



Industrial Plastic Composites Contracting

*Design,
Manufacturing,
and Construction of
Plastic Composites
for Industry*



RTP-1

RTP

Certified

Ershigs, Inc. is accredited by the American Society of Mechanical Engineers to certify the Reinforced Thermoset Plastic (RTP) vessels it builds meet ASME's RTP-1 standard.

About Plastic Composites

Plastic composites employed by Ershigs are lightweight, corrosion-resistant materials used in industrial applications where corrosion resistance is a requirement. Among the many types of plastic composites, Fiberglass Reinforced Plastics, or FRP composites, are the most widely used for their strength, durability, and corrosion resistance. FRP composites are also employed in conjunction with high-performance thermoplastics to produce dual-laminate products with enhanced corrosion resistance in aggressive environments.

FRP composites are more economical than high-performance steel alloys and do not require expensive coatings or linings. Unlike steel, FRP composites can be custom molded and assembled in virtually any size and shape, and are not limited to specific sheet, shape or die sizes.

The unique properties of plastic composites are best utilized by engineers, fabrication specialists, and contractors who work with the material on a daily basis.

A Better Way to Design and Build Your Next FRP Installation

Ershigs' single-source design-build capabilities streamline your development process, improve coordination, and result in a better engineered project.

Ershigs offers a seven-step process that has proven its value over hundreds of major projects in a wide range of industries. From concept to completion, your project is accomplished with the support of experienced people who know industrial composite materials.

At the end of the day, responsibility rests with the company that has earned its reputation specializing in plastic composites for over thirty years.



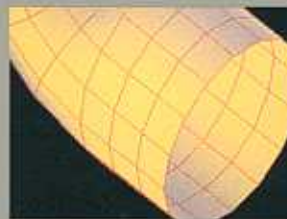
Concept Development



Single-Source Project Procurement



Engineering



Design and Analysis



*Manufacturing Planning
and Fabrication*



On-Site Fabrication



Construction and Installation



Chlorine dioxide storage tanks. These 28 ft. diameter sections will be 55 ft. high when assembled.

The Single-Source System For FRP and Composite Materials

Benefits Of Single-Source

Ershigs' single-source design-build capabilities were developed to eliminate unnecessary cost and reduce complexity often associated with the purchase of FRP and partial-FRP installations. This offers significant improvements over current standard practices:

- *Improved concept development and project planning when composites professionals participate early in the project*
- *Improved engineering and analysis assisted by people who know composite materials and understand downstream processes of fabrication, installation, and maintenance*
- *Better continuity and project management with fewer subcontractors and consultants*
- *Single-source responsibility versus divided responsibility and resulting ambiguities*
- *Lower costs*
- *Warranty backed by Ershigs*



Concept Development

Many projects have been significantly aided by Ershigs' knowledge of efficient, cost-effective, and functional methods for employment of composite structures. Ershigs' planners and engineers can provide valuable assistance during the critical concept development phase, including planning for site layout, configuration, on-site fabrication, and construction.



Single-Source Project Procurement

Ershigs' single-source design-build experience ensures project efficiency and accountability for owners and operators. Ershigs' full-service contracting capabilities provide seamless continuity for your project needs from concept to completion. Responsibility for every phase of the project rests with one company instead of many, backed by Ershigs' reputation for quality and service.



Paper machine vacuum piping for the pulp and paper industry.

A Better Way to Source FRP

Using current practices, an owner or operator works with an engineer to develop plans for a new installation. At some point, a composite material is selected as the best material for a portion of the project.

Designing With FRP Composites

Design and manufacture of composite material structures involves specialized knowl-

edge and craftsmanship. Most engineers are very familiar with steel systems. Composites are a more complex material requiring specialized technology and experience.

Ersbigs' designers and engineers are dedicated composites specialists, enabling them to stay abreast of advances in engineering, manufacturing, and installation processes using composite materials.

Put Ersbigs on Your Team

Ersbigs' staff of engineers and planners will work together with your engineer in a spirit of teamwork and cooperation. The project will benefit from the timely application of the right technical resources, helping to ensure trouble-free and efficient design, manufacture, and installation of your composite systems.



Chemical storage tanks in maintenance-free service since 1978.

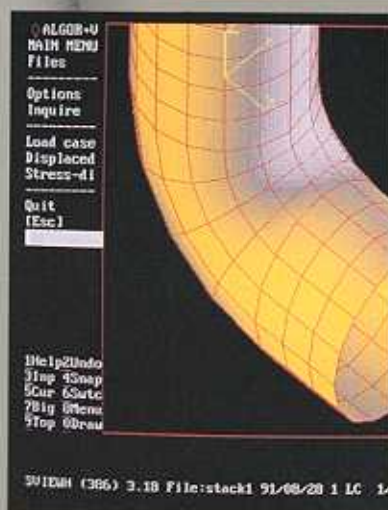


Emissions control system incorporating Ersbigs-built mist eliminators and related ductwork.



Engineering

Ershigs' staff of experienced engineers is unmatched in the industry. These composites specialists have pioneered many of the designs that, over the years, have helped plastic composite materials achieve the status and utility they now enjoy in American industry. Quality engineering and special expertise for composite materials have been the hallmark of Ershigs for over 30 years.



Design and Analysis

Designing with FRP requires special knowledge of composite materials, environmental conditions, chemical properties, structural analysis, and familiarity with specialized fabrication and installation practices. Ershigs' designers are supported by state-of-the-art computing systems, including structural analysis, CAD and Finite Element Analysis capabilities.



Manufacturing Planning and Fabrication

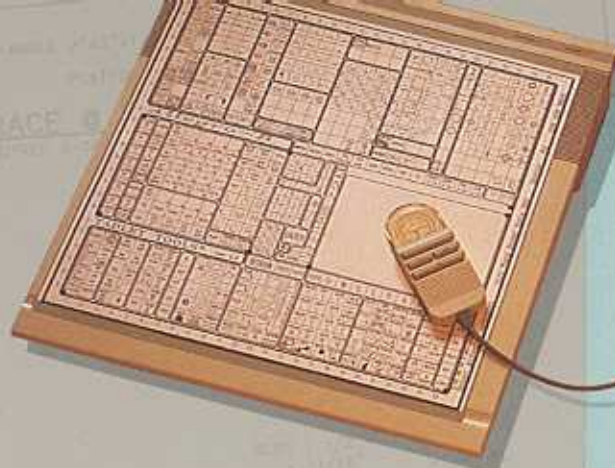
Advances in manufacturing technology have been continually developed at Ershigs since 1960, and have contributed significantly to the production of high-quality, high-performance composite applications. Manufacturing technology has played a pivotal role in achieving the strength and durability Ershigs' products are known for, and has allowed Ershigs to build to almost any size and form specification.



42 ft. diameter scrubber built on-site and used in flue gas desulfurization.



Limestone slurry mix tank used in an emissions control system for a coal-fired electric power plant.



On-Site Fabrication

Ershigs' concept-to-completion capabilities are supported by skilled and experienced on-site fabrication teams. On-site fabrication overcomes size or difficult access problems, and can be highly cost-effective when many large components are needed at a remote location. Ershigs' experienced crews and logistics systems ensure timely completion and maintenance of schedules.



Construction and Installation

Construction facilities and field offices nationwide provide regional service and support to owners and operators. Ershigs' job site planning and its many technical innovations have made installation more efficient and trouble free. Ershigs' reputation for construction service and product support provides confidence to owners and operators that their Ershigs installation will perform to their expectations and beyond.



Let Ershigs Be Your Composites Contractor

Ershigs can design, build and install your system to your performance specifications, eliminating the need for specialized consultants and advisors. Your project will benefit from having a single-source responsibility contractor and will be backed by the best warranty in the business.

Often, the engineers and consultants impose manufacturing specifications on the fabricator and the contractor in an attempt to obtain the desired result. This may require the fabricator or the contractor to alter processes and compromise efficiency and quality. It can also lead to costly and time-consuming disputes regarding responsibility.

Owners need to know who is responsible.

Ershigs Takes Responsibility

When Ershigs' single-source design-build capabilities are used, there is no question who takes responsibility for the project.

Ershigs' experience means efficient designs and quality products that perform. Ershigs-built equipment has been meeting design requirements for over thirty years in critical industrial installations.

Worldwide Capabilities

Ersbigs' on-site construction teams can work virtually anywhere in the world. They are supported by manufacturing plants across the U.S. for components that can be shipped. In addition, field manufacturing facilities can be established at the client's site when the size and duration of the project are of sufficient magnitude.

An Innovative Specialty Contractor

Ersbigs' attention to detail through the seven-step process from conceptual design to construction and installation has resulted in numerous award-winning installations. The innovative use of Composites, on-time project management, engineering depth and financial stability are key components in the selection of Ersbigs as a Specialty Contractor. Dedicated to full service with the highest quality, Ersbigs has been serving industry and solving problems in difficult corrosive applications since 1921.

The Ersbigs Innovative Performance Warranty

Owners of complex industrial systems buy composite structures for their special structural and corrosion-resistant characteristics, and Ersbigs can guarantee performance. By contrast, other suppliers guarantee only labor and materials. The Ersbigs Performance Warranty provides true and certain assurance that components from Ersbigs meet performance expectations.

The Firm

Ersbigs, Inc. is a professional engineering, manufacturing and construction organization that has been serving industry since 1921. The firm is the nation's leading manufacturer of Fiberglass Reinforced Plastic composites for corrosion resistant applications.

The Facilities

Ersbigs, Inc. operates full-service plants across the U.S., as well as on-site facilities for the construction of large diameter equipment anywhere in the world.

The Staff

Ersbigs' staff of more than 250 includes engineers, administrative personnel and skilled craftsmen who design, manufacture and install composite industrial equipment.

Industries Served

Pulp and Paper

Chemical Processing

Petroleum

Power

Water and Waste Water

Metals and Mining

Electronics

Pharmaceuticals

Food Processing

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