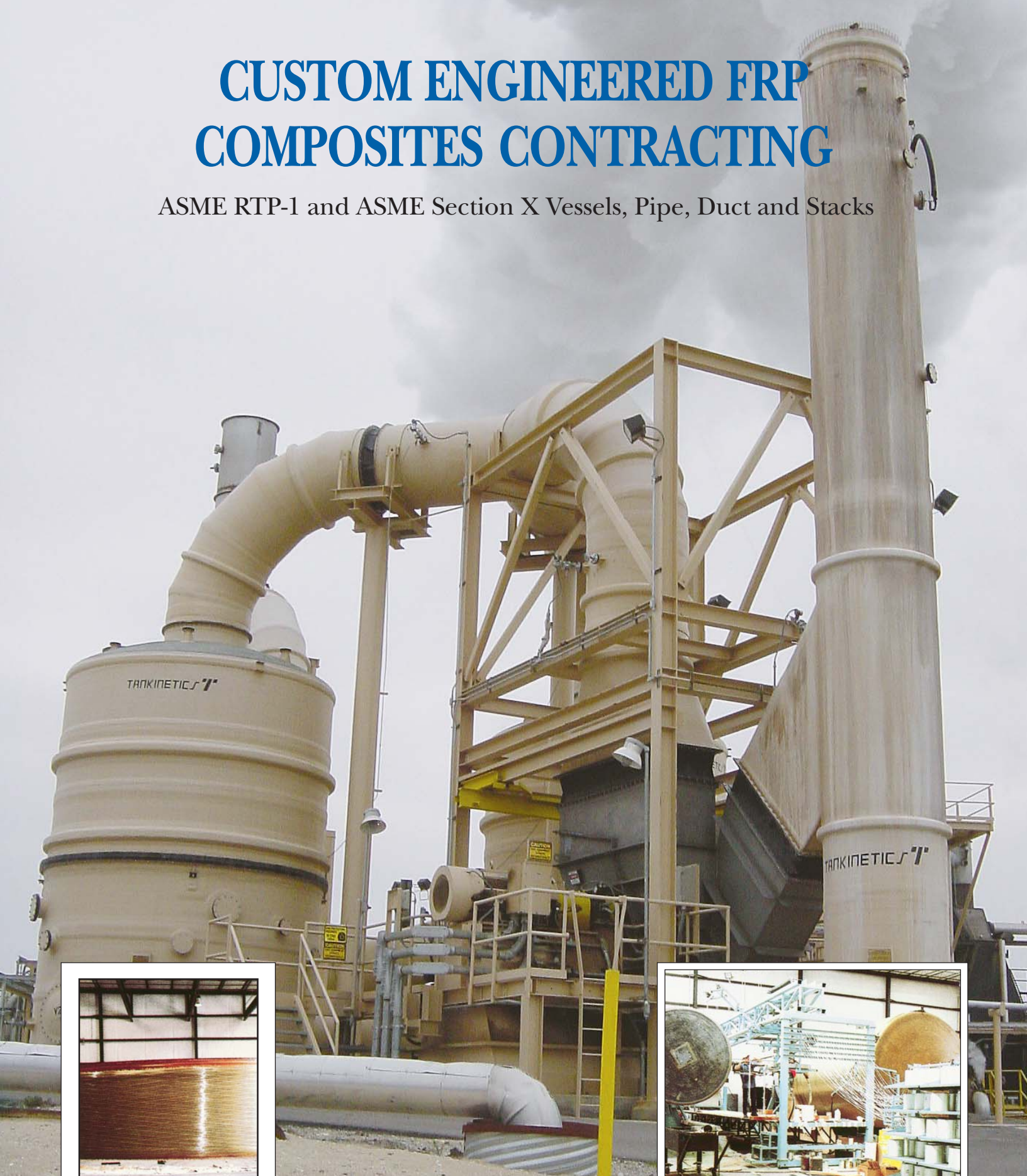


CUSTOM ENGINEERED FRP COMPOSITES CONTRACTING

ASME RTP-1 and ASME Section X Vessels, Pipe, Duct and Stacks



TANKINETICS 

The Tankinetics Difference

Tankinetics is one of the world's leading designers and fabricators of filament-wound composite tanks, vessels, pipe and duct.

Our composite products are fabricated specifically for storage or processing service in aggressive chemical environments, or where the media must be contamination free.

The Tankinetics' brand name serves a wide range of blue chip corporations and engineering firms. Our composite tanks, pipe and duct are now in use at thousands of installations in the chemical processing, petrochemical, power, mining, food, pharmaceutical, pulp & paper, and related industries.

Since Tankinetics' beginning in 1957 as a pioneer in composites, we've invested in developing the resources necessary to fabricate the highest quality FRP composite tanks, pipe and duct available today.

With our newly added 100,000 square foot manufacturing center in Harrison, Arkansas, Tankinetics has one of the largest and most modern FRP composite tank and pipe production plants in the world.

All these areas add up to providing our customers with one of the industry's leaders in FRP Composite Contracting.



Design and Engineering Excellence

Tankinetics applies advanced engineering technology to design FRP composite vessels and equipment.

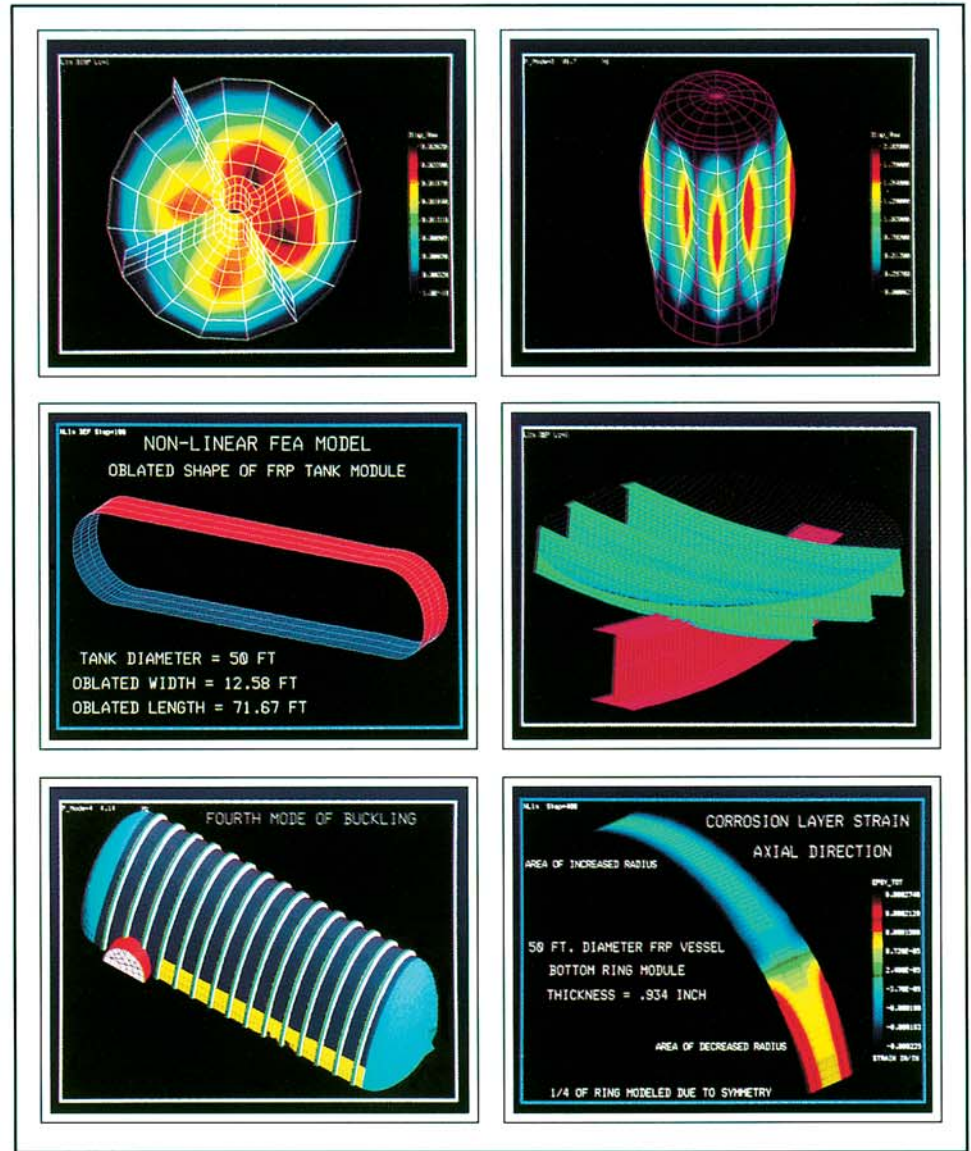
Each Tankinetics product is actually custom engineered by our team of engineers to factor in all of a customer's application requirements and performance variables.

The process begins with our unique 'Design By Rules' computer analysis, MathCad and Finite Element Modeling. Pertinent variables, including internal pressure, external pressure; specific gravity/density; seismic loading; and wind loading, are analyzed. This results in an efficient, safe, quality tank which meets or exceeds all specifications and expectations.

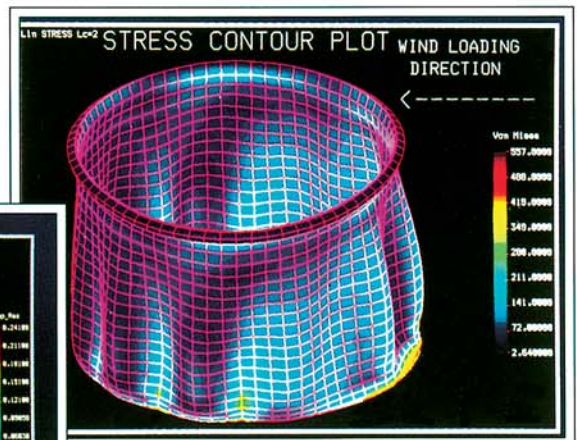
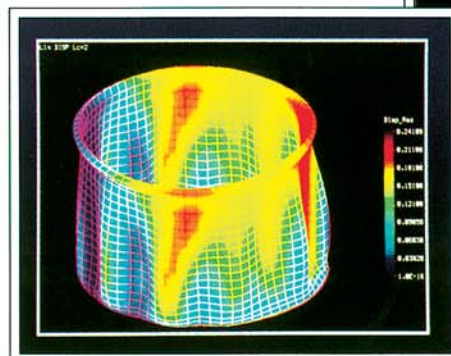
Finite Element, Linear and Non-Linear Analysis

Finite Element Analysis, used for critical applications, computes stresses, strains and displacements. FEA allows us to model complex geometry such as knuckles, secondary bonds and stepped walls. By magnifying and animating deformed shapes in the computer design, potential problems are solved even before a tank is built. Non-Linear Analysis helps solve large displacement and surface contact problems.

Our engineering department works closely with resin manufacturers to carefully select the appropriate resin, factoring in concentration and temperature of service. The resin manufacturer will provide a letter of recommendation upon the customer's request.



Color plots shown are taken from actual Tankinetics' job files. The analysis was performed by Tankinetics' engineering team.



The Industry's Finest Filament Winding Technology

Tankinetics has developed the most advanced fabrication techniques and modernized computer winding equipment in the industry to provide customers with safe, reliable products.

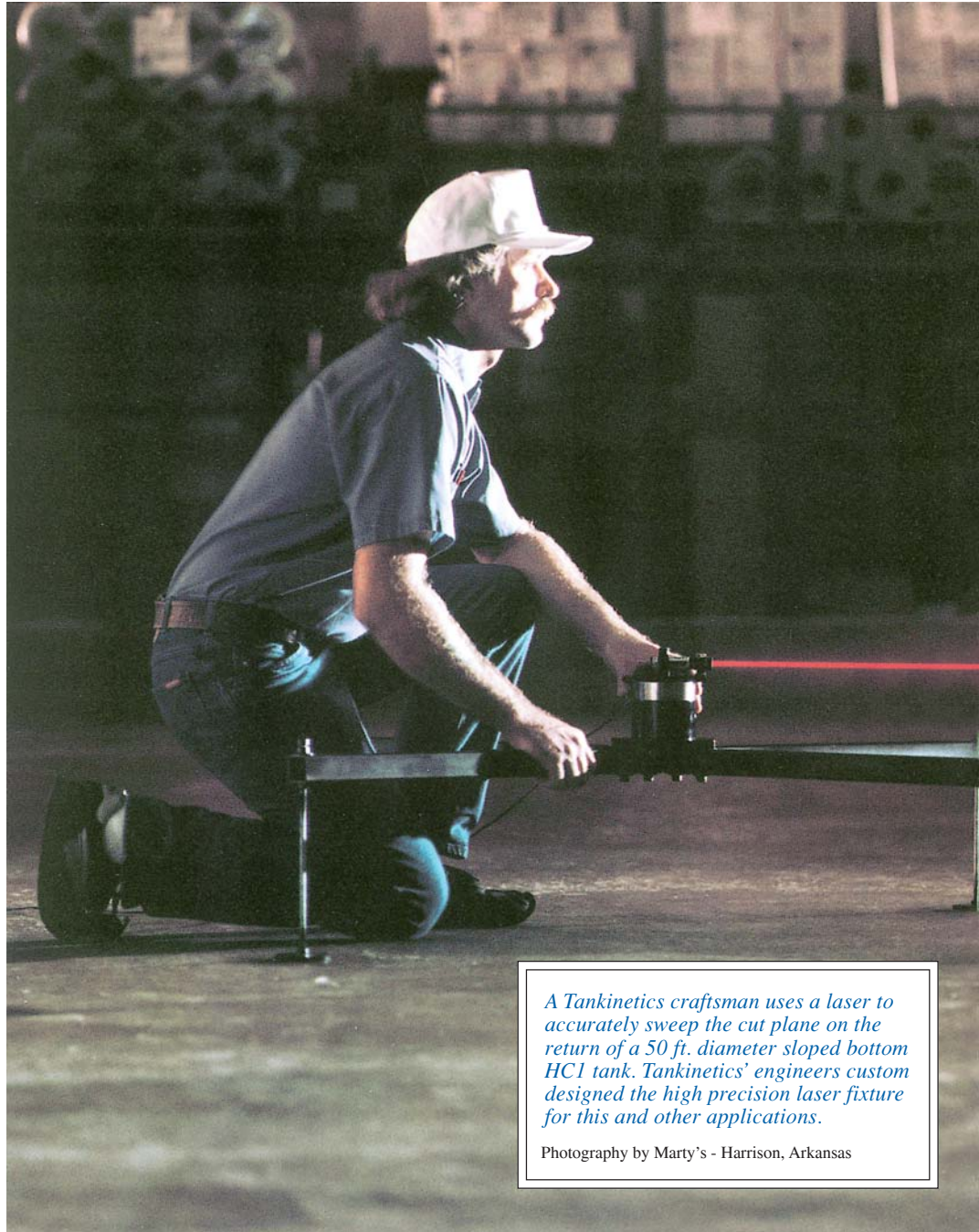
Tankinetics' computer controlled, dual mandrel, **horizontal helical winder** fabricates up to a 25-foot straight wall, 16-foot diameter tank. It adjusts to any angle from 45 to 90 degrees. Bottoms are wound integrally with side walls to increase strength.

Our computer-controlled **vertical helical winders**, an exclusive Tankinetics' design, produces tanks within our plant to 60 foot diameter and capacities up to one million gallons which are oblated and field erected. Tanks above 60 foot diameter are fabricated in the field. These winders are fully automated with adjustable wind angles from 60 to 90 degrees.

Specialized Fabrications

Tankinetics laminates and constructs large, helical wound composite tanks on the customer's site, in a controlled field environment. This allows our customer to gain manufacturing economy on multi-tank orders and Tankinetics offers sizes from 16 foot to 125 foot in diameter with unlimited heights.

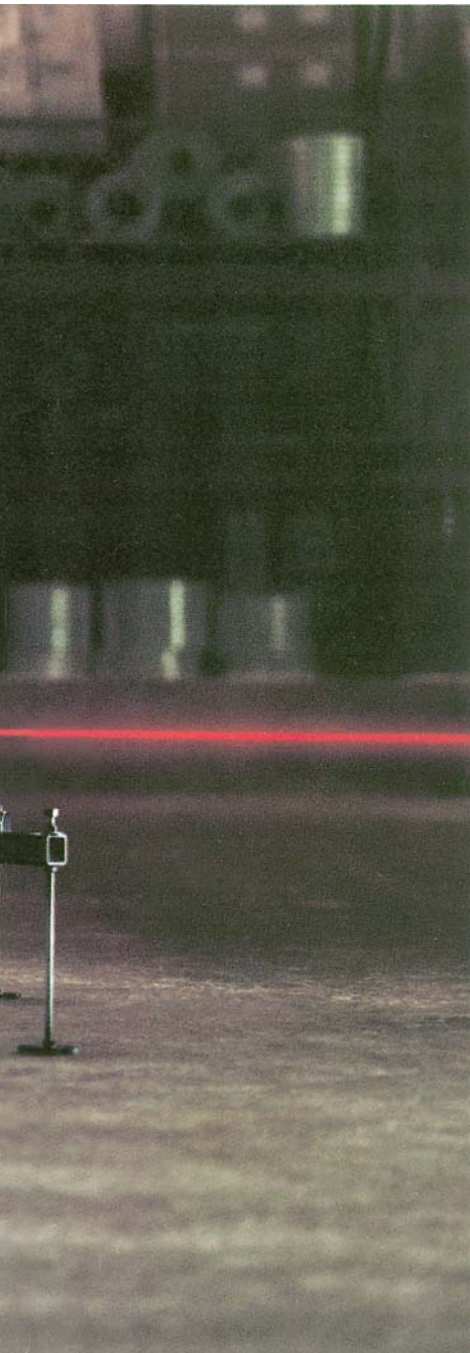
We design and fabricate tanks to conform to many industry standards including Tankinetics Standard, ASTM D-3299 and D-4097, and ASME RTP-1 low pressure vessels, and ASME Section X, Class II Code stamped pressure vessels.



A Tankinetics craftsman uses a laser to accurately sweep the cut plane on the return of a 50 ft. diameter sloped bottom HC1 tank. Tankinetics' engineers custom designed the high precision laser fixture for this and other applications.

Photography by Marty's - Harrison, Arkansas





Tankinetics' Innovations

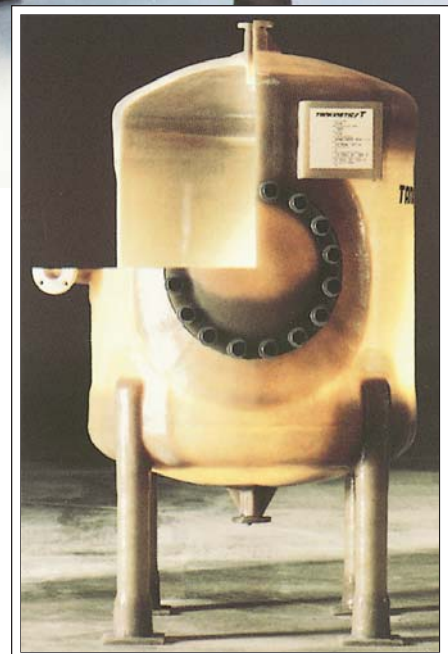
ASME Section X, Class II Vessels

① Tankinetics is the world's first composites manufacturer accredited by ASME to fabricate Section X, Class II fiberglass pressure vessels. ASME Section X is a code which has been enacted into law. The Code stamp affixed to the tank after strict testing procedures provides Tankinetics' customers with the assurance that their vessel has been fabricated strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.

ASME RTP-1 Accredited Vessels

② ASME has accredited Tankinetics for RTP-1, a standard for the manufacture of critical service, low pressure, vessels. RTP-1 fabricators are qualified by a rigorous program which ensures proven ability to manufacture vessels of superior quality. A tank of which an RTP-1 stamp has been affixed has been subjected to a superior quality control program.

Tankinetics is the first FRP company to receive the ASME RTP-1 and Section X, Class II accreditations, a significant achievement.



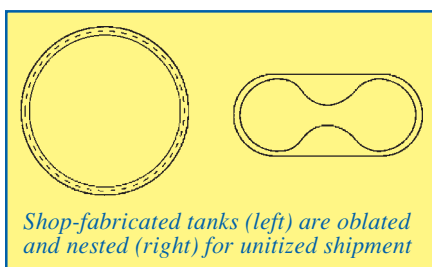
Tankinetics' Oblation System

③ Tankinetics pioneered the innovative modular shipping and field erection concept called Tankinetics' Ring Oblation System.

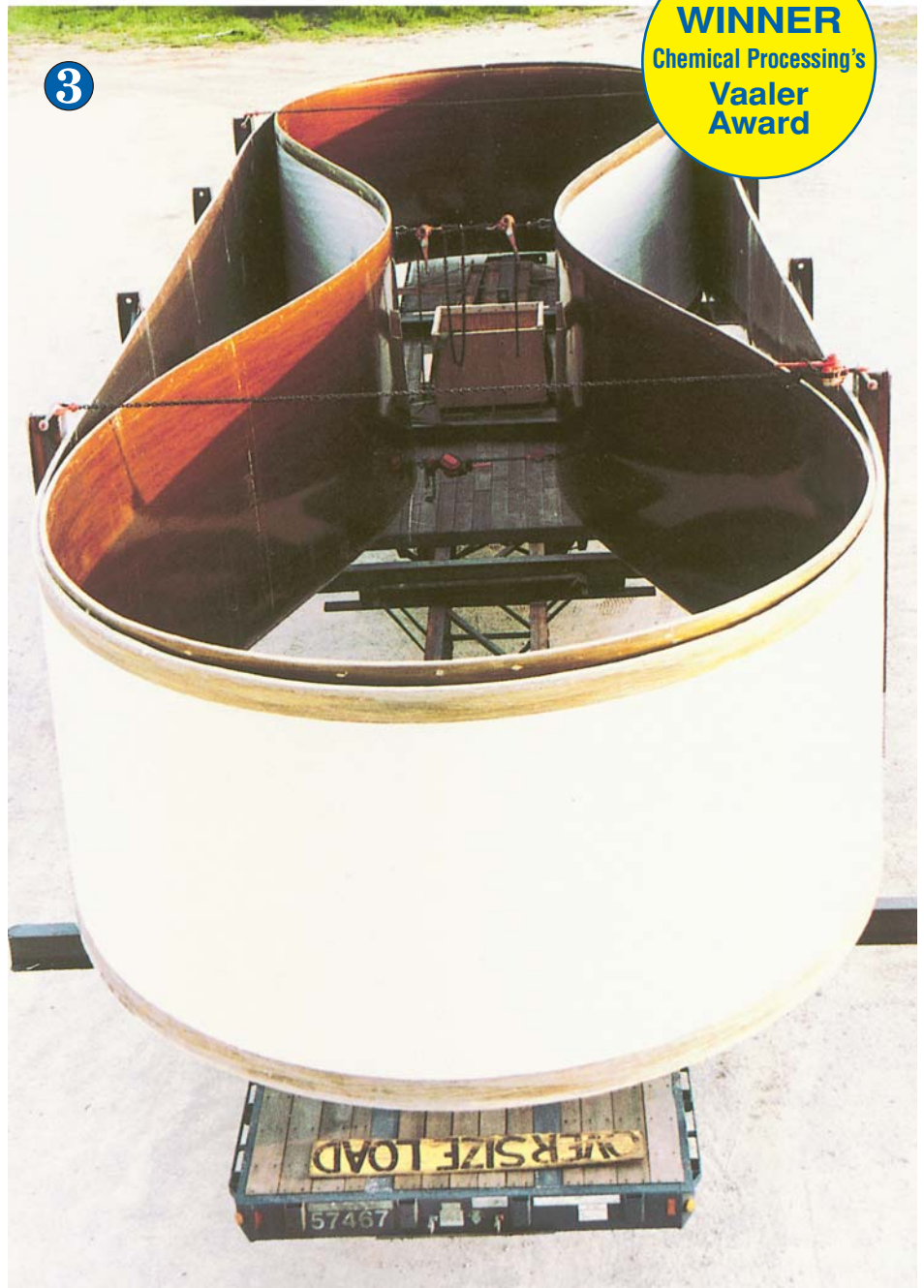
This technology facilitates shipping and erecting Tankinetics' large diameter cylindrical composite tanks.

Oblation enables our large shop fabricated tanks (up to 60 feet in diameter) to be obliterated according to precise mathematical formulas, nested together and shipped to the erection site. There, the tank is de-nested, de-oblated, and the sections are bonded together.

This system results in lower costs, better quality and faster field erection. Tankinetics originally patented this system. Our more than 30 years of experience in oblation technology is unmatched by any other company in the composites industry.



Various steps in Tankinetics' oblation process are shown here: (right) oblation, (below left to right) shipping, de-nesting, and erecting and bonding at the customer's site.



An Edge for Our Customers



Tankinetics state-of-the-art 100,000 square foot manufacturing center in Harrison, Arkansas.

At Tankinetics, quality and safety are built into all our products. Trained, experienced experts monitor all aspects of design, engineering, manufacturing and construction.

Tankinetics is proud to offer our standard 2-Year Warranty — the best in the business. This warranty is backed by product liability insurance coverage and a commitment for immediate response to potential concerns of our products in the field.

Our extensive organization of experienced representatives provide a number of key customer services including in-depth technical support and product training.

Contact Tankinetics today, toll-free at 800/624-2698 for the name of our representative in your area.

Let us put “Tankinetics Specialty Contracting Skills” to work for your company.



On time delivery is furnished by a fleet of trucks and specially built stretch trailers with air ride shocks.



Tankinetics new curing oven for critical service and food industry applications.

TANKINETICS

Tankinetics, Inc.
230 Industrial Park Road
P.O. Box 1195
Harrison, Arkansas 72602 U.S.A.
870 / 741-3626 Phone
870 / 741-3580 Fax
800 / 624-2698 Toll-Free
www.tankinetics.com