Heat Exchangers - Global Strategic Business Report

Description: The report provides separate comprehensive analytics for the US, Canada, Japan, Europe, Asia-Pacific, Latin America, and Rest of World. Annual estimates and forecasts are provided for the period 2015 through 2022. Also, a six-year historic analysis is provided for these markets. Market data and analytics are derived from primary and secondary research.

This report analyzes the worldwide markets for Heat Exchangers in US$ by the following Product Segments: Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE, & Others), Air Coolers, Cooling Towers, and Other Heat Exchangers. Further, the market is also analyzed by the following End-Use Segments: Chemicals Industry, Oil & Gas Industry, Industrial HVAC and Refrigeration, Food and Beverage, Power Generation, and Others.

Company profiles are primarily based on public domain information including company URLs. The report profiles 440 companies including many key and niche players such as -

Air Products and Chemicals, Inc.
Alfa Laval AB
Barriquand Technologies Thermiques
Xylem Inc.
Chicago Bridge & Iron Company N.V

Contents: I. INTRODUCTION, METHODOLOGY & PRODUCT DEFINITIONS
Study Reliability and Reporting Limitations
Disclaimers
Data Interpretation & Reporting Level
Quantitative Techniques & Analytics
Product Definitions and Scope of Study
Heat Exchangers
Analysis by Product Segment
Shell and Tube Heat Exchangers
Plate Heat Exchangers
Air-Cooled Heat Exchangers
Cooling Towers
Other Heat Exchangers
Analysis by End-Use Segment

II. EXECUTIVE SUMMARY
1. INDUSTRY OVERVIEW
Heat Exchangers: The Most Important & Ubiquitous Process Equipment in Industries
Continued Weakness in Post-Recession Global Growth Creates Soft Growth Patches in the Heat Exchangers Market
Table 1: Highlighting Soft Patches of Economic Data Responsible for the Tempered Outlook for the Heat Exchangers Market: World Real GDP Growth Rates in % by Country/Region for the Period 2014-2017P (includes corresponding Graph/Chart)
Global Manufacturing Growth Weakens Amid Anemic Global Growth
Table 2: With Manufacturing PMI Swinging Between Volatile Gains & Losses, the Manufacturing Industry Walks the Tight Rope: Breakdown of Global Manufacturing Purchasing Managers' Index (PMI) Points for the Years 2010 through 1H 2016 (includes corresponding Graph/Chart)
Key Market Trends, Drivers & Challenges
Weakening China: Still a Dominant Market for Heat Exchangers
Table 3: China's Dominant Hold on Global Manufacturing Output & Its Central Role in World Trade Makes the Country a Major Market for Heat Exchangers in Asia: % Breakdown of Global Manufacturing Output by Region for the Years 1990 and 2013 (includes corresponding Graph/Chart)
Prolonged Decline in Oil Prices & Uncertain Exploration Investments Dampen the Demand Outlook in the Oil
Steep Decline in Crude Oil Prices Push Heat Exchangers in the Oil & Gas Sector into a Rough Growth Patch: OPEC Crude Oil Prices (In US$ Per Barrel) for the Years 2013 Through 2016 (includes corresponding Graph/Chart)
Declining Oil Prices Puts a Spoke in the Growth of Underwater Heat Exchangers, Which Began with the Migration to Deepwater Drilling

Table 5: Fall in New Deepwater Exploration Wells to Wield a Temporary Setback for Subsea Heat Exchangers: Number of Deepwater Exploration Wells Drilled by Region for the Years 2012, 2013, 2014 & 2015 (includes corresponding Graph/Chart)

Oil Price Shock Echoes Downstream into the Oil Refining & Processing End-Use Sector, Eliciting a Mixed Scenario of Profits and Losses

Table 6: Mixed Outlook for Oil Refining Capacity Additions Creates a Bumpy Road Ahead for Heat Exchangers in the Oil Refining & Processing End-Use Sector: World Net Refining Capacity Additions (In 000 Barrels of Oil Per Day) by Region for the Years 2013 through 2017 (includes corresponding Graph/Chart)
Focus on Renewable Energy Spurs Optimism for Heat Exchangers in the Energy Generation Sector

Table 7: Opportunity for the Use of Heat Exchangers in Concentrated Solar Power (CSP) Plants: Breakdown of Thermal Power Produced by CSP Plants in (TWh/y) for the years 2015, 2020, 2030, 2040 & 2050 (includes corresponding Graph/Chart)

Expected Revival of Nuclear Energy to Drive Opportunities in the Heat Exchangers Market

Table 8: Rise in the Number of Nuclear Reactors in Operation to Spur Opportunities for Heat Exchanger Equipment for Nuclear Power Plants: Global Nuclear Power Operational Fleet Size for the Years 2010 through 2015 (includes corresponding Graph/Chart)
Focus on Energy Efficiency Drives Gains in the Heat Exchangers Market

Table 9: Growing Food & Beverage Sales to Positively Influence Food Processing Plant Equipment Investments: World Retail Sales of Food & Beverages (In US$ Trillion) for the Years 2014 & 2016 by Geographic Region (includes corresponding Graph/Chart)

Slowing Economy Bodes a Mixed Outlook for the World Chemical Industry

Table 10: Projected Long-Term Gains in the World Chemical Industry Encourage Heat Exchanger Manufacturers to Look Beyond Current Uncertainties to Focus Developmental Efforts on Innovative Solutions: Breakdown of the World Chemicals Industry (In US$ Billion) by Sector for the Years 2015, 2025 & 2035 (includes corresponding Graph/Chart)

Table 11: World Sales of Renewable Chemicals (In US$ Million) by Geographic Region (2015 & 2020): A Measure of Addressable Opportunity for Heat Exchangers in Chemical Production (includes corresponding Graph/Chart)

Stringent Wastewater Treatment Laws Provide Fertile Ground for Heat Exchanger Sales

Table 12: Plunging Mining CAPEX Trips Over Opportunities for Mining Heat Exchangers: Breakdown of the Global Mining Maintenance and Expansion CAPEX (In US$ Million) for the Years 2011 through 2016 (includes corresponding Graph/Chart)

Shortage of Freshwater Spurs Land Based Use of Seawater Heat Exchangers

Table 13: Declining Freshwater Availability Throws the Technology Focus on Seawater Heat Exchangers: Per Capita Availability of Water in Select Countries (In ’000 m3) (includes corresponding Graph/Chart)
Water Shortages to Drive Demand for Air Coolers

Shell and Tube Heat Exchangers Face Substitution Threats

Environmental Concerns Trigger Innovation in Cooling Towers

Innovation in Heat Exchanger Flow Patterns, Fins & Grooves Infuse Vigor in the Market

R&D Focus on Material Science Helps Leverage Benefits of Newer Raw Materials

Heat Exchanger Maintenance Grows in Prominence

Competitive Landscape

Table 14: Leading Players in the Global Plate Heat Exchangers Market (2014): Percentage Share Breakdown of Revenues for Alfa Laval and Others (includes corresponding Graph/Chart)


Table 16: Leading Players in the Global Compact Heat Exchangers Market (2014): Percentage Share Breakdown of Revenues for Alfa Laval, GEA Heat Exchangers, HISAKA WORKS LTD, SPX Corporation, SWEP International AB and Others (includes corresponding Graph/Chart)
Market Outlook

2. PRODUCT OVERVIEW
   Introduction
   Concept of Heat Transfer
   Cutting Edge Equipment Design Innovations by Lummus Technology, a CB&I Company
   Helixchanger®
   Helixchanger
   Product Description
   Helitower®
   Helitower
   Helitower®
   Helitower
   Twisted Tube® type S&T: An advanced shell-and-tube design by Koch Heat Transfer Co, LP
   Advantages of Twisted Tube Type S&T
   Higher Thermal & Hydraulic Performance
   Higher Thermal Effectiveness
   Lower Fouling & Cleanability
   Elimination of Vibration
   Product Groups
   Direct Contact Exchangers
   Regenerators
   Recuperators
   Product Types
   Shell and Tube Heat Exchangers
   U-Tube Heat Exchangers
   Straight Tube Heat Exchangers
   Tube in Tube Heat Exchangers
   Other Tubular Exchangers
   Finned Tube Exchangers
   Double-Pipe Exchangers
   Bayonet Exchangers
   Compact Heat Exchangers
   Advantages
   Costs
   Types
   Plate and Frame Heat Exchangers
   Gasketed Plate and Frame Heat Exchangers
   Advantages
   Brazed Plate Heat Exchangers
   Welded Plate Heat Exchangers
   Semi-Welded Plate Heat Exchangers
   All Welded Plate Heat Exchangers
   New Designs
   Air Coolers
   Cooling Towers
   Other Heat Exchangers
   Finned Coil Heat Exchangers
   Plate Finned Heat Exchangers
   Heat Recovery Systems
   Waste Heat Boilers
   Regenerators and Recuperators
   Heat Pipes
   Scrapped Surface Heat Exchangers

3. END-USE MARKET ANALYSIS
   Select End-Use Industries
   Chemical Industry
   Oil & Gas Industry
   HVAC and Refrigeration Industry
   Food and Beverage Industry
   Power Generation Industry
   Other End-Use Applications

4. PRICING AND DISTRIBUTION
Pricing Behavior by Product Segment
- Shell and Tube Exchangers
- Other Tubular Exchangers
- Plate and Frame Exchangers
- Other Plate and Frame Exchangers
- Air Coolers
- Cooling Towers
- Others

Pricing Behavior by End-Use Segment
- Chemicals Applications
- Industrial HVAC and Refrigeration
- Food and Beverage Applications
- Other Applications
- Utilities
- General Engineering
- Others

Distribution by End-Use Segment

5. PRODUCT INTRODUCTIONS/INNOVATIONS
- Thermex Introduces New Heat Exchangers
- Watlow Launches Next Generation Heat Exchanger
- Bluestar Machinery Introduces New Heat Exchangers
- SWEP Introduces New Double-wall Brazed Plate Heat Exchanger
- Bell & Gossett Launches New Double-Wall Brazed Plate Heat Exchanger
- Ingersoll Rand India Introduces Water Cooled Refrigerated Air Dryers
- SWEP Launches AHRI Certified® Brazed Plate Heat Exchangers
- C&R Launches High Performance Replacement Heat Exchanger
- Alfa Laval Launches New Semi-welded Heat Exchanger
- EVAPCO Unveils AXS Line of Cooling Towers
- Emerson Process Management Launches New Wireless Air Cooled Heat Exchanger Monitoring Solution
- ASI-Life Sciences Unveils DHX Disposable Heat Exchanger
- Mitsubishi Electric Develops World's First Aluminium Heat Exchanger
- Alfa Laval Unveils T35 Gasketed Plate Heat Exchanger
- Alfa Laval Introduces Optigo Range of air Heat Exchangers
- Alfa Laval Introduces Alfa Laval T8 Gasketed Plate Heat Exchanger
- Alfa Laval to Launch Tantalum Heat Exchangers
- SECESPOL Unveils New Brazed Plate Heat Exchangers
- HRS Unveils HRS-Rotex
- Matrix Process Solutions Rolls Out Widegap Plate Heat Exchangers

6. RECENT INDUSTRY ACTIVITY
- Zhejiang Yinlun Machinery Company Acquires Thermal Dynamics
- Alfa Laval Receives Supply Order for Compact Heat Exchangers in Russia
- Aavid Thermalloy Takes Over Niagara Thermal Products
- Alfa Laval Receives Supply Order for Packinox Heat Exchangers in South Korea
- DE Shaw Takes Over Roen Est
- SPX to Divest Dry Cooling Business to Paharpur Cooling Towers Limited
- Alfa Laval Receives Order to Supply Compact Heat Exchangers to Natural Gas Plant in the US
- Alfa Laval Receives Supply Order for Air Heat Exchangers in Spain
- Alfa Laval Receives Supply Order for Compact Heat Exchangers in China
- Alfa Laval Receives Supply Order for Heat Exchangers from DSME
- Koch Heat Transfer Takes Over Alco and Bos-Hatten
- Alfa Laval Wins New Supply Contract in the US
- Heatric Bags New Contract from NET Power
- Air Products Wins LNG Heat Exchanger Contract
- Alfa Laval Bags New Contract in the Middle East
- Air Products Inaugurates New LNG Heat Exchanger Manufacturing Facility
- Harsco Takes Over Hammco
- Triton Takes Over GEA Heat Exchangers
- Alstom Divestes Steam Auxiliary Components Business to Triton
- Chart Industries Takes Over Brazed Aluminum Heat Exchanger Business of Wuxi City Zhongbo
- Radiant Engineers Inaugurates New Facility
7. FOCUS ON SELECT PLAYERS
Air Products and Chemicals, Inc. (US)
Alfa Laval AB (Sweden)
Tranter Inc. (US)
Barriquand Technologies Thermiques (France)
Xylem Inc. (US)
Chicago Bridge & Iron Company N.V. (The Netherlands)
GEA Heat Exchangers Group (Germany)
Hamon Group (Belgium)
Harsco Industrial Air-X-Changers (US)
Hisaka Works, Ltd (Japan)
Kelvion (Germany)
Sondex, A/S (Denmark)
SmartHeat Inc. (US)
SPX Corporation (US)
Balcke-Dürr GmbH (Germany)
SPX Cooling Technologies, Inc. (US)
API Heat Transfer (US)
Vahterus Oy (Finland)

8. GLOBAL MARKET PERSPECTIVE
Table 17: World Recent Past, Current & Future Analysis for Heat Exchangers by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Sales in US$ Million for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 18: World Historic Review for Heat Exchangers by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Sales in US$ Million for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 19: World 14-Year Perspective for Heat Exchangers by Geographic Region
Percentage Breakdown of Dollar Sales for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Product Segment Analytics
Table 20: World Recent Past, Current & Future Analysis for Shell and Tube Heat Exchangers by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Sales in US$ Million for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 21: World Historic Review for Shell and Tube Heat Exchangers by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Sales in US$ Million for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 22: World 14-Year Perspective for Shell and Tube Heat Exchangers by Geographic Region
Percentage Breakdown of Dollar Sales for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 23: World Recent Past, Current & Future Analysis for Plate and Frame Heat Exchangers by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Sales in US$ Million for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 24: World Historic Review for Plate and Frame Heat Exchangers by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Sales in US$ Million for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 25: World 14-Year Perspective for Plate and Frame Heat Exchangers by Geographic Region
Percentage Breakdown of Dollar Sales for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 26: World Recent Past, Current & Future Analysis for Plate and Frame Heat Exchangers by Product Segment
Gasketed PHE, Welded PHE, Brazed PHE, Other PHE Segments Independently Analyzed with Annual Sales in US$ Million for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 27: World Historic Review for Plate and Frame Heat Exchangers by Product Segment
Gasketed PHE, Welded PHE, Brazed PHE, Other PHE Segments Independently Analyzed with Annual Sales in
III. MARKET

1. THE UNITED STATES

A. Market Analysis

Outlook

Opportunities Exist for New Entrants in HVAC&R Heat Exchangers Market

Shale Gas Revolution: A Fundamental Driver of Growth in the Use of Heat Exchangers in Liquefaction Plants

Table 68: Annual Production of Shale Gas (In Trillion Cubic Feet) in the United States (2015 through 2040): A Measure of Addressable Opportunity for Exchangers in Heat Recovery Applications in Shale Gas Processing (includes corresponding Graph/Chart)

Increasing Awareness Spur Demand for Energy Efficient Heat Exchangers

Wet Cooling Towers Dominate the Cooling Tower Market

Product Launches

Strategic Corporate Developments

Select Players

B. Market Analytics

Table 69: US Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment

Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 70: US Historic Review for Heat Exchangers by Product Group Segment

Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 71: US 14-Year Perspective for Heat Exchangers by Product Group Segment

Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
# RESEARCH AND MARKETS

Table 72: US Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 73: US Historic Review for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 74: US 14-Year Perspective for Heat Exchangers by End-Use Segment
Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

## 2. CANADA

### A. Market Analysis

#### Outlook

#### Select Players

#### B. Market Analytics

Table 75: Canadian Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 76: Canadian Historic Review for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 77: Canadian 14-Year Perspective for Heat Exchangers by Product Group Segment
Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

Table 78: Canadian Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 79: Canadian Historic Review for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 80: Canadian 14-Year Perspective for Heat Exchangers by End-Use Segment
Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

## 3. JAPAN

### A. Market Analysis

#### Outlook

#### Product Launch

Hisaka Works, Ltd.
A Major Japanese Player

#### B. Market Analytics

Table 81: Japanese Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 82: Japanese Historic Review for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 83: Japanese 14-Year Perspective for Heat Exchangers by Product Group Segment
Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

Table 84: Japanese Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 85: Japanese Historic Review for Heat Exchangers by End-Use Segment

Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 86: Japanese 14-Year Perspective for Heat Exchangers by End-Use Segment

Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

4. EUROPE

A. Market Analysis

Outlook

Factors Influencing Market

Factors Influencing Demand in Various End-Use Segments

Competition from Low Cost Nations

Rising Demand from Eastern Europe

Replacement Market Driving Growth

Adoption of Plate Heat Exchangers Accelerates

Competitive Structure

Table 87: Leading Players in the European Heat Exchangers Market (2015): Percentage Share Breakdown of Revenues for Alfa Laval, GEA Heat Exchangers, Hamon, SPX Corp and Others (includes corresponding Graph/Chart)

Table 88: Leading Players in the European Shell and Tube Heat Exchangers Market (2015): Percentage Share Breakdown of Revenues for Alfa Laval, GEA Heat Exchangers, SPX Corp and Others (includes corresponding Graph/Chart)

Table 89: Leading Players in the European Gasketed Plate & Frame Heat Exchangers Market (2015): Percentage Share Breakdown of Revenues for Alfa Laval, GEA Heat Exchangers, SPX Corp and Others (includes corresponding Graph/Chart)


Table 91: Leading Players in the European All-Welded Plate & Frame Heat Exchangers Market (2015): Percentage Share Breakdown of Revenues for Alfa Laval, GEA Heat Exchangers, SPX Corp and Others (includes corresponding Graph/Chart)

Table 92: Leading Players in the European Air Coolers Market (2015): Percentage Share Breakdown of Revenues for GEA Heat Exchangers, Guntner, Hamon, SPX Corp, and Others (includes corresponding Graph/Chart)

Table 93: Leading Players in the European Cooling Tower Heat Exchangers Market (2015): Percentage Share Breakdown of Revenues for GEA Heat Exchangers, Hamon, SPX Corp and Others (includes corresponding Graph/Chart)

Market Analysis by Product Segment

Shell and Tube Exchangers

Market Accelerators

Market Decelerators

Plate and Frame Heat Exchangers

Air Coolers

Analysis by End-Use Segment

Regulatory Environment

Chemicals Industry

A Case of Ethylene

Oil & Gas

HVAC and Refrigeration

Other Applications

B. Market Analytics

Table 94: European Recent Past, Current & Future Analysis for Heat Exchangers by Geographic Region

France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 95: European Historic Review for Heat Exchangers by Geographic Region

France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 96: European 14-Year Perspective for Heat Exchangers by Geographic Region
Percentage Breakdown of Dollar Sales for France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 97: European Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 98: European Historic Review for Heat Exchangers by Product Group Segment Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 99: European 14-Year Perspective for Heat Exchangers by Product Group Segment Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 100: European Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 101: European Historic Review for Heat Exchangers by End-Use Segment Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 102: European 14-Year Perspective for Heat Exchangers by End-Use Segment Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

4a. FRANCE
A. Market Analysis
Outlook
A Major French Player
B. Market Analytics
Table 103: French Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 104: French Historic Review for Heat Exchangers by Product Group Segment Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 105: French 14-Year Perspective for Heat Exchangers by Product Group Segment Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 106: French Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 107: French Historic Review for Heat Exchangers by End-Use Segment Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 108: French 14-Year Perspective for Heat Exchangers by End-Use Segment Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

4b. GERMANY
A. Market Analysis
Outlook
Strategic Corporate Developments
Select Players
B. Market Analytics
Table 109: German Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 110: German Historic Review for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 111: German 14-Year Perspective for Heat Exchangers by Product Group Segment
Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 112: German Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 113: German Historic Review for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 114: German 14-Year Perspective for Heat Exchangers by End-Use Segment
Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

4c. ITALY
A. Market Analysis
Outlook
B. Market Analytics
Table 115: Italian Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 116: Italian Historic Review for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 117: Italian 14-Year Perspective for Heat Exchangers by Product Group Segment
Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 118: Italian Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 119: Italian Historic Review for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 120: Italian 14-Year Perspective for Heat Exchangers by End-Use Segment
Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

4d. THE UNITED KINGDOM
A. Market Analysis
Outlook
Select Players
B. Market Analytics
Table 121: UK Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 122: UK Historic Review for Heat Exchangers by Product Group Segment

Table 123: UK 14-Year Perspective for Heat Exchangers by Product Group Segment

Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

Table 124: UK Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment

Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

Table 125: UK Historic Review for Heat Exchangers by End-Use Segment

Table 126: UK 14-Year Perspective for Heat Exchangers by End-Use Segment

Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 127: Spanish Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment

Table 128: Spanish Historic Review for Heat Exchangers by Product Group Segment

Table 129: Spanish 14-Year Perspective for Heat Exchangers by Product Group Segment

Table 130: Spanish Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment

Table 131: Spanish Historic Review for Heat Exchangers by End-Use Segment

Table 132: Spanish 14-Year Perspective for Heat Exchangers by End-Use Segment

Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

Table 133: Russian Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment

Table 134: Russian Historic Review for Heat Exchangers by Product Group Segment

Table 135: Russian 14-Year Perspective for Heat Exchangers by Product Group Segment

Table 136: Russian Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment

Table 137: Russian Historic Review for Heat Exchangers by End-Use Segment

Table 138: Russian 14-Year Perspective for Heat Exchangers by End-Use Segment

Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 134: Russian Historic Review for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 135: Russian 14-Year Perspective for Heat Exchangers by Product Group Segment
Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 136: Russian Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 137: Russian Historic Review for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 138: Russian 14-Year Perspective for Heat Exchangers by End-Use Segment
Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

4g. REST OF EUROPE
A.Market Analysis
Outlook
Product Launches
Corporate Development
Select Players
B.Market Analytics
Table 139: Rest of Europe Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 140: Rest of Europe Historic Review for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 141: Rest of Europe 14-Year Perspective for Heat Exchangers by Product Group Segment
Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 142: Rest of Europe Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 143: Rest of Europe Historic Review for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 144: Rest of Europe 14-Year Perspective for Heat Exchangers by End-Use Segment
Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

5. ASIA-PACIFIC
A.Market Analysis
Outlook
B.Market Analytics
Table 145: Asia-Pacific Recent Past, Current & Future Analysis for Heat Exchangers by Geographic Region
China and Rest of Asia-Pacific Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 146: Asia-Pacific Historic Review for Heat Exchangers by Geographic Region
China and Rest of Asia-Pacific Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 147: Asia-Pacific 14-Year Perspective for Heat Exchangers by Geographic Region
Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
2009 through 2014 (includes corresponding Graph/Chart)
Table 147: Asia-Pacific 14-Year Perspective for Heat Exchangers by Geographic Region
Percentage Breakdown of Dollar Sales for China and Rest of Asia-Pacific Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 148: Asia-Pacific Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 149: Asia-Pacific Historic Review for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 150: Asia-Pacific 14-Year Perspective for Heat Exchangers by Product Group Segment
Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 151: Asia-Pacific Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 152: Asia-Pacific Historic Review for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 153: Asia-Pacific 14-Year Perspective for Heat Exchangers by End-Use Segment
Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

5a. CHINA
A. Market Analysis
Outlook
Chinese Market Outlook
Governmental Initiatives to Drive Growth
Rising Focus on Energy Saving, Environmentally Friendly Technology
Key Statistical Data
Table 154: Chinese Plate Heat Exchangers Market (2015): Percentage Share Breakdown of Revenues for Domestic Manufacturers and International Manufacturers (includes corresponding Graph/Chart)
Strategic Corporate Developments
A Major Chinese Player
B. Market Analytics
Table 155: Chinese Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 156: Chinese Historic Review for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 157: Chinese 14-Year Perspective for Heat Exchangers by Product Group Segment
Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 158: Chinese Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2022 (includes corresponding Graph/Chart)
Table 159: Chinese Historic Review for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 160: Chinese 14-Year Perspective for Heat Exchangers by End-Use Segment
Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

5b. REST OF ASIA-PACIFIC
A. Market Analysis
Outlook
Product Launches
Strategic Corporate Developments
Select Players
B. Market Analytics
Table 161: Rest of Asia-Pacific Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 162: Rest of Asia-Pacific Historic Review for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 163: Rest of Asia-Pacific 14-Year Perspective for Heat Exchangers by Product Group Segment
Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 164: Rest of Asia-Pacific Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 165: Rest of Asia-Pacific Historic Review for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 166: Rest of Asia-Pacific 14-Year Perspective for Heat Exchangers by End-Use Segment
Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

6. LATIN AMERICA
A. Market Analysis
Outlook
B. Market Analytics
Table 167: Latin American Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 168: Latin American Historic Review for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 169: Latin American 14-Year Perspective for Heat Exchangers by Product Group Segment
Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 170: Latin American Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 171: Latin American Historic Review for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 172: Latin American 14-Year Perspective for Heat Exchangers by End-Use Segment
Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

7. REST OF WORLD
A. Market Analysis
Outlook
New Power Plant Projects to Provide Traction to South African Heat Exchangers Market
Corporate Development
B. Market Analytics
Table 173: Rest of World Recent Past, Current & Future Analysis for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 174: Rest of World Historic Review for Heat Exchangers by Product Group Segment
Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 175: Rest of World 14-Year Perspective for Heat Exchangers by Product Group Segment
Percentage Breakdown of Dollar Sales for Shell and Tube Heat Exchangers, Plate and Frame Heat Exchangers (Gasketed PHE, Welded PHE, Brazed PHE and Other PHE), Air Coolers, Cooling Towers and Other Heat Exchangers Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 176: Rest of World Recent Past, Current & Future Analysis for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 177: Rest of World Historic Review for Heat Exchangers by End-Use Segment
Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets Independently Analyzed with Annual Sales in US$ Thousand for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 178: Rest of World 14-Year Perspective for Heat Exchangers by End-Use Segment
Percentage Breakdown of Dollar Sales for Chemicals Industry, Oil & Gas, HVAC and Refrigeration, Food and Beverage, Power Generation and Other End-Use Sectors Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

IV. COMPETITIVE LANDSCAPE
Total Companies Profiled: 440 (including Divisions/Subsidiaries 493)
United States (112)
Canada (13)
Japan (7)
Europe (267)
- France (14)
- Germany (53)
- The United Kingdom (42)
- Italy (50)
- Spain (7)
- Rest of Europe (101)
Asia-Pacific (Excluding Japan) (79)
Latin America (1)
Africa (1)
Middle East (13)

Ordering:
Order Online - http://www.researchandmarkets.com/reports/347951/
Order by Fax - using the form below
Order by Post - print the order form below and send to
Research and Markets,
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct and select the format(s) you require.

Product Name: Heat Exchangers - Global Strategic Business Report
Web Address: http://www.researchandmarkets.com/reports/347951/
Office Code: SC2GZY45

Product Formats
Please select the product formats and quantity you require:

<table>
<thead>
<tr>
<th>Format Description</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic (PDF) - Single User:</td>
<td>□</td>
<td>USD 4950</td>
</tr>
<tr>
<td>Electronic (PDF) - 1 - 5 Users:</td>
<td>□</td>
<td>USD 6930</td>
</tr>
<tr>
<td>Electronic (PDF) - 1 - 10 Users:</td>
<td>□</td>
<td>USD 9405</td>
</tr>
<tr>
<td>Electronic (PDF) - 1 - 15 Users:</td>
<td>□</td>
<td>USD 11880</td>
</tr>
</tbody>
</table>

* The price quoted above is only valid for 30 days. Please submit your order within that time frame to avail of this price as all prices are subject to change.

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title:    | Mr □  Mrs □  Dr □  Miss □  Ms □  Prof □
First Name: | ____________________________ | Last Name: | ____________________________
Email Address: * | ____________________________
Job Title: | ____________________________
Organisation: | ____________________________
Address: | ____________________________
City: | ____________________________
Postal / Zip Code: | ____________________________
Country: | ____________________________
Phone Number: | ____________________________
Fax Number: | ____________________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card:  You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check:  Please post the check, accompanied by this form, to:
Research and Markets, Guinness Center, Taylors Lane, Dublin 8, Ireland.

☐ Pay by wire transfer:  Please transfer funds to:

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account number</td>
<td>833 130 83</td>
</tr>
<tr>
<td>Sort code</td>
<td>98-53-30</td>
</tr>
<tr>
<td>Swift code</td>
<td>ULSBIE2D</td>
</tr>
<tr>
<td>IBAN number</td>
<td>IE78ULSB98533083313083</td>
</tr>
<tr>
<td>Bank Address</td>
<td>Ulster Bank, 27-35 Main Street, Blackrock, Co. Dublin, Ireland.</td>
</tr>
</tbody>
</table>

If you have a Marketing Code please enter it below:

Marketing Code: __________________________________________________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:
(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World