Manganese - 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. Company profiles are primarily based on public domain information including company URLs.

This report analyzes the worldwide markets for Manganese in Metric Tons by the following Alloys and Compounds: Alloys (FeMn, SiMn, Refined FeMn, & Others), and Electrolytic Mn. The market is also analyzed by the following End-use Segments: Steel, Batteries, and Others.

The report profiles 97 companies including many key and niche players such as -

  Anglo American Plc
  Assmang Proprietary Ltd.
  Cegasa USA Inc.
  Compania Minera Autlan, S.A.B. De C.V
  Consolidated Minerals Limited

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
Manganese Alloys
Ferro Manganese (FeMn)
Silico-manganese (SiMn)
Refined FeMn
Electrolytic Managanese

II. EXECUTIVE SUMMARY
1. INDUSTRY OVERVIEW
Manganese
A Prelude
Receding Mn Demand in China Dampens Global Supply Demand Balance
Moderate Short-range Prospects for Global Steel Industry Sustains Mid-term Demand
Table 1: World Consumption of Finished Steel (2014 through 2020) (In Million Metric Tons) (includes corresponding Graph/Chart)
Developing Countries on the Growth Path
Stable Economic Outlook to Keep Market Sentiment Intact
Table 2: GDP Growth Rates in Select World Economies (2014-2016) (includes corresponding Graph/Chart)
Table 3: Global Manufacturing PMI for the Years 2010 through 2015 (includes corresponding Graph/Chart)
Manganese Pricing Dynamics
Table 4: World Average Price of Manganese Alloys: March 2014
March 2015 (In US$/tonne) (includes corresponding Graph/Chart)
Companies Resort to Plant Closures as Mn Prices Drop Further
Competitive Landscape
Table 5: Leading Players in the Global Manganese Ore Market (2014): Percentage Breakdown of Production for Anglo, ARM, BHP, Eramet, Vale, and Others (includes corresponding Graph/Chart)
High Grade Manganese Ores
Table 6: Leading Players in the Global High Grade Manganese Ores Market (2015): Percentage Breakdown of Sales for Assmang, South32 Limited, Eramet, Vale, and Others (includes corresponding Graph/Chart)
2. GROWTH DRIVERS, MARKET TRENDS & ISSUES

Steady Volume Growth in Automobile Production Bodes Well for Manganese Market

Opportunity Indicators

Table 7: World Production of Passenger Cars: Breakdown of Annual Production Figures in ‘000’ Units for Years 2014 & 2018 by Geographic Region/Country (includes corresponding Graph/Chart)

Table 8: World Production of Commercial Vehicles: Breakdown of Annual Production Figures in ‘000’ Units for Years 2014 & 2018 by Geographic Region/Country (includes corresponding Graph/Chart)

Demand for Lighter Weight Vehicles Drives Growth in AHSS Segment

Use of Mn in Twinning Induced Plasticity Steel Drives Market Expansion

Demand for Stainless Steel Sustains Growth in Manganese Market

Expanding Applications Drive Demand for Manganese Oxide

Ferro Manganese Market to Register Growth

Duplex Stainless Steel Drives Demand

Green Energy Boosts Demand for Electrolytic Manganese

Table 9: Worldwide Electrolytic Manganese Metal (EMM) Production (2014): Percentage Breakdown of Production Volume by Country

China and South Africa (includes corresponding Graph/Chart)

Growing Popularity of EVs to Benefit EMM Demand

Emerging End-Use Applications Drives Manganese Carbonate Market

Table 10: Global Manganese Carbonate Market (2014): Percentage Breakdown of Volume Share by End-Use Applications

Agrochemicals, Chemical Intermediates, Glaze Colorant and Others (includes corresponding Graph/Chart)

Increasing Global Demand for Batteries to Drive Demand

Austenitic Manganese Steel Finds Use in Railways

Issues

Manganese

The Darker Side

Health Issues Related to Manganese Toxicity

Tolerable Upper Intake Level for Manganese

Manganese-Based Gasoline Additive Concerns Auto Manufacturers

3. MANGANESE FACTS AND FIGURES

Worldwide Manganese Resources

Reserves

Table 11: Worldwide Manganese Reserves (2015): Breakdown of Total Deposit Volumes in Million Metric Tons by Country

South Africa, Ukraine, Australia, India, Brazil, China, Gabon and Other Countries (includes corresponding Graph/Chart)

Production Scenario


South Africa, Australia, China, Gabon, Brazil, India, Kazakhstan, Ukraine, Malaysia, Mexico, Burma and Other Countries (includes corresponding Graph/Chart)

Select Manganese Projects

Table 13: Global Manganese Ore Market (2013): Production in Million Metric Tons by Country

Australia, Brazil, China, Gabon, Ghana, South Africa, Ukraine, and Rest of World (includes corresponding Graph/Chart)

Manganese Ore Grades

Table 14: Global Mn High Grade (>44%) Market (2013): Percentage Breakdown of Production by Country (includes corresponding Graph/Chart)

Table 15: Global Mn Mid-Grade (>30% and <44%) Market (2013): Percentage Breakdown of Production by Country (includes corresponding Graph/Chart)

Table 16: Global Mn Low Grade (<30%) Market (2013): Percentage Breakdown of Production by Country (includes corresponding Graph/Chart)

Mn Alloys Production Stats

Table 17: Global Mn ALLOY Production by Type (2013 & 2014) (In Million Metric Tons) (includes corresponding Graph/Chart)

Table 18: World SilicoManganese Market (2014): Percentage Breakdown of Production by Region/Country (includes corresponding Graph/Chart)

Table 19: World Refined Manganese Market (2014): Percentage Breakdown of Production by Region/Country (includes corresponding Graph/Chart)
Table 20: World High-Carbon Ferromanganese (HCFeMn) Market (2014): Percentage Breakdown of Production by Country (includes corresponding Graph/Chart)

4. TRADE SCENARIO

Exports
- Table 21: Global Exports of Manganese Ores and Concentrates (2014): Percentage Share Breakdown of Exports Value by Country (includes corresponding Graph/Chart)
- Table 22: Global Exports of Manganese Oxides (2014): Percentage Share Breakdown of Exports Value by Country (includes corresponding Graph/Chart)
- Table 23: Global Exports of Manganese Dioxides (2014): Percentage Share Breakdown of Exports Value by Country (includes corresponding Graph/Chart)
- Table 24: Global Exports of High Carbon Ferro Manganese (HC FeMn) for 2014: Percentage Share Breakdown of Exports Value by Country (includes corresponding Graph/Chart)
- Table 25: Global Exports of Ferro-Silico-Manganese (2014): Percentage Share Breakdown of Exports Value by Country (includes corresponding Graph/Chart)

Imports
- Table 26: Global Imports of Manganese Ores and Concentrates (2014): Percentage Share Breakdown of Imports Value by Country (includes corresponding Graph/Chart)
- Table 27: Global Imports of Manganese Oxides (2014): Percentage Share Breakdown of Imports Value by Country (includes corresponding Graph/Chart)
- Table 28: Global Imports of Manganese Dioxide (2014): Percentage Share Breakdown of Imports Value by Country (includes corresponding Graph/Chart)
- Table 29: Global Imports of High Carbon Ferro Manganese (HC FeMn) (2014): Percentage Share Breakdown of Imports Value by Country (includes corresponding Graph/Chart)
- Table 30: Global Imports of Ferro-Silico-Manganese (2014): Percentage Share Breakdown of Imports Value by Country (includes corresponding Graph/Chart)

5. PRODUCT OVERVIEW

- Manganese
  - A Definition
  - Chemical and Physical Characteristics of Manganese and Select Manganese Compounds
  - Applications of Manganese
  - History
  - Ore and Concentrates
  - Forms of Mn Consumption
  - Manganese Alloys
  - Ferro Manganese (FeMn)
  - Silico-manganese (SiMn)
  - Refined FeMn
  - Grades of Ferromanganese: An Overview
  - Others
  - Electrolytic Manganese

6. STEEL INDUSTRY

- A MAJOR END-USER OF MANGANESE
  - Steel Industry Accounts for Lion's Share
  - Table 31: World Steel Demand (2014): Percentage Breakdown of End-Use Sector
    - Construction, Mechanical Engineering, Metal Goods, Automotive, Oil & Gas, Electrical Engineering and Others (includes corresponding Graph/Chart)
  - Steel Industry
    - Key Facts & Figures
    - Global Steel Production
    - Steel Production on a Downward Spiral
    - Table 32: World Crude Steel Production (2005-2015) in Million Tons (includes corresponding Graph/Chart)
    - Table 33: Global Crude Steel Market (2013, 2014, and 2015): Breakdown of Volume Production (in Million Tonnes) by Country (includes corresponding Graph/Chart)
    - Table 34: World Crude Steel Market (2015): Percentage Breakdown of Production by Region (includes corresponding Graph/Chart)
    - Imports/Exports Scenario
    - Table 35: World Steel Exports Scenario (2014): Breakdown of Exports by Leading Exporting Countries (includes corresponding Graph/Chart)
    - Table 36: World Steel Imports Scenario (2014): Breakdown of Imports by Leading Importing Countries (includes corresponding Graph/Chart)
Table 37: World Finished Steel Market (2014): Percentage Breakdown of Production by Category (includes corresponding Graph/Chart)
Use of Manganese in Construction Steel Benefits Growth
Manganese in Steelmaking
Role of Manganese in the Steel Industry
Table 38: Classification of Steel Based on Mn Content (includes corresponding Graph/Chart)
Carbon Steel
Use of Manganese in Engineering Steel
High-Strength Low-Alloy Steel
Austenitic Manganese Steel
Stainless Steel

7. OTHER END-USE APPLICATIONS
Batteries
Chemicals Applications
Use of Manganese for Other Metallurgies
Aluminum
Copper
Other Metals
MMT
Manganese Based Fuel Additive
Medical Applications
Adequate Intake for Manganese
Role of Manganese in Wound Healing
Manganese Deficiency Leads to Several Diseases
Polysaccharide Krestin Found to Improve MnSOD Activity
Manganese as a Micronutrient in Agriculture
Commercial Fertilizers Comprising Manganese
Animal Feed Grade Manganese Products

8. RECENT INDUSTRY ACTIVITY
Consolidated Minerals Freezes Operations at Woodie Woodie Manganese Mine
Carus CARUSOL® Liquid Permanganate Secures Certification for Drinking Water Applications
Brazil Manganese Corporation Reports Sales of 7,500 Tonnes of Manganese Mineral Products
South32 Set to Undertake Major Restructuring and Minimize Cash Costs
Autilán Indefinitely Shuts Down Operations at its Gómez Palacio Plant
American Manganese Inks Finder's Fee Agreement With CPM Group for Licensing Hydrometallurgical Process
American Manganese Inks NDA Agreement with Critical Materials Institute
3M and LG Chem Ink Patent License Agreement for Use of NMC Cathode Materials in Li-On Battery
Ferrex to Develop Nayega Manganese Project by Using Funds from its Acquisition of Chaffers Mining
Star Minerals Extends MOU with Cooperative Mineral Resources
South32 Delays Restarting Three of the Four Deployed HCFeMn Furnaces at Metalloys Manganese Alloy Facility
Excalibur Mining and Pinto Minerals Acquires Majority Stake in a Manganese Deposit
OM Holdings Limited Halts Operations at its Bootu Creek Manganese Project Facility
BHPB to Demerge Aluminium, Coal, Manganese, Nickel & Silver Assets into New Company
Star materials inks MOU with Octopus Technologies and Cooperative Mineral Resources
Otojondou Mining in Purchase Contract with Noble Resources for Selling Manganese Ore
Geovic Mining Agrees to Extend Agreement with Jiangxi Rare Metals Tungsten Holdings Group Company
American Manganese SECURES Patent for its Proprietary Manganese Recovery Process
Outotec Enters into Operation and Maintenance Service Contract with Kalagadi Manganese
American Manganese to Focus on Adoption of Chemical Manganese Dioxide Process
Cancana Takes Control of Eletroligas Ltda’s manganese Processing Plant
Cancana Acquires Stake in Brazil Manganes Corporation
Glencore Xstrata Mulls Sale of ENRC Zhairem Assets
Zamanco Minerals Enters into Agreement with Jazzman Chikwakwa
JMS Divests Stake in Oakover Manganese Project
Japan Oil, Gas and Metals Inks Contract with ISA
Gulf Minerals to Establish Alloy Smelter Unit
Adhunik Group to Sell Minority Stake in Orissa Manganese and Minerals
African Compass International Investments to Take Over Gabon JV Manganese and Niobium Assets
Brighton Mining to Acquire Asia Minerals Corporation
Valmont Industries Decreases Investment in Delta EMD
Tata Steel Introduces Ferro Chrome and Ferro Manganese Brands
Honeywell Launches Novel Copper Manganese Sputtering Targets

9. FOCUS ON SELECT GLOBAL PLAYERS
Anglo American Plc (UK)
Assmang Proprietary Ltd. (South Africa)
Cegasa USA Inc. (USA)
Compania Minera Autlan, S.A.B. De C.V. (Mexico)
Consolidated Minerals Limited (Australia)
ERACHEM Comilog Inc (USA)
Eramet SA (France)
Eurasian Natural Resources Corporation Limited (UK)
Gulf Manganese Corporation Limited (Australia)
Manganese Metal Company (South Africa)
Mesa Minerals Limited (Australia)
MOIL Limited (India)
Nippon Denko Company Ltd. (Japan)
OM Holdings Ltd (Australia)
South32 Limited (Australia)
Vale (Brazil)
Xiangtan Electrochemical Scientific Ltd. (China)

10. GLOBAL MARKET PERSPECTIVE
Table 39: World Recent Past, Current & Future Analysis for Manganese by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 40: World Historic Review for Manganese by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 41: World 14-Year Perspective for Manganese by Geographic Region
Percentage Breakdown of Volume Consumption 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)
Manganese Alloys
Table 42: World Recent Past, Current & Future Analysis for Manganese Alloys by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 43: World Historic Review for Manganese Alloys by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 44: World 14-Year Perspective for Manganese Alloys by Geographic Region
Percentage Breakdown of Volume Consumption 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 45: World Recent Past, Current & Future Analysis for Manganese Alloys by Product Segment
Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 46: World Historic Review for Manganese Alloys by Product Segment
Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 47: World 14-Year Perspective for Manganese Alloys by Product Segment
Percentage Breakdown of Volume Consumption for Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 48: World Recent Past, Current & Future Analysis for Ferro Manganese Alloy by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 49: World Historic Review for Ferro Manganese Alloy by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 50: World 14-Year Perspective for Ferro Manganese Alloy by Geographic Region
Percentage Breakdown of Volume Consumption 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 51: World Recent Past, Current & Future Analysis for Silico Manganese Alloy by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 52: World Historic Review for Silico Manganese Alloy by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 53: World 14-Year Perspective for Silico Manganese Alloy by Geographic Region
Percentage Breakdown of Volume Consumption 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 54: World Recent Past, Current & Future Analysis for Refined Ferro Manganese Alloy by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 55: World Historic Review for Refined Ferro Manganese Alloy by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 56: World 14-Year Perspective for Refined Ferro Manganese Alloy by Geographic Region
Percentage Breakdown of Volume Consumption 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 57: World Recent Past, Current & Future Analysis for Other Manganese Alloys by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 58: World Historic Review for Other Manganese Alloys by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 59: World 14-Year Perspective for Other Manganese Alloys by Geographic Region
Percentage Breakdown of Volume Consumption 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 60: World Recent Past, Current & Future Analysis for Electrolytic Manganese by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 61: World Historic Review for Electrolytic Manganese by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 62: World 14-Year Perspective for Electrolytic Manganese by Geographic Region
Percentage Breakdown of Volume Consumption 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)
End-Use Segments
Table 63: World Recent Past, Current & Future Analysis for Manganese in Steel Production by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 64: World Historic Review for Manganese in Steel Production by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 65: World 14-Year Perspective for Manganese in Steel Production by Geographic Region
Percentage Breakdown of Volume Consumption 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 66: World Recent Past, Current & Future Analysis for Manganese in Batteries Production by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 67: World Historic Review for Manganese in Batteries Production by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 68: World 14-Year Perspective for Manganese in Batteries Production by Geographic Region
Percentage Breakdown of Volume Consumption 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 69: World Recent Past, Current & Future Analysis for Manganese in Other Applications by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 70: World Historic Review for Manganese in Other Applications by Geographic Region
US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Latin America and Rest of World Markets
Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 71: World 14-Year Perspective for Manganese in Other Applications by Geographic Region
Percentage Breakdown of Volume Consumption 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)
III. MARKET
1. THE UNITED STATES
A. Market Analysis
Outlook
Market Overview
Product Matrix of Leading Producers of Manganese Products in the US
Table 72: US Consumption of Manganese by End-Use Sector (2015E): Percentage Share Breakdown by End-Use (includes corresponding Graph/Chart)
A Review of the US Steel Industry
Turnaround in Construction Sector to Bode Well for the Market
Table 73: Residential Construction in the US (2007-2015): Number of Housing Starts by Type Single-Family Units and Multi-Family Units (in '000) (includes corresponding Graph/Chart)
Recovery in the US Automobile Sector Supports Market Prospects for Steel, Bodes Well for Manganese Market
Table 74: US Vehicle Production (2007-2014) (in Million Units) (includes corresponding Graph/Chart)
Import/Export Scenario
Table 75: US Imports of Manganese Ores and Concentrates (2015): Percentage Share Breakdown by Country of Origin (includes corresponding Graph/Chart)
Table 76: US Exports of Manganese Ores and Concentrates (2015): Percentage Share Breakdown by Destination Country (includes corresponding Graph/Chart)
Table 77: US Imports of Manganese Ore, Ferromanganese and Siliconmanganese (2011-2015): Export Value in US$ Million (includes corresponding Graph/Chart)
Table 78: US Imports of Manganese Oxides (2015): Percentage Share Breakdown by Country of Origin (includes corresponding Graph/Chart)
Table 79: US Exports of Manganese Oxides (2015): Percentage Share Breakdown of Value Exports by
Destination Country (includes corresponding Graph/Chart)
Table 80: US Imports of Ferromanganese (High Carbon) (2015): Percentage Share Breakdown of Value Imports by Country of Origin (includes corresponding Graph/Chart)
Table 81: US Exports of Ferromanganese (High Carbon) (2015): Percentage Share Breakdown of Value Exports by Destination Country (includes corresponding Graph/Chart)
Table 82: US Imports of Ferro-Silico-Manganese (2015): Percentage Share Breakdown of Value Imports by Country of Origin (includes corresponding Graph/Chart)
Table 83: US Exports of Ferro-Silico-Manganese (2015): Percentage Share Breakdown of Value Exports by Destination Country (includes corresponding Graph/Chart)
Table 84: US Imports of Manganese Dioxide (2015): Percentage Share Breakdown of Value Imports by Country of Origin (includes corresponding Graph/Chart)
Table 85: US Exports of Manganese Dioxide (2015): Percentage Share Breakdown of Value Exports by Destination Country (includes corresponding Graph/Chart)

Strategic Corporate Developments
Select Key Players
B. Market Analytics
Table 86: US Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 87: US Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 88: US 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 89: US Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 90: US Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 91: US 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

2. CANADA
A. Market Analysis
Outlook
Import-Export Scenario
Table 92: Canadian Imports of Manganese Ores and Concentrates (2015): Percentage Share Breakdown of Value Imports by Country of Origin (includes corresponding Graph/Chart)
Table 93: Canadian Exports of Manganese Ores and Concentrates (2015): Percentage Share Breakdown of Value Exports by Destination Country
Table 94: Canadian Imports of Manganese Oxides (2015): Percentage Share Breakdown of Value Imports by Country of Origin (includes corresponding Graph/Chart)
Table 95: Canadian Exports of Manganese Oxides (2015): Percentage Share Breakdown of Value Exports by Destination Country
Table 96: Canadian Imports of Ferromanganese (High Carbon) (2015): Percentage Share Breakdown of Value Imports by Country of Origin (includes corresponding Graph/Chart)
Table 97: Canadian Exports of Ferromanganese (High Carbon) (2015): Percentage Share Breakdown of Value Exports by Destination Country (includes corresponding Graph/Chart)
Table 98: Canadian Imports of Ferro-Silico-Manganese (2015): Percentage Share Breakdown of Value Imports by Country of Origin (includes corresponding Graph/Chart)
Table 99: Canadian Exports of Ferro-Silico-Manganese (2015): Percentage Share Breakdown of Value Exports by Destination Country (includes corresponding Graph/Chart)
Table 100: Canadian Imports of Manganese Dioxide (2014): Percentage Share Breakdown of Value Imports by Country of Origin (includes corresponding Graph/Chart)
Table 101: Canadian Exports of Manganese Dioxide (2014): Percentage Share Breakdown of Value Exports by Destination Country (includes corresponding Graph/Chart)

Strategic Corporate Developments
B. Market Analytics

Table 102: Canadian Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 103: Canadian Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 104: Canadian 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy,
Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016
& 2022 (includes corresponding Graph/Chart)
Table 105: Canadian Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 106: Canadian Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 107: Canadian 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016
& 2022 (includes corresponding Graph/Chart)

3. JAPAN

A. Market Analysis
Outlook

Strategic Corporate Development
Select Key Player

B. Market Analytics

Table 108: Japanese Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 109: Japanese Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 110: Japanese 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy,
Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016
& 2022 (includes corresponding Graph/Chart)
Table 111: Japanese Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 112: Japanese Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 113: Japanese 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016
& 2022 (includes corresponding Graph/Chart)

4. EUROPE

A. Market Analysis
Outlook

Moderate Outlook for Steel Production Buys Mn Demand
Steady Recovery of Construction Activity Augurs Well for Manganese Market

Import-Export Scenario

Table 114: EU 28 Imports of Manganese Ores and Concentrates (2014): Percentage Share Breakdown of
Value Imports by Country of Origin (includes corresponding Graph/Chart)
Table 115: EU 28 Exports of Manganese Ores and Concentrates (2014): Percentage Share Breakdown of
Value Exports by Destination Country (includes corresponding Graph/Chart)
Table 116: EU 28 Imports of Ferro-Alloys (2014): Percentage Share Breakdown of Value Imports by Country
of Origin (includes corresponding Graph/Chart)
Table 117: EU 28 Exports of Ferro-Alloys (2014): Percentage Share Breakdown of Value Exports by Destination Country (includes corresponding Graph/Chart)
Table 118: EU 28 Exports of Ferromanganese (High Carbon) (2014): Percentage Share Breakdown of Value Exports by Destination Country (includes corresponding Graph/Chart)
Table 119: EU 28 Imports of Ferromanganese (High Carbon) (2014): Percentage Share Breakdown of Value Imports by Country of Origin (includes corresponding Graph/Chart)
Table 120: EU 28 Exports of Manganese Oxides (2014): Percentage Share Breakdown of Value Exports by Destination Country (includes corresponding Graph/Chart)
Table 121: EU 28 Imports of Manganese Oxides (2014): Percentage Share Breakdown of Value Imports by Country of Origin (includes corresponding Graph/Chart)
Table 122: EU 28 Exports of Manganese Dioxide (2014): Percentage Share Breakdown of Value Exports by Destination Country (includes corresponding Graph/Chart)
Table 123: EU 28 Imports of Manganese Dioxide (2014): Percentage Share Breakdown of Value Imports by Country of Origin (includes corresponding Graph/Chart)

B. Market Analytics

Table 124: European Recent Past, Current & Future Analysis for Manganese by Geographic Region
France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 125: European Historic Review for Manganese by Geographic Region
France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 126: European 14-Year Perspective for Manganese by Geographic Region
Percentage Breakdown of Volume Consumption for France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 127: European Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 128: European Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 129: European 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 130: European Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 131: European Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 132: European 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

4a. FRANCE

A. Market Analysis

Outlook
Eramet SA
A Key Player

B. Market Analytics

Table 133: French Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 134: French Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 135: French 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016
& 2022 (includes corresponding Graph/Chart)
Table 136: French Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 137: French Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 138: French 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

4b. GERMANY
Market Analysis
Table 139: German Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 140: German Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 141: German 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy,
Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 142: German Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 143: German Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 144: German 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

4c. ITALY
Market Analysis
Table 145: Italian Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 146: Italian Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 147: Italian 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy,
Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 148: Italian Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 149: Italian Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 150: Italian 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

4d. THE UNITED KINGDOM
A. Market Analysis
Outlook
Select Key Players
B. Market Analytics

Table 151: UK Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 152: UK Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 153: UK 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy,
Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016
& 2022 (includes corresponding Graph/Chart)

Table 154: UK Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 155: UK Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 156: UK 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016
& 2022 (includes corresponding Graph/Chart)

4e. SPAIN
Market Analysis

Table 157: Spanish Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 158: Spanish Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 159: Spanish 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy,
Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016
& 2022 (includes corresponding Graph/Chart)

Table 160: Spanish Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 161: Spanish Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 162: Spanish 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016
& 2022 (includes corresponding Graph/Chart)

4f. RUSSIA
A. Market Analysis
Outlook
Market Overview
Russia to Face Deficit in Demand and Supply of Silico-Manganese
Drop in Steel Markets to Impact Mn Demand
Table 163: Crude Steel production in Russia (2009-2015) (In Thousand Tons) (includes corresponding
Graph/Chart)

B. Market Analytics
Table 164: Russian Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 165: Russian Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 166: Russian 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 167: Russian Recent Past, Current & Future Analysis for Manganese by End-Use Segment Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 168: Russian Historic Review for Manganese by End-Use Segment Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 169: Russian 14-Year Perspective for Manganese by End-Use Segment Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

4g. REST OF EUROPE
A. Market Analysis
  Outlook
  Turkey
  A Potential Steel Producer
  Manganese Production in Ukraine
Table 170: Ukraine Manganese Production in Metric Tons for the Year 2012 through 2015 (includes corresponding Graph/Chart)
  Ukraine
  Emerging as a Leading Steel Producing Nation
  Strategic Corporate Development
  Select Key Players
  B. Market Analytics
  Table 171: Rest of Europe Recent Past, Current & Future Analysis for Manganese by Product Segment Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
  Table 172: Rest of Europe Historic Review for Manganese by Product Segment Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Anlyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
  Table 173: Rest of Europe 14-Year Perspective for Manganese by Product Segment Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
  Table 174: Rest of Europe Recent Past, Current & Future Analysis for Manganese by End-Use Segment Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
  Table 175: Rest of Europe Historic Review for Manganese by End-Use Segment Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
  Table 176: Rest of Europe 14-Year Perspective for Manganese by End-Use Segment Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

5. ASIA-PACIFIC
A. Market Analysis
  Outlook
  B. Market Analytics
  Table 177: Asia-Pacific Recent Past, Current & Future Analysis for Manganese by Geographic Region China, India and Rest of Asia-Pacific Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
  Table 178: Asia-Pacific Historic Review for Manganese by Geographic Region -China, India and Rest of Asia-Pacific Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
  Table 179: Asia-Pacific 14-Year Perspective for Manganese by Geographic Region Percentage Breakdown of Volume Consumption for China, India and Rest of Asia-Pacific Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 180: Asia-Pacific Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 181: Asia-Pacific Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 182: Asia-Pacific 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 183: Asia-Pacific Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 184: Asia-Pacific Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 185: Asia-Pacific 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

5a. CHINA
A. Market Analysis
Outlook
Market Overview
Slowdown Construction Sector Impacts Steel Demand
Table 186: Residential Construction Sales Growth (in %) in China: 2007-2015 (includes corresponding
Graph/Chart)
Steel Production Cutbacks Impede Mn Demand
Table 187: Crude Steel Production in China (2007-2015) (in Million Metric Tons) (includes corresponding
Graph/Chart)
Table 188: Crude Steel Production in China (2007-2016) (% YoY Growth) (includes corresponding
Graph/Chart)
Mn Inventory Piles Up as Steel Production Slows down
Table 189: Chinese Manganese Production in Metric Tons for the Year 2012 through 2015 (includes
corresponding Graph/Chart)
Import Scenario
Table 190: Chinese Imports of Manganese Ore (2014): Percentage Share Breakdown of Value Imports by
Country of Origin (includes corresponding Graph/Chart)
Table 191: Chinese Imports of Manganese Ore (2011-2014): Export Volume in '000 MT (includes
corresponding Graph/Chart)
Strategic Corporate Development
Select Key Players
B. Market Analytics
Table 192: Chinese Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 193: Chinese Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 194: Chinese 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 195: Chinese Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 196: Chinese Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 197: Chinese 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

5b. INDIA
A. Market Analysis
   Outlook
   Market Overview
   Competition
Table 198: Leading Players in Indian Manganese Ore Market (2014): Percentage Share Breakdown of Volume Production of Major Players (includes corresponding Graph/Chart)
   Indial Steel Industry
   An Overview
   Key Statistics
Table 199: Indian Production of Manganese Ore in Million Tons for the Period 2010-2015 (includes corresponding Graph/Chart)
Table 200: Indian Manganese Market (2014): Percentage Breakdown of Production of Manganese Ore by Region (includes corresponding Graph/Chart)
   Ferro-Manganese
Table 201: Indian Exports of Ferro Manganese in US$ Million for the Period 2010-2014 (includes corresponding Graph/Chart)
Table 202: Indian Imports of Ferro Manganese in US$ Million for the Period 2010-2014 (includes corresponding Graph/Chart)
   Strategic Corporate Developments
   Select Key Players
B. Market Analytics
Table 203: Indian Recent Past, Current & Future Analysis for Manganese by Product Segment
   Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 204: Indian Historic Review for Manganese by Product Segment
   Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 205: Indian 14-Year Perspective for Manganese by Product Segment
   Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 206: Indian Recent Past, Current & Future Analysis for Manganese by End-Use Segment
   Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 207: Indian Historic Review for Manganese by End-Use Segment
   Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 208: Indian 14-Year Perspective for Manganese by End-Use Segment
   Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

5c. REST OF ASIA-PACIFIC
A. Market Analysis
   Review of Select Markets
   Kazakhstan
   Australia
   Production Scenario
Table 209: Australian Manganese Production in Metric Tons for the Year 2012 through 2015 (includes corresponding Graph/Chart)
   Indonesia
   Strategic Corporate Developments
   Select Key Players
B. Market Analytics
Table 210: Rest of Asia-Pacific Recent Past, Current & Future Analysis for Manganese by Product Segment
   Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for
Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 211: Rest of Asia-Pacific Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 212: Rest of Asia-Pacific 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 213: Rest of Asia-Pacific Recent Past, Current & Future Analysis for Manganese by Product Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 214: Rest of Asia-Pacific Historic Review for Manganese by Product Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 215: Rest of Asia-Pacific 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

Table 216: Latin American Crude Steel Market (2014): Percentage Breakdown of Production by Country (includes corresponding Graph/Chart)

Table 217: Latin American Recent Past, Current & Future Analysis for Manganese by Geographic Region
Brazil, Mexico and Rest of Latin America Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 218: Latin American Historic Review for Manganese by Geographic Region -Brazil, Mexico and Rest of Latin American Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 219: Latin American 14-Year Perspective for Manganese by Geographic Region
Percentage Breakdown of Volume Consumption for Brazil, Mexico and Rest of Latin American Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 220: Latin American Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 221: Latin American Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 222: Latin American 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 223: Latin American Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 224: Latin American Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 225: Latin American 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

6a. BRAZIL
A. Market Analysis
Outlook
Manganese Market Overview
Table 226: Brazilian Manganese Production in Metric Tons for the Years 2012 through 2015 (includes corresponding Graph/Chart)
Steel Market
A Brief Overview
Strategic Corporate Development
Vale
A Key Player
B. Market Analytics
Table 227: Brazilian Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 228: Brazilian Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 229: Brazilian 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 230: Brazilian Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 231: Brazilian Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 232: Brazilian 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

6b. MEXICO
A. Market Analysis
Outlook
Compania Minera Autlan, S.A.B. De C.V.
A Key Player
B. Market Analytics
Table 233: Mexican Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 234: Mexican Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 235: Mexican 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
Table 236: Mexican Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)
Table 237: Mexican Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)
Table 238: Mexican 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

6c. REST OF LATIN AMERICA
A. Market Analysis
Outlook
Strategic Corporate Development
B. Market Analytics
Table 239: Rest of Latin America Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys),
and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 240: Rest of Latin America Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 241: Rest of Latin America 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

Table 242: Rest of Latin America Recent Past, Current & Future Analysis for Manganese by Product Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 243: Rest of Latin America Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 244: Rest of Latin America 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

7. REST OF WORLD
A. Market Analysis
Outlook
Overview of Select Markets
Construction Boom in Middle East Fuels Steel Demand, Augurs Well for Manganese Market
Table 245: Construction Projects in GCC: Breakdown of Contractor Award Value in US$ Billion for Infrastructure and Building by Country (2014) (includes corresponding Graph/Chart)
Steel Production in GCC Gathers Pace
Saudi Arabia to Emerge As Major Crude Steel Producer
South Africa
Leading Producer of Manganese
Production Scenario
Table 246: South African Manganese Production in Metric Tons for the Year 2012 through 2015 South African Production Constrained by Infrastructure Deficiencies (includes corresponding Graph/Chart)

South African Production Constrained by Infrastructure Deficiencies
Gabon
Table 247: Gaban Manganese Production in Metric Tons for the Year 2012 through 2015 (includes corresponding Graph/Chart)
Strategic Corporate Developments
Key Players
B. Market Analytics
Table 248: Rest of World Recent Past, Current & Future Analysis for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 249: Rest of World Historic Review for Manganese by Product Segment
Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 250: Rest of World 14-Year Perspective for Manganese by Product Segment
Percentage Breakdown of Volume Consumption for Alloys (Ferro Manganese Alloy, Silico Manganese Alloy, Refined Ferro Manganese Alloy, and Other Alloys), and Electrolytic Manganese Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)

Table 251: Rest of World Recent Past, Current & Future Analysis for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2015 through 2022 (includes corresponding Graph/Chart)

Table 252: Rest of World Historic Review for Manganese by End-Use Segment
Steel, Batteries and Other Markets Independently Analyzed with Annual Consumption in Metric Tons for Years 2009 through 2014 (includes corresponding Graph/Chart)

Table 253: Rest of World 14-Year Perspective for Manganese by End-Use Segment
Percentage Breakdown of Volume Consumption for Steel, Batteries and Other Markets for Years 2009, 2016 & 2022 (includes corresponding Graph/Chart)
IV. COMPETITIVE LANDSCAPE Total Companies Profiled: 97 (including Divisions/Subsidiaries 104)
The United States (7)
Canada (3)
Japan (8)
Europe (16)
- France (1)
- Germany (1)
- The United Kingdom (3)
- Spain (2)
- Rest of Europe (9)
Asia-Pacific (Excluding Japan) (53)
Latin America (4)
Africa (13)

Order by Fax - using the form below
Order by Post - print the order form below and send to
Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
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: Manganese - Global Strategic Business Report
Web Address: http://www.researchandmarkets.com/reports/338730/
Office Code: SCPLIRLY

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

<table>
<thead>
<tr>
<th>Format</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic (PDF)</td>
<td>Single User:</td>
<td>USD 4500</td>
</tr>
<tr>
<td>Electronic (PDF)</td>
<td>1 - 5 Users:</td>
<td>USD 6300</td>
</tr>
<tr>
<td>Electronic (PDF)</td>
<td>1 - 10 Users:</td>
<td>USD 8550</td>
</tr>
<tr>
<td>Electronic (PDF)</td>
<td>1 - 15 Users:</td>
<td>USD 10800</td>
</tr>
</tbody>
</table>

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:
Account number 833 130 83
Sort code 98-53-30
Swift code ULSBIE2D
IBAN number IE78ULSB98533083313083
Bank Address Ulster Bank,
27-35 Main Street,
Blackrock,
Co. Dublin,
Ireland.

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