Lamitex®
Composite Materials
Engineered and
Machined to Fulfill
Your Requirements.

FRANKLIN
Franklin Fibre - Lamitex Corporation
Composites for Today’s Challenges
Franklin Fibre - Lamitex Corp.

is a vertically integrated manufacturer of composite and thermoset materials. We machine precision components from these materials as well as many thermoplastic products. Since 1921, businesses worldwide have depended on Franklin for quality plastic materials and machined parts. Our modern shop is well organized and staffed with skilled machinists that produce parts from the very simple square inch in size to the very complex 50 sq. ft. component, in single order quantities of less than 10 or up to multiples of many thousands. We have committed all aspects of our organization to the concept of continuous improvement. Franklin has been ISO 9001 certified since 2003 and we constantly strive to improve our technical expertise and invest in the latest technologies available.

No two projects are ever the same. Let us help you with your next material application challenge.
Lamitex® Composites

Sheet – Rod – Tube – Molded Shapes

Nema Grade Industrial Laminates:
- Paper Based (X, XX, XXX, XP, XPC)
- Linen and Canvas Based (L, LE, C, CE, CYB)
- Glass Based (G-3, G-5, G-7, G-9, G-10, FR-4, G-11)
- Glass Polyester (GPO 1, GPO 2, GPO 3, SG200)

Lamitex Specialty Grades:
- SBE 60, SBE 70, SBE 100
- Kevlar® reinforced composites (PK-50, EK-50, PK-100)
- PF-30, PL-28, G-30

Lamitex Filament Wound Tubes:
- G-12 and G-13 Filament Wound Glass Epoxy tubes.
- Custom wind angles available to improve performance.

Specialty Products

Insularc® Cement Boards:
- Mica, NAD-11, Transite II

Vulcanized Fibre:
- Sheets, tubes and fishpaper

Thermoplastics: Sheet, Rod, Tube and fabricated parts:
- ABS, Acetal, Acrylic, Cast Nylon, Delrin®, Kydex®, Kapton®, Mylar®, MoS2 filled Nylon, Nylon 6/6, 6/12, Noryl®, Polyamideimide (Torlon®), Polycarbonate, Polyester, PEEK®, Ultem®, Polyethylene, Polyimide (Vespel®), Polypropylene, Polystyrene, Polysulfone, Polyurethane, Polyvinylchloride PVC, Teflon®, Styrene, UHMW Polyethylene.
Lamitex® Composites

Molded Lamitex G-10, G-11, XX, LE, C Square Tubes, Channels, Angles, Rods & Custom Shapes
Franklin Fibre manufactures molded thermoset square & rectangular tubes, rod, channel, custom shapes and angles from U.L. listed, Mil-I-24768 and custom-formulated pre-pregs.

Composite Fiber and Kevlar® Bearings
Composite bearings for hot rolling mills are molded and machined with graphite, molybdenum disulfide and aluminum oxide fillers that promote longer bearing life. Lamitex fiber bearings are made from the same composite material formulations used by mills for more than 50 years. Newly developed and proven Kevlar/phenolic-lined bearings yield longer production cycles for high usage and heavy load hot roll mill applications. We take pride in our customers’ preference of Lamitex composite collars, cast nylon slipper bearings, bearing plates and wiper blades over other less effective international substitutes.

Vanes for Rotary Vacuum Pumps and Pneumatic Motors, Starters & Industrial Tools
Franklin Lamitex PK-50 vanes have been used in rotary vacuum pumps since 1999 and our newest grade PK-100 is manufactured for companies that prefer a vane similar to those imported from overseas. Vanes for pneumatic uses are precision machined from custom cotton phenolic laminates.

High Temperature Electrical Insulation Materials and Fabricated Parts
We are an experienced fabricator of high temperature glass-filled composites, polyimide, mica, cement boards and Nomex. A G-11 & G-7 inventory of popular size tubes and sheets is maintained for our customers’ varied applications.

Electric Arc Furnace Mast Arm Insulation (E.A.F)
Franklin maintains inventories of common sizes of high temperature materials required in arc furnace mast arm rebuilds and repairs. We work to customer-expedited delivery times to help get them back into production.
Product Applications

**Cryogenic Composites and Fabricated Parts**

Lamitex Cryogenic materials and parts are used in applications that process, transport or store nitrogen, helium or LNG in a liquid state. Applications include storage dewars, neck tubes, tank liners and high strength bushings and fittings.

**Paper and Saw Mill materials for bearing & saw guide applications.**

*Lamitex CYB* is a cotton fabric impregnated with a graphite-modified phenolic resin formulation. Its low coefficient of friction gives CYB exceptional high wear resistance in aggressive and dust-filled environments.

*Lamitex PF-30*, an Organic Fiber/Phenolic composite with a graphite filler, was developed as a paper mill wear strip and seal bar material for bearing applications in aggressive chemical and wet environments. Exceptional wear and self-lubricating conditions contributed to its popularity in other bearing applications and especially traditional graphite and moly-filled grade C cotton phenolic applications. PF30 is a preferred material as steel mill wear strips, saw mill saw guides, transfer deck wear strips, band saw pressure blocks and wear strips.

*Lamitex G-10 and G-11* materials are regularly used in vibrating conveyor applications for composite springs, slat springs or vibratory slats.

**Corrugated Transformer Insulation**

Corrugated insulation is manufactured by Franklin Fibre in coil form up to 22” wide from Nomex, fishpaper or rag paper. It offers an alternative to “dog bone and “top stick” applications.

**Frac balls, Frac plugs and other machined composite parts for oil and natural gas exploration.**

Lamitex Frac balls possess mechanical strengths in excess of 10,000 psi for deep well exploration at temperatures to 350°F. Glass epoxy composite plugs and bridges are fabricated to our customers’ proprietary designs.
Custom Fabrication and Machined Products:

Franklin’s technical sales staff has worked together with engineers throughout the country to recommend and develop new applications for industrial laminates and thermoplastics. You can count on us to source and produce only the right product for your application. Investment in Inventory to insure timely deliveries to meet your ongoing demands is an integral part of our mission.

- Franklin machines fiberglass-reinforced industrial laminates/composites daily.
- Our modern CNC machining capabilities include saws, lathes and vertical machining centers.
- Reverse Engineering of custom fabricated parts is readily available.
- CAD (Solidworks) 3D drawing software available to accept and quote from your electronic drawings.
- Blanket order servicing from stock, Kanban equipped, 24-hour delivery if required.
- Regularly running a second shift to maximize production capacity.
- Complimentary services include conditioning, polishing, painting, stamping, custom packaging, sub-assembly and barcoding.
- Low and high volume quantities are produced daily to your specifications.
- Close tolerance work is completed for small and large custom plastic parts.
Machined Parts are a Franklin Core Competency:

Franklin’s machinists can provide parts and assemblies from Sheet, Rods and Tubes in most plastic and Non-metallic materials. They perform precision and conventional machining services for milled and turned parts from single prototypes to large quantity requirements. Franklin has produced precision machined parts made to customer specifications for more than 70 years.

Lamitex Composite and Plastic Fabrication:

• CNC milling of full size sheets, 48” x 120”. With Z-Axis capability to 30”.
• CNC turning of tubes up to 48” diameter x 48” long.
• 4-axis CNC milling on 4 CNC Vertical Machining Centers.
• A “Lights Out” operation on magazine-fed CNC Lathes allows us to pass along savings to you.
• 25 CNC machines available to run on multiple shifts daily.
Composites for Today’s Challenges

Applications for Laminates, Thermoplastics & Composites:

- Cryogenic Neck Tubes
- Impeder Tubes
- High Voltage Fuse Tubes
- Rotary Compressor Vanes
- Friction Plates
- Bearings
- Cam Followers
- Switch Insulation
- Door Guide Blocks
- Sleeve Bearings
- Neck Bearings
- Roll Neck Bearings
- Flat Back Bearings
- Self-Lubricating Bearings
- Rocket Liners
- Angle and Channel Insulation
- Tap Changer Shafts
- Square Washers
- Angles
- Isolator Pads
- Mast Arm Insulation
- Coll Forms
- Guide Rails
- Conveyor Springs
- Cryogenic Pipe Insulation
- Antennas
- High Voltage Insulators
- Air Motor Vanes
- Truck Side Plates
- Thrust Washers
- Baffle Plates
- Bus Bar Supports
- Signage Plates
- Shaft Bearings
- Thrust Collar Bearings
- Bushing Liners
- Rolling Mill Bearings
- Low-Friction Bearings
- Rocket Sleeves
- Mounting Boards
- Standoff Insulators
- Round Washers
- Bus Tube Insulation
- Insulating Plugs
- Insulating Saddle
- Seals
- Conveyor Parts
- Slat Springs
- Cryogenic Straw Tubes
- Battery Casings
- Bushings
- Starter Motor Vanes
- Center Pivot Liners
- Shoe Bears
- Arc Chutes
- Electrical Terminal Boxes
- Threshold Plates
- Slipper Bearings
- Spindle Bearings
- Top Roll Rider Bearings
- Main Shaft Bearings
- Marine Shaft Bearings
- Rocket Motor Tubes
- Insulating Barriers
- Intermediate Plates
- Split Bushings
- Electrode Clamps
- Bolt Caps
- Clamp Shoe
- Rollers
- Gears
- Vibratory Slats
- Cryogenic Structural Supports
- Cylinder Tubes
- High Vacuum Pump Vanes
- Pneumatic Tool Vanes
- Sliding Ways
- Cams
- Electric Box Liners
- Electrical Grid Bushings
- Truck Cable Clamps
- High-Temperature Sleeves
- Model Rocket Tubes
- Model Rocket Bodies
- Artillery Sleeves
- Rocket Body Tubes
- Rocket Body Sleeves
- Tap Changer Terminal Board
- Electrode Arm Insulation
- Discs
- Split Tubes
- Bus Caps
- Access Covers
- Saw Guides
- Sprockets
- Transfer Deck Wear Strips

Quality Standards and Certifications:

- Franklin is ISO 9001 certified
- Franklin is registered with the Directorate of Defense Controls (DTCC) and is compliant with the Arms Export Control Act (AECA) and the International Traffic in Arms Regulations (ITAR Part 122)

Delrin, Kapton, Kevlar, Teflon, Vespel are all registered Trademarks of E.I. DuPont Co. - Noryl, Ultem are registered Trademarks of G.E. Co.

Kydex is a registered Trademark of Kleerdex Co., Torlon is a registered Trademark of Amoco Chemicals Corp., Lamitex is a registered trademark of Franklin Fibre-Lamitex Corp.