VACUUM **IMPREGNATION**

LIEGHLIV PROCESSING

Vacuum Impregnation is a process used to seal porosity in many materials and products ranging from aluminum die castings to powder metal and electrical components. The sealant we use in the process is an anaerobic resin developed and manufactured by Loctite Corporation. In the vacuum impregnation process, porous parts are placed inside a vacuum chamber containing the anaerobic resin. As air is pumped from the chamber, the resin is drawn into the porosity in the parts. The anaerobic characteristic causes the resin to cure at room temperature in the absence of air. Some of the major advantages of Vacuum Impregnation using Loctite anaerobic resin are:

- The cured resin resists all types of solvents.
- Capability of operating at temperatures up to 400 degrees Fahrenheit.
- No bleedout of resin since cure is anaerobic rather than heat activated.
- Parts can be impregnated before or after machining or finishing operations.
- Cured sealant is compatible with surface treatments such as plating or painting.
- Sealing of porosity extends tool life in machining operations.
- Cost effective Saves money since scrap costs are significantly reduced.

Listed below are some of the applications where Vacuum Impregnation using Loctite anaerobic resin has proven beneficial to industry:

- Die Castings (Aluminum, Magnesium, Zinc) Plastics & Ceramics
- Forgings, Sand Castings Electrical Parts (Housings, Stators)
- Powder Metal Electronic Components (Coils, PCB's)

ANIONICS has been an authorized Loctite user for nearly 20 years. We offer quality Vacuum Impregnation service at a very competitive cost with rapid turnaround times. Contact us today at (315) 736-0891. Let us help you develop and implement cost-effective solutions to your sealing problems.





SUCCESSFULLY COMPLETED PROJECTS

Steam Turbine Diaphragm

Material:	410 Stainless Steel to Carbon Steel, 347 Stainless Steel
Size:	18" To 61" Diameter
Weight:	Up to 1200 Pounds
Penetration:	1/4" Up to 2"
inspection:	Radiographic, Ultrasonic, Visual

Nuclear Warhead Casings.

Material:	Titanium 6AL4V
Size:	19" Diameter X 24" Long
Penetration:	1/3" and 5/8"
Inspection:	Radiographic

Superconducting Motors & Generator Assemblies

Materiai:	Tri-metal - Copper, Nickel, Steel
Size:	12" to 36" Diameter
Penetration:	1/8" to 7/8"
inspection:	Ultrasonic, Visual

Diaphragm Coupling Assemblies

Materiai:	4140
Size:	6" to 40"
Penetration:	1/4" to 1"
inspection:	Radiographic, Ultrasonic, Visual

Vibration & Fatigue Test Fixture For Space Environment Testing

Material:	5061 Aluminum
Size:	Envelope 20" X 36"
Penetration:	1/2", 1" and 2"
inspection:	Visual





SUCCESSFULLY COMPLETED PROJECTS

Automotive Transmission Gears

Material: Size: Penetration: Inspection:

Steel 7 1/2" Diameter 1/4" Up to 3/8" Radiographic, Ultrasonic, Visual

Lever Arm Assemblies

Material:	4140 Cast
Size:	1" Diameter
Penetration:	.050" to .070"
Inspection:	Visual

Leaf Contact Assemblies

Material:	Bi-Metal, Copper, Nickel
Size:	6" W X 2" D X 3' L
Penetration:	.880"
Inspection:	Visual, Continuity Test

Contact Plates

Material:	Bi-Metal, Copper, Nickel	
Size:	8" W X 3" D X 24" Long	•
Penetration:	1"	
Inspection:	Visual	

T.........

Steel Drive Shafts

Material:	Steel
Size:	1 1/2" Diameter
Penetration:	.050"
Inspection:	Visual

- 13 Mar 18 M

2

÷.,





Electron Beam Welding is used to join metals varying in thickness from a few thousandths of an inch to three inches, to weld many dissimilar metal combinations and to join normally unweldable metals ranging from 1% carbon steels to many non-ferrous materials. Welding is carried out under a hard vacuum so that no contamination of the welded material or oxidation of the part occurs. This advantage coupled with the high welding speed and precise control of heat input results in weld joints generally as strong as the base material. Distortion during welding is minimal so that the weld may often be used to assemble a finished product without subsequent machining. Listed below are some of the many different metals joined by Electron Beam Welding:

Aluminum Alloy Beryllium Carbon Steel Columbium Copper Gold Hasterioy Haynes Stellite Incoloy Inconel Invar Kavar Low Carbon Steel Magnesium Molybdenum Monel Nickel Silver Stainless Steel Titanium Titanium Alloy Tool Steel Tungsten Zirconium

Our large vacuum chamber (5' High X 5' Deep X 8' Long) can handle a wide array of part sizes and weights. Our Hamilton Standard EB Welder uses 7.5 KW and is capable of penetrating up to three inches deep. The following fixtures are available to position parts for welding:

Rotary Fixture:

This variable speed fixture is used for welds in either the vertical or horizontal planes. It can be adjusted for welds up to 30 degrees.

12 Position Rotary Fixture: This twelve spindle fixture has the capability for welds in the vertical and horizontal planes, for angular adjustments and each position can be indexed. Speed is variable.

Regular Table: This variable speed fixture consists of a 30 inch square table for linear welds. The other fixures are mounted on this basic table. Table movement is externally controlled.

We have the capability to custom design and build fixtures and adaptors for your specific application. Whether your application is for Research and Development, Prototypes or Production, we at **Anionics** are ready to satisfy your welding needs. Please give us a call today at (315) 736-0891.

BARBER - PRESALE R 0118966 R2519954

QUALITY

.•

SERVICE

RELIABILITY ·

INSPECTION EQUIPMENT

- 18" X 24" GRANITE SURFACE PLATE FEDERAL GGG-P-463, GRADE A
- FOWLER 12" HEIGHT TRANSFER MICROMETER
- VERNIERS AND MICROMETERS: HEIGHT GAGE, HELIOS 20.5" HEIGHT GAGE, B & S 12" DIAL INDICATOR, FEDERAL .0001 DIAL INDICATOR, FOWLER .0001 DIAL INDICATOR, B & S .0001 DIAL INDICATOR, FOWLER .0005 DIAL MICROMETER, MITUTOYO.0001 1" MICROMETER, MITUTOYO .0001 1" MICROMETER, FOWLER .0001 2" MICROMETER, FOWLER .0001 3" - 4" MICROMETER, LUFKIN .0001 4" - 5" MICROMETER, B & S .001 5" - 6" MICROMETER, B & S .001 12 HEIGHT MICROMETER, FOWLER 6" DIAL CALIPER, STARRETT .001 6" CALIPER, CRAFTSMAN .001 13" CALIPER, HELIOS .001 1" DIAL DEPTH GAGE, STARRETT ,001 TELESCOPING GAGE, STARRETT 5/16" - 6"
- SURFACE PLATE, GRANETETT 18" X 24"

.....

- GAGE BLOCKS, HULTGREN .10025 " 4" (84 PCS)
- GAGE BLOCKS, HULTGREN .010" .090" (28 PCS)
- V-BLOCKS, FOWLER 90 X 70 X 125

LABORATORY EQUIPMENT

- OHAUS BALANCE
- LABORATORY OVEN, GAB-HEET
- CONSTANT TEMPERATURE BATH

BUILDING

- 5000 SQ. FT PROCESSING AREA
- 700 SQ. FT. ENGINEERING/QUALITY AREA
- 700 SQ. FT. ADMINISTRATION AREA



SPECIALITY PROCESSING

ONEIDA COUNTY INDUSTRIAL PARK P.O. BOX V ORISKANY, N.Y. 13424 PHONE (315) 736-0891



SERVICE

RELIABILITY



SPECIALTY PROCESSING

FACILITIES LIST

ELECTRON BEAM WELDING

HAMILTON STANDARD 7.5 KW WORK CHAMBER 5' HIGH X 5' DEEP X 8' LONG, MODEL 625264

SPECIAL MACHINING

- 18" CINCINNATI LATHE
- 13" SHELDON LATHE
- HARDINGE CHUCKER
 MODEL HC
- KONDIA VERTICAL MILLS
 (2) MACHINES
- KEMP SMITH HAND MILLS
- 6" X 18" SURFACE GRINDER
- BURGMASTER DRILLING EQUIPMENT MODEL 0B
- DOALL 14" BAND SAW
- PEERLESS POWER HACKSAW

VACUUM IMPREGNATION

- LOCTITE VACUUM IMPREGNATION SYSTEM, MODEL 2412
- LOCTITE VACUUM IMPREGNATION SYSTEM, MODEL 3618V
- LOCTITE VACUUM IMPREGNATION SYSTEM, MODEL 3830V

PLASTIC DUNNAGE WASHINING

- CUSTOM DESIGNED TRAY WASHER CAN HANDLE TRAYS TO 21" X 26"
- CUSTOM DESIGNED TOTE, TUB AND LARGE TRAY WASHER CAN HANDLE UNITS TO 54" X 86"
- CUSTOM DESIGNED DRYING FACILITY -
- FURY II PRESSURE WASHER, 1200 PSI 250 DEGREES FAHRENHEIT



SPECIALTY PROCESSING

WE ARE PLEASED TO ANNOUNCE THAT WE NOW HAVE FULL FAX CAPABILITY AT OUR MAIN OFFICE AND PLANT IN ORISKANY, N.Y. THE NUMBER IS:

FAX (315) 736-1804

THIS MACHINE IS CAPABLE OF RECEIVING 24 HOURS A DAY. PLEASE FEEL FREE TO USE THIS ADDITIONAL SERVICE PROVIDED BY **ANIONICS, INC.**

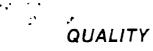
> ONEIDA COUNTY INDUSTRIAL PARK 300 HANGAR ROAD ORISKANY, N.Y. 13424 (315) 736-0891

AT ANIONICS COMPLETE CUSTOMER

SATISFACTION IS OUR GOAL. OUR WORKING MANAGEMENT IS CONSTANTLY STRIVING TO SATISFY YOUR SPECIALTY PROCESSING NEEDS. WE STRESS CONTINUOUS IMPROVEMENT IN ALL FACETS OF OUR BUSINESS. LET OUR PROCESSING TEAM PROVIDE YOU WITH:

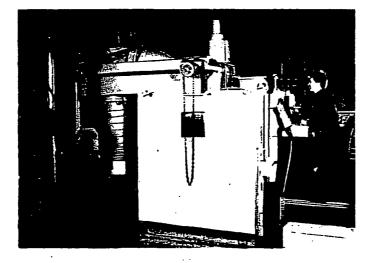
- TOTAL QUALITY: PROCESS CONTROL PLANS DESIGNED TO MEET YOUR SPECIFIC APPLICATION
- SERVICE: WE WORK WITH YOU TO DEVELOP AND IMPLEMENT SOLUTIONS TO YOUR PROCESSING PROBLEMS
- RELIABILITY: RAPID TURNAROUND TIMES TO MEET YOUR DELIVERY REQUIREMENTS
- COMPETITIVE COST





SERVICE

RELIABILITY







SPIECIAL TY PROCESSING

ONEIDA COUNTY INDUSTRIAL PARK P.O. BOX V ORISKANY, NY 13424 PHONE (315) 736-0891

