



# ATLAS FIBRE COMPANY

Quality and Precision in Plastics



*Solutions for Global Industries*

Distributed by:  Polymershapes

# 1

# The world's largest inventory of phenolic, melamine and glass epoxy

## ☐ RODS

### WE MANUFACTURE IT

Atlas Fibre began operation in 1957. Since then, we've become the world's largest manufacturer of turned and precision ground rod— BECAUSE WE LISTENED, LEARNED AND RESPONDED.

We listened to industry's need for impeccable quality and urgent timing. We learned how to get the most out of our equipment and our people. And we responded to innovations, keeping our engineering current with the latest technological and industry advances.

### WE STOCK IT

No manufacturer of phenolic rods in the world has an inventory to compare with Atlas Fibre. We also carry a substantial stock of sheets in an almost endless variety of sizes and materials.

We've grown because our customers know that WE HAVE WHAT THEY WANT WHEN THEY WANT IT!

## ☐ RODS

1/32" to 6" diameter  
Lengths up to 6'

## ☐ SHEETS

.004" through 6" thick  
Sizes up to 48" x 120"

## ☐ TUBES

A huge variety of inside and outside diameters  
custom made to your specifications.

## ☐ SHEETS

## ☐ TUBES



### WE FABRICATE IT

We wanted to answer all your needs, so we developed the know-how—and installed the equipment—for custom machining, grinding, shearing, sanding and sawing.

This expansion encouraged an interrelationship based on pride: each department works together within a network of quality standards and controls.

The results: we guarantee unequalled accuracy in the precision manufacture of custom parts made from any of our materials.

# 2

## We ship stock orders in 24 hours!!



We ship your order before the competition has a chance to read their email or faxes... they may take days...we ship stock orders in 24 hours. Every time! Our large inventory is only part of the reason.

Our sales engineers are all experienced thermoset plastic experts. Over the years they've gained a thorough knowledge of the specific manufacturing needs of the consumer and defense industries.

We're proud of their record- they'll match your needs to our capabilities; they'll anticipate problems and suggest alternatives which often prove more economical.

Their expertise will save you time and money. Their courtesy and efficiency will save you frustration.

Additionally they have the support of a highly efficient computerized tracking system. They'll always have up-to-the-minute information on stock availability because every update is immediately entered into our comprehensive database.

**And accurate competitive cut-to-size prices can be quoted on the spot, saving you time and money.**



# 3

## Custom fabricated sizes shipped within 48 hours— AND THAT'S TOUGH TO BEAT!



Our new 4' x 10' CNC router gives us greater capability to produce your complex flat work quickly.

That's the service our customers have learned to expect. And we go to great lengths to make sure it happens...every time.



# 4

## We're tough on quality.

**WE ARE CERTIFIED DOCK-TO-STOCK SUPPLIERS FOR SOME OF AMERICA'S LARGEST MANUFACTURING CORPORATIONS.**

Quality Control begins with the purchase of raw materials, and our suppliers know we're tough.

We set the toughest specifications... we reject any raw material that doesn't measure up.

Each shipment we receive is subjected to the scrutiny of our professional inspection staff. Only the very finest raw materials meet their criteria.

It comes naturally to us—our affiliate, Standard Grinding and Manufacturing Co., supplies the most critical requirements of the aerospace and defense industry. This has forced us to reach for—and to demand—**QUALITY WITHOUT COMPROMISE.**



# 5

## We won't bend on precision.

**WE GUARANTEE TOLERANCES OF  $\pm .001$ " AND THAT'S TOUGH TO BEAT!**

Our standard tolerances are far closer than NEMA, Federal or Military Specifications.

Our customers often ask why we do more than is necessary—why we insist on holding the closest tolerances in the industry.

We believe in creating standards, not conforming to them. We're on top of technological advances which affect the manufacturing, defense and aerospace industries. We're equipped with the finest state-of-the-art equipment. We don't just keep pace with the industry, **WE SET THE PACE.**



# 6

## We're unbeatable on value, and we'll show you why!



Modern manufacturing methods and controls virtually eliminate mistakes; costly re-runs are a thing of the past.

Computerized equipment means faster, more efficient manufacturing and fabrication. Each job is entered into our computerized control system and tracked through every phase of production. And behind the modern computers and microchip controls is our real story: the old-fashioned dedication of highly skilled craftsmen, challenged and encouraged to reach beyond their limits.

**Finally, there's the economic law of the marketplace: we're the largest manufacturer, and that means that we buy our raw material in the greatest quantities. Larger quantities mean lower prices: the savings go to you.**





# We have what it takes to meet your every requirement... INCLUDING THE NEWEST ENGINEERING THERMOPLASTICS

## WE'VE GOT THE SELECTION.

Atlas Fibre can recommend and supply the products best suited to your specific application. The following is only a partial listing of our abundant stock of materials.

### THERMOSET PLASTIC MATERIALS

All Atlas Fibre thermoset materials are uniformly dense, solid materials which are produced by the application of heat and pressure to layers of paper, cotton or glass fabric impregnated with a synthetic resin.

These materials are extremely versatile because of their unusual combination of properties. All grades are light in weight (about half the weight of aluminum), dense, structurally strong, resistant to moisture, and none will soften appreciably under the reapplication of heat.

No one grade can possess all the properties desirable for all applications, therefore we manufacture and stock a number of grades so that the proper material may be selected for almost any application.

### GRADE XXX—PAPER PHENOLIC

A paper base phenolic laminate with good mechanical properties, high dielectric strength, and good resistance to moisture. Grade XXX is our most economically priced grade and is recommended for most mechanical applications, for use at radio frequencies, and in high humidity situations. Typical applications include insulating washers, sleeves, switch bases and panelboards. Specification: MIL-1-24768/10, Type PBE

### GRADE CE—CANVAS PHENOLIC

A course weave cotton fabric base phenolic laminate with greater mechanical strength than Grade XXX. Grade CE is strong, tough, and has high impact strength. It machines readily, and is excellent for a variety of mechanical applications such as gears, pulleys, sheaves, insulators, bushings, washers, and rollers. Specification: MIL-1-24768/14, Type FBG

### GRADE LE—LINEN PHENOLIC

A fine weave cotton fabric base phenolic laminate which provides a finer surface texture and better machinability than Grade CE. Grade LE is low in moisture pick-up and dissipation factor, and is excellent

in all electrical properties. It can be machined easily and cleanly to very close tolerances, and is recommended for use where there is need for good mechanical properties combined with excellent electrical characteristics. Applications for Grade LE include intricate machined parts, radio components, fine gears and pinions, spacers, bushings and rollers. Specification: MIL-1-24768/13, Type FBE

### GRADE G-9—GLASS MELAMINE

A continuous woven glass fabric laminated with a melamine resin. Grade G-9 has good mechanical properties plus high resistance to flame, heat, arcing, and most strong alkali solutions. It is recommended for use where good mechanical properties are needed under wet conditions. Grade G-9 is used for switchboard panels, arc barriers, structural electrical parts, specialty terminal blocks and circuit breaker components. Specification: MIL-1-24768/1, Type GME

### GRADE G-10 FR4—GLASS EPOXY

A continuous woven glass fabric laminated with an epoxy resin. This grade is extremely high in mechanical strength, has low water absorption and dissipation factors and has superior electrical characteristics, which are exhibited over a wide range of temperatures and humidities. Grade G-10 is used for terminal boards, washers, sleeves, structural components, and parts where the strength to size ratio is critical. Specification: MIL-1-24768/27, Type GEE-F

### GRADE G-11—HIGH TEMPERATURE GLASS EPOXY

A grade similar in composition and properties to Grade G-10 but more suitable for continuous use at elevated temperature. G-11 retains at least 50% of its structural strength at continuous operating temperatures in excess of 300°F. Due to its high cost, G-11 applications are limited to only the most critical high heat situations. Specification: MIL-1-24768/3, Type GEB

### GRADE G-7—GLASS SILICONE

A continuous glass fabric laminated with a silicone resin. Grade G-7 is unequalled for high heat and arc resistance applications, and where good mechanical and electrical properties must be exhibited in humid conditions in excess of 500°F. Specification: MIL-1-24768/17, Type GSG

## THERMOPLASTICS MATERIAL AVAILABILITY

ABS  
ACETAL  
ACETRON GP  
ACRYLIC  
CELAZOLE®  
CELCON®  
CPVC  
DELRIN®  
DELRIN AF®  
ERTALYTE® (PET)  
HALAR® (E-CTFE)  
HYDLAR®  
KEL-F® (PCTFE)  
KYNAR® (PVDF)  
NORYL®  
NYLATRON GS®  
NYLON  
POLYCARBONATE  
POLYETHERETHERKETONE (PEEK)  
POLYETHERSULFONE (VICTREX®)  
POLYETHYLENE (HDPE)  
POLYETHYLENE (LDPE)  
POLYMETHYLPENTENE (TPX®)  
POLYPROPYLENE (PROPYLUX®)  
POLYSTYRENE (HI-IMPACT)  
POLYSULFONE (THERMALUX®)  
POLYURETHANE  
POLYVINYLCHLORIDE (PVC)  
RYTON®  
TECHTRON  
TEFLON® (PTFE)  
TEFLON® (FEP)  
TEFZEL® (E-TFE)  
TORLON®  
UHMW  
ULTEM®  
VESPEL®



# ...even your toughest fabricating jobs COMPLETE IN HOUSE CNC MACHINING CAPABILITY

## □ OUR QUALITY CONTROL

We are ISO 9001-2000 certified and produce parts to the strictest government and military standards. We use the latest CNC and laser measuring equipment, and all our master gauging is traceable to the National Bureau of Standards. In addition, we are fully compliant with all applicable aeronautical inspection standards.

Our entire production and quality areas are fully air conditioned and humidity controlled to assure consistent dimensional accuracy.

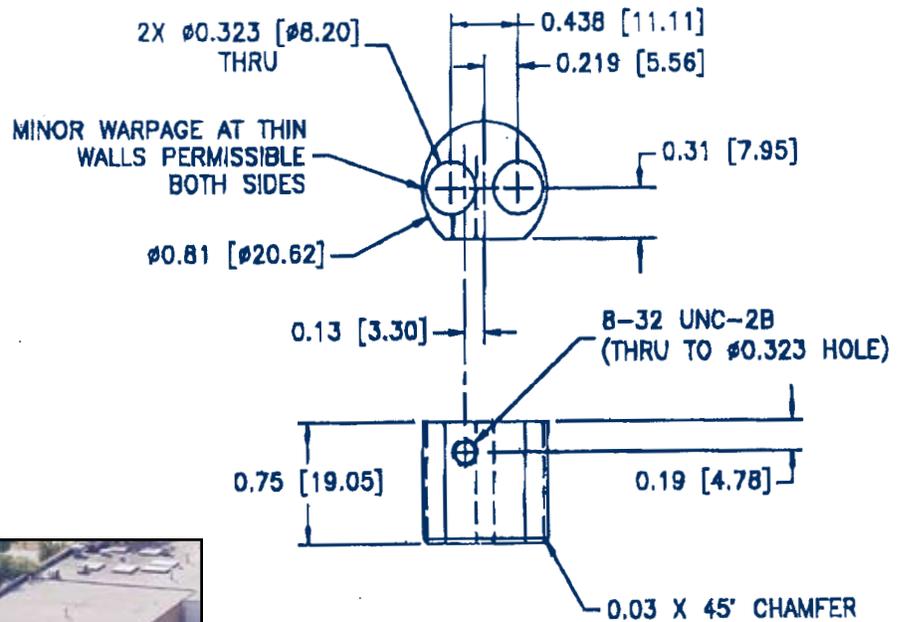
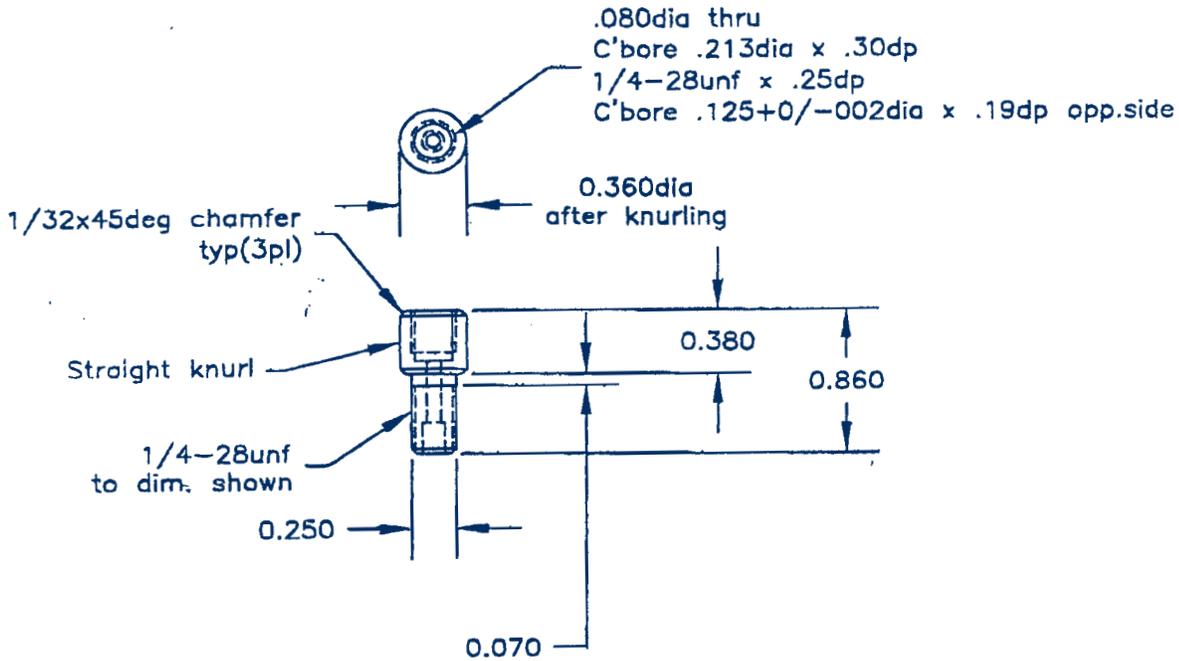
## □ OUR DEDICATION

Our dedication to excellence has made us a leader in precision custom fabrication, in delivery, and in service. We are one of the country's most experienced shops in machining the new, challenging, high-performance thermoplastics such as Peek, Torlon and Vespel. From typical applications to the experimental and unusual; from simple machining to high-precision CNC fabrication, we welcome the challenges you bring us.

## □ OUR GUARANTEE

FAX us your blueprints and specifications. We'll quote without obligation. With our extensive facilities and equipment, we can tackle tough jobs that most fabricators can't touch. And we'll do it efficiently and economically. Let us prove it. We guarantee satisfaction—in quality, in delivery, in price.





**ATLAS FIBRE COMPANY**

3411 Woodhead Dr.  
 Northbrook, IL 60062  
 847-674-1234 (p)/847-674-1723 (f)  
 www.atlasfibre.com  
 www.atlasfibremachining.com  
 sales@atlasfibre.com