

## Growth Opportunities in North American FRP Tank Market 2010 - 2015: Trends, Forecast and Opportunity Analysis, April 2010

https://marketpublishers.com/r/O950EB20AE4EN.html

Date: April 2010 Pages: 169 Price: US\$ 4,600.00 (Single User License) ID: O950EB20AE4EN

### **Abstracts**

FRP (Fiber Reinforced Plastics) technology came into existence during World War II until then tanks were made of steel and other traditional materials. Later in 1960s more efficient manufacturing processes and advancement in resin technology helped to create rust-proof, strong and durable tanks. FRP tanks grew in acceptance by chemical, petroleum, paper and pulp industries as a viable and economical solution for chemical and fuel storage. This success of FRP tanks opened doors for their use in other industries. North America, the largest industry bases in the world, extensively uses FRP tanks in areas like chemical, oil & gas, water/wastewater treatment plants, pulp/paper, septic etc. FRP have the advantages of corrosion resistance, high strength-to-weight ratio, low maintenance, and a longer life cycle as compared to other traditional materials such as concrete and steel.

According to this report, the total FRP tank consumption in NA is expected to continue a strong growth momentum of 5.4% CAGR from 2010-2015. The FRP tank market in North America is expected to reach \$712 M by 2015. In the near future the use of FRP tanks is expected to increase in other application areas with new customized design.

This report also presents the detailed analysis of all the application areas of FRP tanks in 2009 and would be of great use to both materials suppliers as well as tank molders to plan their production and target high growth application areas. It will also provide you with valuable information, insights and tools needed to identify new growth opportunities and operate your business successfully in FRP tank markets. This report will save you hundreds of hours of your own personal research time and will significantly benefit you in expanding your business in this market. In today's stringent economy, you need every advantage that you can find.



#### Some of the features of this market report are:

FRP tank market size in terms of \$ and volume shipments

FRP tank market breakdown in various applications has been provided in this report

FRP tank market breakdown in terms of type of tanks, raw materials, market leadership position diameter size, raw materials, market leadership position

FRP tank market breakdown by Region has been provided

Major growth drivers and challenges for each of these application areas.

Trend (2004-2009) and forecast (2010-2015) of FRP tank market in North America.

Strength and Weakness of FRP tank market in North America.

FRP tank market by manufacturing process such as filament winding, hand layup etc.

Growth opportunities in emerging applications of FRP tank

Description of Molders has been provided in this report.



### Contents

#### **1. EXECUTIVE SUMMARY**

- 1.1 North America FRP Tank Market Overview
- 1.2 Porter's Five Forces Analysis of North America FRP Tank Market
- 1.3 Important Notes Regarding Data Collection

#### 2. FRP TANK INDUSTRY BACKGROUND AND CHARACTERISTICS

- 2.1 Industry Overview
- 2.2 FRP Tank Applications
  - 2.2.1 Underground and Above Ground Storage Tanks
  - 2.2.2 Tank Industry Standards / Requirements

#### 3. FRP TANK MARKET ANALYSIS

- 3.1 FRP Tank Market 2009
- 3.2 Tank Manufacturers Market Shares
- 3.3 FRP Tank Market Segmentation by Applications
  - 3.3.1 Underground Storage Tank Application
  - 3.3.2 Aboveground Storage Tank Application
  - 3.3.3 Petroleum Tank Market
  - 3.3.4 Chemical Tank Market
  - 3.3.5 Wastewater Tank Market
  - 3.3.6 Septic Tank Market
  - 3.3.7 Pulp and Paper Tank Market
  - 3.3.8 Agriculture & Aquaculture Tank Market
- 3.4 Regional Analysis
- 3.5 Composite Materials Consumption in Tanks

#### 4. TRENDS IN NORTH AMERICAN FRP TANK MARKET

- 4.1 FRP Tank Market Trends
- 4.2 Trends in Petroleum Market (2004-2009)
- 4.3 Trends in Septic Market (2004-2009)
- 4.4 Trends in Water/Wastewater Market (2004-2009)
- 4.6 Trends in Pulp/Paper Market (2004-2009)
- 4.7 Trends in Chemical Market (2004-2009)



4.9 Trends in Agriculture & Aquaculture Market (2004-2009)

4.10 Raw Material Trend

#### 5. MARKET FORECASTS OF NORTH AMERICA FRP TANK MARKET (2010-15)

- 5.1 Growth Drivers for North America FRP Tank Market
- 5.2 North American FRP Tank Market Forecast by Applications
- 5.4 North America FRP Tank Market Forecast by Raw Material
- 5.5 Forecasts from the Material Suppliers Perspective

#### 6. TANK MANUFACTURING PROCESSES

- 6.1 Overview of Tank Manufacturing Processes
  - 6.1.1 Process 1
  - 6.1.2 Process 2
  - 6.1.3 Process 3
- 6.2 Tank Manufacturers by Manufacturing Process

#### 7. GROWTH OPPORTUNITIES AND EMERGING COMPOSITE APPLICATIONS

- 7.1 Growth Matrix
- 7.2 Emerging Applications:



## **List Of Figures**

#### LIST OF FIGURES

#### **CHAPTER 1 EXECUTIVE SUMMARY**

Fig. 1.1: Porter's Five Forces model for the North American FRP tank market

#### CHAPTER 2 FRP TANK INDUSTRY BACKGROUND AND CHARACTERISTICS

Fig. 2.1: Evolution in corrosion applications for composite products from 1950's onwards

- Fig. 2.2: Opportunities in tank market
- Fig. 2.3: Fiberglass underground tank
- Fig. 2.4: Fiberglass tank for drinking water storage
- Fig. 2.5: 65,000 gallon water storage FRP tank
- Fig. 2.6: Image of horizontal fiberglass septic tank
- Fig. 2.7: Image of fiberglass oil field tank
- Fig. 2.8: FGD system bleed tank
- Fig. 2.9: Image of underground fiberglass tank
- Fig. 2.10: Image of aboveground storage fiberglass tank

#### **CHAPTER 3 FRP TANK MARKET ANALYSIS**

- Fig. 3.1 Image of above ground fiberglass tank
- Fig. 3.2 Image of fiberglass oil field tank
- Fig. 3.3 Image of fiberglass septic tank
- Fig. 3.4 Image of underground fiberglass tank

Fig. 3.5: Percent comparison of retail petroleum tank shipments by construction material in 2009

- Fig. 3.6: Comparison of retail petroleum tank shipments by construction material in 2009
- Fig. 3.7: Percent comparison of septic tank shipments (in terms of number) by construction material in 2009
- Fig. 3.8: Number of septic tank shipments by construction material in 2009
- Fig. 3.9: Comparison of tank capacity and weight for 4& 6 foot diameter tanks
- Fig. 3.10: Supply chain analysis for FRP tank industry
- Fig. 3.11: North American FRP tank market share analysis for 2009
- Fig. 3.12: North American FRP tank market consolidation analysis
- Fig. 3.13: Percent comparison between \$ shipments of AST and UST



Fig. 3.14: Comparison between \$ shipments of AST and UST

Fig. 3.15: Percent comparison by annual number of fiberglass tanks shipped for use in corrosion applications in the NA market segments

Fig. 3.16: Comparison by annual number of fiberglass tanks shipped for use in corrosion applications in the NA market segments

Fig. 3.17: Percentage comparison by sales of fiberglass tanks used in corrosion applications in the NA market segments

Fig. 3.18: Comparison by sales of fiberglass tanks used in corrosion applications in NA by the industries served

Fig. 3.19: North American FRP tank market (M lbs) by applications in 2009

Fig. 3.20: North American FRP tanks shipment (M lbs) by application in 2009

Fig. 3.21: Percentage comparison of fiberglass tanks by type of tank in North America for year 2009

Fig. 3.22: Distribution of underground storage FRP tanks in different application by \$M

Fig. 3.23: Distribution of aboveground storage FRP tanks in different application by \$M

Fig. 3.24: Percent comparison of fiberglass tank sales in chemical applications and other applications

Fig. 3.25: Dollar shipment in chemical market in 2009

Fig. 3.26: Percent comparison of retail petroleum tank shipments by construction material

Fig. 3.27: Comparison of retail petroleum tank shipments by construction material in North America

Fig. 3.28: Confirmed leakages of underground tanks in the US. (Sources: U.S. Environmental Protection Agency).

Fig. 3.29: UST cleanup activities in EPA region from 2003 through 2009

Fig. 3.30: The annual number of UST leakage cleanups completed in the US from 2003 through 2009

Fig. 3.31: Number of active underground storage tanks by the top 18 states

Fig. 3.32: Breakdown of underground tanks by states in the US

Fig. 3.33: Percent comparison of market leaders in the production of fiberglass tanks used in petroleum applications in NA

Fig. 3.34: Percent comparison of fiberglass tank sales in chemical applications and other applications

Fig. 3.35: Dollar shipment in chemical market in 2009

Fig. 3.36: Percent comparison of the number of fiberglass tank shipments in chemical and other applications

Fig. 3.37: Comparison of the number of fiberglass tank shipments in chemical and other applications

Fig. 3.38: Shipment trends in Canada for Alkali and chlorine in terms of current dollar



Fig. 3.39: Shipment trends in Canada for other inorganic chemicals

Fig. 3.40: Percent comparison of market leaders in the production of fiberglass tanks used in chemical applications in NA

Fig. 3.41: Percent comparison of fiberglass tank sales in wastewater applications and other applications

Fig. 3.42: Dollar shipment in wastewater market in 2009

Fig. 3.43: Percentage comparison of fiberglass waste water tank shipments with other applications

Fig. 3.44: Comparison of the number of fiberglass tank shipments in wastewater and other applications

Fig. 3.45: Percent comparison of market leaders in the production of fiberglass tanks used in WWTP applications in NA

Fig. 3.46: The U.S. housing starts (1975-2009)

Fig. 3.47: Percentage comparison of fiberglass tank shipments by numbers with other applications

Fig. 3.48: Dollar shipment in septic market in 2009

Fig. 3.49: Percent comparison of fiberglass tank sales in septic applications and other applications

Fig. 3.50: Comparison of fiberglass tank sales in septic applications and the remainder of the corrosion market

Fig. 3.51: Number of septic tank shipments by material type in 2009 in North America

Fig. 3.52: Percentage distribution of septic tank market by material type in 2009 in North America

Fig. 3.53: Percent comparison of fiberglass tank sales in pulp & paper applications and other applications

Fig. 3.54: Dollar shipment in pulp & paper market in 2009

Fig. 3.55: Percent comparison of the number of fiberglass pulp & paper tank shipments with other applications

Fig. 3.56: Comparison of the number of fiberglass tank shipments in pulp & paper applications with other applications

Fig. 3.57: Trends in paper and paperboard production in the US

Fig. 3.58: Annual percentage change in paper and paperboard production in the US

Fig. 3.59: Percent comparison of market leaders in pulp and paper segments of FRP tank

Fig. 3.60: 3 compartment, 450 gallon transport FRP tank

Fig. 3.61: FRP rectangular tanks for aquaculture

Fig. 3.62: Percent comparison of fiberglass tank sales in agriculture and aquaculture applications and other applications

Fig. 3.63: Dollar shipment in agriculture & aquaculture market in 2009



Fig. 3.64: Percent comparison of the number of fiberglass tank shipments in agriculture & aquaculture industry and other segments

Fig. 3.65: Number of fiberglass tank shipments for agriculture and aquaculture applications in 2009

Fig. 3.66: Fiberglass holding tanks for aquaculture

Fig. 3.67: Percent comparison of market leaders of agriculture and aquaculture segments of FRP Tank in NA

Fig. 3.68: Percent comparison of the market controlled by manufacturers of fiberglass tanks in NA by regional segmentation

Fig. 3.69: Comparison of the market controlled by manufacturers of fiberglass tanks in NA by regional segmentation

Fig. 3.70: Percentage comparison of composite materials consumption for the production of fiberglass tanks in NA

Fig. 3.71: Comparison of composite materials consumption for the production of fiberglass tanks in NA by market segment

Fig. 3.72: Percentage comparison of polyester resin consumption for the production of fiberglass tanks in NA by market segment

Fig. 3.73: Comparison of polyester resin consumption for fiberglass tanks in NA by market segment

Fig. 3.74: Percent comparison of resin materials consumption by fiberglass tanks in North America by resin type

Fig. 3.75: Comparison of resin materials consumption by fiberglass tanks in North America by resin type

Fig. 3.76: Raw materials consumption by fiberglass tanks in North America

#### CHAPTER 4 TRENDS IN NORTH AMERICAN FRP TANK MARKET

Fig. 4.1: Overall trend in the market for fiberglass tanks used in corrosion applications in North America by \$ M

Fig. 4.2: Overall trend in the market for fiberglass tanks used in corrosion applications in North America by million pounds

Fig. 4.3: Annual percent change in the overall trend in the market for fiberglass tanks used in corrosion applications in North America by \$ M

Fig. 4.4: Annual percent change in the overall trend in the market for fiberglass tanks used in corrosion applications in North America by million pounds

Fig. 4.5: Compound average annual growth rates in various market segments of the North America FRP Tank market by \$ million in the last 5 years (2004-2009)

Fig. 4.6: Compound average annual growth rates in various market segments of the North America FRP Tank market by million pounds in last 5 years (2004-2009)



Fig. 4.7: Average annual growth rates in various market segments of the North America FRP Tank market by \$ million in 2008-2009

Fig. 4.8: Average annual growth rates in various market segments of the North America FRP Tank market by million pounds in 2008-2009

Fig. 4.9: Trend for fiberglass tanks used in petroleum applications in North America

Fig. 4.10: Annual percent changes trends of last five years for fiberglass tanks used in petroleum applications in North America

Fig. 4.11: Trend in the market for fiberglass tanks used in septic applications in North America

Fig. 4.12: Annual percent change trends of last five years for fiberglass tanks used in septic applications in North America

Fig. 4.13: Trend in the market for fiberglass tanks used in wastewater applications in North America

Fig. 4.14: Annual percent change trends of last five years for fiberglass tanks used in wastewater applications in North America

Fig. 4.15: Trend in the market for fiberglass tanks used in pulp & paper applications in North America

Fig. 4.16: Annual percent change trends of last five years for fiberglass tanks used in pulp & paper applications in North America

Fig. 4.17: Trend in the market for fiberglass tanks used in chemical applications in North America

Fig. 4.18: Annual percent change trends of last five years for fiberglass tanks used in chemical applications in North America

Fig. 4.19: Trend in the market for fiberglass tanks used in agriculture and aquaculture applications in North America

Fig. 4.20: Annual percent change trend of last five years for fiberglass tanks used in agriculture and aquaculture applications in North America

Fig. 4.21: Trend in the market for fiberglass tanks used in other applications in North America

Fig. 4.22: Resin materials consumption in 2004

Fig. 4.23: Raw materials consumption in 2004

Fig. 4.24: Composite materials consumptions (M lbs) for the production of FRP tank by applications in 2004

# CHAPTER 5 MARKET FORECASTS OF NORTH AMERICA FRP TANK MARKET (2010-15)

Fig. 5.1: Drivers and challenges for North America FRP tank

Fig. 5.2: Overall forecast for the market of fiberglass tanks used in corrosion



applications in North America.

Fig. 5.3: Overall forecast for the market (M lbs) of fiberglass tanks used in corrosion applications in North America.

Fig. 5.4: Annual percent change in the overall forecast for the market of fiberglass tanks used in corrosion applications in North America.

Fig. 5.5: Annual percent change in the overall forecast for the market (M lbs) of fiberglass tanks used in corrosion applications in North America.

Fig. 5.6: North America Tank Market forecast 2010-15 by applications in \$ M.

Fig. 5.7: North America Tank Market forecast 2010-15 by applications in M lbs.

Fig. 5.8: Compound average annual growth forecast in next 5 years (2010-2015) in NA FRP Tank market by application

Fig. 5.9: Distribution of industry segmentation (\$ M) for fiberglass tank used in corrosion application in 2010.

Fig. 5.10: Distribution of industry segmentation (\$ M) for fiberglass tank used in corrosion application in 2015.

Fig. 5.11: Dollar shipments in various categories of fiberglass tanks used in corrosion applications in 2015.

Fig. 5.12: Distribution of industry segmentation (M lbs) for fiberglass tank used in corrosion application in 2010.

Fig. 5.13: Distribution of industry segmentation (M lbs) for fiberglass tank used in corrosion application in 2015.

Fig. 5.14: Resin consumption in composites tank market in 2015.

Fig. 5.15: Raw material consumption in composites tank market in 2015.

#### CHAPTER 6 TANK MANUFACTURING PROCESSES

Fig. 6.1: Raw material flow chart in tank manufacturing.

Fig. 6.2: A filament winding machine

Fig. 6.3: Chopper Gun used for the spray up process

Fig. 6.4: Percent comparison of manufacturing processes utilized for producing

fiberglass tanks used in North America by market segment.

Fig. 6.5: Comparison of manufacturing processes utilized for producing fiberglass tanks used in corrosion applications in North America by market segment.

# CHAPTER 7 GROWTH OPPORTUNITIES AND EMERGING COMPOSITE APPLICATIONS

Fig. 7.1: Growth Matrix of NA FRP Tank Market (2004-2009)

Fig. 7.2: Growth Matrix of NA FRP Tank Market (2010-2015)

Growth Opportunities in North American FRP Tank Market 2010 - 2015: Trends, Forecast and Opportunity Analysis,..



Fig. 7.3: Emerging applications of FRP tank with future growth potential.

Fig. 7.4: Image of ZCL's fiberglass home heating oil storage tank

Fig. 7.5: mages of fiberglass agricultural tanks



#### I would like to order

Product name: Growth Opportunities in North American FRP Tank Market 2010 - 2015: Trends, Forecast and Opportunity Analysis, April 2010

Product link: https://marketpublishers.com/r/O950EB20AE4EN.html

Price: US\$ 4,600.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

#### Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/O950EB20AE4EN.html