

Industrial and Specialty Gases: Market Research Report

<https://marketpublishers.com/r/I41569864ACEN.html>

Date: March 2012

Pages: 504

Price: US\$ 4,500.00 (Single User License)

ID: I41569864ACEN

Abstracts

This report analyzes the worldwide markets for Industrial and Specialty Gases in billion cubic feet by the following Product Segments: Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and Others.

The report provides separate comprehensive analytics for the US, Canada, Japan, Europe, Asia-Pacific, Middle East, and Latin America.

Annual estimates and forecasts are provided for the period 2009 through 2017.

Also, a six-year historic analysis is provided for these markets.

The report profiles 82 companies including many key and niche players such as Air Liquide, American Air Liquide Holdings, Inc., Air Products and Chemicals, Inc., Airgas, Inc., Praxair, Inc., Taiyo Nippon Sanso Corporation, and The Linde Group.

Market data and analytics are derived from primary and secondary research.

Company profiles are primarily based upon search engine sources in the public domain.

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

Acetylene

Argon

Carbon Dioxide

Hydrogen

Nitrogen

Oxygen

Other Industrial and Specialty Gases

II. EXECUTIVE SUMMARY 1. INDUSTRY OVERVIEW

Upbeat Outlook for Industrial and Specialty Gases

Table 1. World Recent Past, Current & Future Analysis for Industrial and Specialty Gases Analyzed - Annual Sales Figures in US\$ Million for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 2. World Historic Review for Industrial and Specialty Gases Analyzed - Annual Sales Figures in US\$ Million for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Opportunities in Store: A Synopsis

Impact of Recession in Retrospect

Industry Fundamentals

Key Input in Majority of Industrial Processes

Relatively Stable

Demand Grows at Premium to GDP

Highly Capital-Intensive

High Barriers to Entry

Limited International/National Trade

Differentiation by Service/Application/Price
Highly Innovative Industry
New Applications are Vital
Potential New Applications
Hydrogen as an Alternative Fuel
High-Pressure Jet Cleaning Using Dry Ice Pellets of CO₂
Neutralization of Alkaline Wastewater with Carbon Dioxide

2.MARKET TRENDS

Changing Paradigms for Growth: The Two H Engine
Increasing Investments, New Applications and Outsourcing – Accelerate Growth
Need for Containing Costs Sparks New Demand
Higher Capital Investments Limit The Profitability
Increasing Capacity Utilization Absorbs Idle Capacity
Environmental Applications Driving Growth
Investments Continue Despite Economic Slouch
Industrial Gases en route the Developing Economies
Market Maturity Doesn't Bar New Growth
The BOC Take over Fiasco: Axing the Industry's Consolidation Spirit
Feeble Pricing Flattens the Liquid Gases Market
Liquid Nitrogen Market Softens
Outsourcing Industrial Gases is a Growing Trend
Onsite Gas Generators: One Time Investment for on Time Supply
Companies Initiate Value Added Services
Scrubbing in Petrochemicals
Sand-Jet Process
Test Gases
Water Ice and CO₂ Jets
Cooling Chemical Reactors
Drying Out Large Plants

3.COMPETITIVE SCENARIO

An Overview

Table 3. Leading Players in Global Market for Industrial and Specialty Gases (2010):
Percentage Breakdown of Dollar Sales for Air Liquide, The Linde Group, Praxair, Air

Products, TNSC, Airgas and Others (includes corresponding Graph/Chart)

Table 4. Leading Players in Global Market for Packaged Gas (2010): Percentage Breakdown of Dollar Sales for Airgas, Praxair PDI, Matheson Tri-Gas, Air Liquide, Linde and Others (includes corresponding Graph/Chart)

Focus on Key Growth Strategies

Industry Vibes in Quest for Profitability

Reinforcing the Core Competencies

Trend Towards Globalization in the Industrial Gases Industry

Consolidation: A Solid Industrial Growth Strategy

The Linde Group Breaks the Shackles

Competing Globally and Co-operating Locally: The New Mantra for Survival

Smart Targeting Opportunities for Industrial Gas Companies

Competitors' Profiles

L' Air Liquide

Table 5. Leading Geographic Markets for L'Air Liquide (2008): Percentage Breakdown for Gas and Services Value Sales by Region - Europe, Americas, Asia-Pacific and Middle East & Africa (includes corresponding Graph/Chart)

Focusing on the Southeast Asian Markets

Strong Presence in the Electronics Market

Table 6. Leading End-Use Markets for L' Air Liquide (2008): Percentage Breakdown of Value Sales by Industrial Customer, Large Industries, Health Care and Electronics (includes corresponding Graph/Chart)

Proven Expertise in Non-Cryogenic Processes

The Linde Group

Strategic Positioning in Geographic Regions and Product Segments

Market Leader in Cylinder and Bulk Sales

Table 7. The Linde Group's Distribution Channel (2007) - Percentage Breakdown by Value Sales for Cylinders, Merchant/Bulk, Onsite and Healthcare (includes corresponding Graph/Chart)

Focus Towards High-Growth Gases

Table 8. Leading Gas Segments for The Linde Group (2007) - Percentage Breakdown by Value Sales for Healthcare, Hydrogen, Electronics and Other (includes corresponding Graph/Chart)

Key Player in Electronic Gases

Table 9. World Leaders in Electronic Gases (2009): Percentage Share Breakdown by Players—Air Products, Taiyo Nippon Sanso, Air Liquide, Linde, Praxair and Others (includes corresponding Graph/Chart)

Praxair

Industrial and Specialty Gases, Largest Volume Products
Major Market Position in Non-Cryogenic Market Technology
Sales Break-up

Table 10. Leading Geographic Markets for Praxair (2009): Percentage Breakdown for Value Sales by North America, South America, Europe, Asia-Pacific and Others (includes corresponding Graph/Chart)

Air Products and Chemicals

Non-Cryogenic Business to Provide Volume Growth in Future
Sales Break-up by Distribution Channel

Table 11. Air Products' Distribution Channels for Industrial Gases (2008): Percentage Breakdown by Value Sales for Onsite, Packages Gases & Specialty Materials, Liquid/Bulk and Equipment & Services (includes corresponding Graph/Chart)

Table 12. Leading End-Use Market for Air Products and Chemicals' (2008): Percentage Breakdown by Value Sales for Energy, Chemicals, General Manufacturing, Electronics, Metals, Medical, Food, and Others (includes corresponding Graph/Chart)

Airgas

The Hub-and-Spoke Strategy: The Key to Successful Business Expansion

Objective to be the Lowest Cost Supplier

4.A SEGMENTAL ANALYSIS

Table 13. Leading Companies in Worldwide Hydrogen Market (2008): Percentage Breakdown by Volume Sales for Air Products, Praxair, Linde, Air Liquide, and Others (includes corresponding Graph/Chart)

Carbon Dioxide

Future Demand Growth Likely in Markets Other than the US

Other Industrial and Specialty Gases

Profile of the Specialty Gases Industry

Table 14. World Specialty Gas Market (2009): Percentage Share Breakdown by Types –Atmospheric gases, Noble gases, Carbon gases, Halogen gases and Others (includes corresponding Graph/Chart)

5.A PROFILE OF END USER INDUSTRIES

End User Profile for Industrial and Specialty Gases

Table 15. World Market for Industrial and Specialty Gases (2009): Percentage Share Breakdown of Value Sales by End-Use Industry - Refining and Chemicals Processing, Metal Fabrication and Production, Medical, Electronics, Food, Pulp & Paper, and Others (includes corresponding Graph/Chart)

Major End-User Industries

Chemical Process Industry

Main End Use Segments in the Chemical Industry

Major Growth Determinants

Metal Industry

Steel Industry – A Major End User of Oxygen and Nitrogen

Electronics and Semiconductors Industry

Table 16. Leading Players in Global Electronic Industrial Gas Market (2009):

Percentage Breakdown of Dollar Sales for Air Products, Taiyo Nippon Sanso, Air Liquide, Linde, Praxair, and Others (includes corresponding Graph/Chart)

Ultra Pure Gases: Ongoing Slowdown Blues
Changing Demand Profile for Industrial Gases
Healthcare Showing Healthy Growth Opportunities

6.PRICING

Pricing – An Influential Factor
Distribution Mode: A Key Pricing Factor
Power Costs: Other Major Determinant of Gas Prices
Merchant Market in the US: Most Visible
Key Players Announce Price Hikes
Price Fluctuations
Nitrogen
Carbon Dioxide
Chilled Seasonal Supplies
Price Fixation for CO2 Quotas
Helium
Industry Outlook on the Pricing Pattern and Changing Prerogatives

7.MODES OF DELIVERY

Tonnage/On-Site/Pipeline
Cryogenic On-Site
Piggyback Liquefiers
Non-Cryogenic Air Separation
Factors Determining System Choice
Positive Growth to Continue
Current Investment Geared towards On-Site Projects
Liquid/Merchant/Bulk
Small-Scale Non-Cryogenic On-Site Plants Also Serve Liquid Market
Compressed/Cylinders/Packaged Gas
Low-Margin 'Hardgoods'
Packaged Gas Business Generates Strong Cash Flows
The 'Hub and Spoke' Strategy of Airgas
Advances in Cylinder Gas Business

8.PRODUCT OVERVIEW

Nitrogen

Application Areas

New Applications Fueling Growth

High-tech Industry Processes Need Increasingly Pure N2

Liquid Nitrogen Provides Shear Cooling Solution

Nitrogen Critical for Production of Semiconductor Chips

Petroleum Industry- Important Source of Incremental Demand

Oxygen

Table 17. End Use Markets for Oxygen (2008): Percentage Breakdown by Volume Sales* for Metal Production, Chemicals, Cutting & Welding, Medical, Pulp & Paper, and Others (includes corresponding Graph/Chart)

Application Areas

Steel and Chemical Industries: Major Consumers of Oxygen

Mode of Delivery

Trends Boosting the Oxygen Market

Environmental Regulations Drive the Oxygen Market

Growing Market in Environmental Remediation

Blast Furnaces Replacing Coke with O2

Mandatory Cuts in Noxious Fume Emissions Drives Demand for O2

O2 Increasingly Replacing Chlorine in Pulp Bleaching

New Bleaching Recipes Spell Opportunity for Suppliers

Increased Demand in Primary Metal Production

Emerging Applications

Pure O2 Replaces Air in Oxidation

Oxygen as an Oxidant in Gasification

Oxygen for Bleaching Textiles

Oxygen to Recover Gold From Refractory Ore and Toxic Tailings

Oxygen in Hydrotreating of Crude

Hydrogen

Application Areas

Refining and Chemicals – Major End-Use Applications of Hydrogen

Table 18. World Market for Hydrogen (2007): Percentage Breakdown of Value Sales by

End-Use Application - Refining, Chemicals, Metals, Food, Electronics, Glass and Others
(includes corresponding Graph/Chart)

New Applications for Hydrogen
Clean Gains in the Green Backdrop
Fuel Cells: An Important Future Application of Hydrogen
Growing Use of Hydrogen in Batch-Annealing by Steel Makers.
Hydrogen for Heat Treating: Hotting Up Worldwide
Delivery Mechanisms for Hydrogen
Developments Impacting Hydrogen Market
Petroleum Industry Likely to Lead in the Production of Hydrogen
Clean Air Act Fuels Demand for Hydrogen
Challenges for Hydrogen in Penetrating into Automobile Market
Carbon Dioxide
Uses of Carbon Dioxide

Table 19. End Users of Carbon Dioxide (2009): Percentage Breakdown by Volume Sales* for Food Industry, Beverage Industry, Welding and Others (includes corresponding Graph/Chart)

Trailblazing Applications for CO₂
Food-Safety Interventionism Buoy the Growth
Carbon Dioxide for Water Treatment and Other Potential Applications
Super Critical Carbon Dioxide for Super Cleaning of Wafers and Extraction of Toxic Metals
High-Pressure Jet Cleaning Using Dry Ice
CO₂ Foam Blowing to Replace CFCs and HCFCs
CO₂ for Manufacturing Acetylene
Formic Acid Direct from CO₂
CO₂ Dissolved in Water To Produce Methane & Acetic Acid
Greener Way to Process Bio-molecules
Solid CO₂ to Clean Sensitive Electronic Test Equipment
Carbon Dioxide as an Alternative to Chlorofluorocarbons
CO₂ as an Extinguishing Agent
Carbon Dioxide to Pasteurize Fruit Juices
Carbon Dioxide in Recycling of Sludge from Metalworks
Carbon Dioxide in Development of Extremely Fine Particles in Paint and Drug Industry
Carbon Dioxide Washes Brownstock in Paper and Pulp Industry

Carbon Dioxide to Lower pH of Alkaline Water
Carbon Dioxide as Coolant in Automobiles
Carbon Dioxide as Coolant in Food and Beverage Industry
Carbon Dioxide to Treat Heavy Metal Contaminated Soil
Argon
Application Areas
New Applications
Making Halon-based Fire Extinguishers Gone!
Betting with the Best in Packaging
Compounding Possibilities with New Compounds
Liquid Argon from Cryo: Dispelling the Cylinders
Acetylene
Chemical Sector Largest End-Use Segment
Acetylene in Internal Combustion Engines
Cheaper Petrochemical Feedstock Replacements: A Potential Threat
Technology Enhancements: Turning Corners in the Sagging Markets
New Applications
Go-Tec Develops Acetylene-based, Dual-Fuel System
Specialty Gases
Helium
Uses of Helium

Table 20. Helium Application Areas Worldwide (2008): Percentage Share Breakdown by Cryogenic Applications, Pressurizing and Purging, Welding Cover Gas, Controlled Atmospheres, Leak Detection and Others (includes corresponding Graph/Chart)

Special Gas Mixes for Use-Specific Applications
Patented Helium Recovery Systems: Set in the Cycle Again
Other Specialty Gases

9.PRODUCTION PROCESS

Two Production Processes
Cryogenic Production
Non-Cryogenic Production
Pressure/Vacuum Swing Adsorption (PVSA)
Membrane Technology
Dynamics of Non-Cryogenic Market

Purity - A Crucial Limiting Factor
Effect of Non-Cryogenic Gases on Merchant Market
Company Specific Technology Strengths
New Technology Shaping Industrial Gases Industry
Complex Plants Built by Gas Companies
Electricity - Major Input Cost for Producing Gases

10. TECHNOLOGICAL DEVELOPMENTS IN RECENT PAST

Parker Domnick Hunter Develops 40H-ICP Hydrogen Generator
Praxair Commercializes High Purity Hydrogen
Carbon Dioxide from Power Plant Flue Gas
SC Fluids and Air Products to Develop Photoresist Stripping Agent
Improvements in Steam Methane Reforming Technology
New Nitrogen Manufacturing Machine from Alliance Gas Systems
CO₂ Solution Develops Bioreactor-based Carbon Dioxide Recycling Technology
Engelhard Corporation Launches New Method for Nitrogen Extraction
Nitrogen to Cool Plastic Extrusion Process
Nitrogen to Facilitate Gas-Assisted Injection Molding
Potential Applications of Nitrogen in Semiconductor Industry
Vacuum Carburizing: A Budding Opportunity
Cojet Gas Injection System Technology for Basic Oxygen Furnaces in Steel Industry
Oxygen to Add Fizz to Soft Drinks
Steam Methane Reforming Technology Now Economical for Small Plants
Messer Griesheim Manages Hydrogen Supply in a Novel Way
Hydrogen from Risky Hydrocarbon Waste
Hydrogen from Seawater
Natural Gas - Source for Hydrogen Supply
Kemgas Technology for Acetylene Production
Air Products Develops the World's Largest Helium Liquefier
Air Products Augments the BIP Helium and Nitrogen Cylinder Technology Suite

11. PRODUCT INTRODUCTIONS/INNOVATIONS

Linde Canada Launches ECOCYL OSQ Specialty Gas Cylinder
Linde Gases Introduces New Series of Welded Panels
Linde Launches Ionic Compressor Systems
Linde Gases Introduces HiQ® 60 Range of Calibration Gases
Phymetrix Introduces New Analyzers for Specialty and Process Gases

Air Liquide Launches 2 Scott™ EPA Protocols
MOCON Unveils New Carbon Dioxide and Oxygen Analyzer
Shell Canada Introduces Gasolines with Nitrogen Enrichment
Air Products Launches New Models of XeCovary® Xenon Recovery System
Linde North America Introduces New LINSPRAY® CO2 Cooling Technology
Linde North America Unveils New LASGON® H Shielding Gaseous Mixtures
Air Products Extends Series of Certified Calibration Gas Mixtures
Drax Introduces BEAT2 in the UK
Air Products Launches New GASGUARD® Very High Flow System

12.RECENT INDUSTRY ACTIVITY

Air Liquide Takes Over Cryogas
MTG Takes Over Western International
MTG and K-Air Gases India Form JV
The Gas Co. Teams Up with General Motors for Hydrogen Project
Air Liquide Collaborates with Sasol Synfuels
Praxair China Inks Agreement with Marcegaglia
SCIPIG Receives Carbon Monoxide and Hydrogen Supply Order from BPUS
Praxair Bags Contract from SAIL
Air Liquide to Expand Capacity in India
Linde Gases to Upgrade Specialty Gases Plant in South Africa
Linde Merges Customer Services Operations at New Facility in the US
Messer Group Commissions New CO2 Liquefaction Plant
Airgas Acquires Tri-Tech
Airgas Takes Over Fitch Industrial and Welding Supply
MTG Acquires Valley National Gases
Kyiv Carbon Dioxide Plant and OJSC Linde Gas Ukraine to Merge
CIGI Merges with BPC Gas
Air Liquide Acquires Majority Interest in Al Khafrah Industrial Gases
Xebec Adsorption Merges Operations with QuestAir
Investcorp to Buy Stake in Gulf Cryo
Spectra Gases Renames to Linde
INOX Air Products Inks Two New Deals with PV Makers
Air Products Wins Supply Order from CHINT Solar
Praxair Secures Contract from IOC
Linde Gases to Supply Helium to NASA
Linde Gases to Supply Specialty Gases to Nestle Oil
Linde Bags Supply Contract from Bosch Solar

Air Liquide Establishes New Facilities in Muscat and Sohar

13. STRATEGIC CORPORATE DEVELOPMENTS – A HISTORIC PERSPECTIVE BUILDER

Airgas Acquires Northeast Gas Technologies

Praxair Distribution Pockets Kirk Welding Supply Inc.

Airgas Acquires Merriam-Graves

Air Liquide Group Takes Over Pure Helium

KOGAS to Form Joint Venture with UNG

Air Products Inks Agreement with Nestlé Waters North America

Rivoira to Supply Gas Delivery Equipments to Silfab SpA

Linde Gases and Tartu University Sign Agreement

The Linde Group Divests Cryogas to Indura

Air Liquide Acquires Scott Specialty Gases

Air Liquide Acquires Lurgi

Air Liquide to Acquire Linde Gas UK

Air Liquide Acquires Team One Technologies Inc.

Air Products Supplies Specialty Gas and Chemical Equipment to New Austin Site

Praxair to Form Joint Venture for Supply of Packaged Gases

Praxair to Acquire AGA S.A. de C.V.

The Linde Group Pockets Birlesic Oksijen Sanayi A.S

Air Liquide Acquires Controlling Interests in its Joint Venture Companies

Private Group of CCMP Acquires Vacuum & Semiconductor Operations of BOC Edwards

Air Products & Chemicals Acquires BOC Gazy Sp zoo

Airgas Acquires Lehner & Martin

Airgas Acquires Major Portion of Linde AG's US Packaged Gas Business

Valley National Gases Acquires Mitchell Industrial Supply

Discount Investment Signs Agreement to Acquire Additional Stake In Maxima

Praxair Distribution Acquires Rite Weld Supply

Praxair Distribution Acquires Wilson Welding & Medical Gases

Linde Group Forms Joint Venture with ADNOC

SOL to Erect a New Plant in Hoechst Industry Park

Praxair Wins EU Approval to Acquire 50% Interest in Yara Industrial Gases Unit

Air Liquide to Construct a New Industrial Gas Plant in the Germany

Airgas Pockets Central Welding Supply, and Texas Industrial Gas

Messer Group and Hoa Phat Join Forces for New Industrial Gas Plant Establishment

Linde Acquires Controlling Interest in Malaysian Oxygen

Air Liquide Inaugurates Research Complex in Newark
Air Liquide Severstal Establishes Gas Production Unit
Linde Signs Agreement with Ningbo Wanhua Polyurethane

14.FOCUS ON SELECT GLOBAL PLAYERS

Air Liquide (L' Air Liquide S.A.) (France)
American Air Liquide Holdings, Inc. (US)
Air Products and Chemicals, Inc. (US)
Airgas, Inc. (US)
Praxair, Inc. (US)
Taiyo Nippon Sanso Corporation (Japan)
The Linde Group (Germany)

15.GLOBAL MARKET PERSPECTIVE

Table 21. World Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 22. World Historic Review for Industrial and Specialty Gases by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 23. World 15-Year Perspective for Industrial and Specialty Gases by Geographic Region – Percentage Breakdown of Volume Sales for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

Table 24. World Recent Past, Current & Future Analysis for Acetylene by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the years 2009 through 2017 (includes corresponding Graph/Chart)

Table 25. World Historic Review for Acetylene by Geographic Region – US, Canada,

Japan, Europe, Asia- Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 26. World 15-Year Perspective for Acetylene by Geographic Region – Percentage Breakdown of Volume Sales for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets for Years 2003, 2011 & 2017(includes corresponding Graph/Chart)

Table 27. World Recent Past, Current & Future Analysis for Argon by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the years 2009 through 2017 (includes corresponding Graph/Chart)

Table 28. World Historic Review for Argon by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 29. World 15-Year Perspective for Argon by Geographic Region – Percentage Breakdown of Volume Sales for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

Table 30. World Recent Past, Current & Future Analysis for Carbon Dioxide by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the years 2009 through 2017 (includes corresponding Graph/Chart)

Table 31. World Historic Review for Carbon Dioxide by Geographic Region – US, Canada, Japan, Europe, Asia- Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 32. World 15-Year Perspective for Carbon Dioxide by Geographic Region – Percentage Breakdown of Volume Sales for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

Table 33. World Recent Past, Current & Future Analysis for Hydrogen by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the years 2009 through 2017 (includes corresponding Graph/Chart)

Table 34. World Historic Review for Hydrogen by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 35. World 15-Year Perspective for Hydrogen by Geographic Region – Percentage Breakdown of Volume Sales for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

Table 36. World Recent Past, Current & Future Analysis for Nitrogen by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the years 2009 through 2017 (includes corresponding Graph/Chart)

Table 37. World Historic Review for Nitrogen by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 38. World 15-Year Perspective for Nitrogen by Geographic Region – Percentage Breakdown of Volume Sales for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

Table 39. World Recent Past, Current & Future Analysis for Oxygen by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the years 2009 through 2017 (includes corresponding Graph/Chart)

Table 40. World Historic Review for Oxygen by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 41. World 15-Year Perspective for Oxygen by Geographic Region – Percentage Breakdown of Volume Sales for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

Table 42. World Recent Past, Current & Future Analysis for Other Industrial and Specialty Gases* by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the years 2009 through 2017 (includes corresponding Graph/Chart)

Table 43. World Historic Review for Other Industrial and Specialty Gases* by Geographic Region – US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 44. World 15-Year Perspective for Other Industrial and Specialty Gases* by Geographic Region – Percentage Breakdown of Volume Sales for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), Middle East, and Latin American Markets for years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

III. MARKET1.THE UNITED STATES

A. Market Analysis

Petroleum Refining, Metal Processing: Key Drivers of Future Growth

Oxygen and Nitrogen: Chief Industrial Gases

Industry Consolidation on the Move

Trade Dynamics

Imports

Table 45. Imports of Argon in the US (2008 & 2009): Annual Percentage Breakdown by Leading Countries (In US\$) (includes corresponding Graph/Chart)

Table 46. Imports of Hydrogen in the US (2008 & 2009): Annual Percentage Breakdown by Leading Countries (In US\$)

Table 47. Imports of Nitrogen in the US (2008 & 2009): Annual Percentage Breakdown

by Leading Countries (In US\$) (includes corresponding Graph/Chart)

Table 48. Imports of Oxygen in the US (2008 & 2009): Annual Percentage Breakdown by Leading Countries (In US\$) (includes corresponding Graph/Chart)

Exports

Table 49. US Exports of Argon (2008 & 2009): Annual Breakdown by Leading Countries (In US\$) (includes corresponding Graph/Chart)

Table 50. US Exports of Hydrogen (2008 & 2009): Annual Breakdown by Leading Countries (In US\$) (includes corresponding Graph/Chart)

Table 51. US Exports of Nitrogen (2008 & 2009): Annual Breakdown by Leading Countries (In US\$) (includes corresponding Graph/Chart)

Table 52. US Exports of Oxygen (2008 & 2009): Annual Breakdown by Leading Countries (In US\$) (includes corresponding Graph/Chart)

Restructuring Attempts: In Quest for Resurgence
Landscape of the US Industrial and Specialty Gases

Table 53. Leading Players in US Industrial Gas Market (2008): Percentage Share Breakdown by Value Sales for Air Liquide, Linde, Praxair, Air Products, TNS, Airgas and Others (includes corresponding Graph/Chart)

Statistics in the Past

Table 54. Leading Players in US Liquid Carbon Dioxide Market (2003 & 2004): Percentage Breakdown by Volume Sales for BOC, Praxair, Airgas, Air Liquide, EPCO and Others (includes corresponding Graph/Chart)

Table 55. Leading Companies in US Merchant Gaseous Carbon Monoxide Market (2003 & 2004): Percentage Breakdown by Production Capacity for Air Liquide, Air Product, BOC, Praxair and Others (includes corresponding Graph/Chart)

Table 56. Leading Companies in US Merchant Gaseous Hydrogen Market (2003 & 2004): Percentage Breakdown by Production Capacity for Air Liquide, Air Products, BOC, Linde AG, Praxair and Others (includes corresponding Graph/Chart)

Distribution Scenario for Packaged Gas

Prices on a Roller Coaster Ride

New Capacity Expansions

Focus on Select Key Players

B. Market Analytics

Table 57. US Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and Other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 58. US Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and Other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 59. US 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Annual Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and Other Industrial and Specialty Gases Markets for years 2003, 2011 & 2017(includes corresponding Graph/Chart)

2.CANADA

A. Market Analysis

Leading Companies

Market Trends

Environmental Regulations Drive Demand for Oxygen

Oxygen Recovers Gold from Refractory Ore and Toxic Tailings

B. Market Analytics

Table 60. Canadian Recent Past, Current & Future Analysis for Industrial and Specialty

Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and Other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 61. Canadian Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and Other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 62. Canadian 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and Other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017(includes corresponding Graph/Chart)

3.JAPAN

A. Market Analysis

- Industry Overview

- An Analysis of Select Segments

- Favorable Demand for Hydrogen & Nitrogen

- Low Demand for Oxygen

- Reflects the Economy

- Declining Unit Prices

- Research on the Use of Hydrogen as a Source of Energy

- Key Player

B. Market Analytics

Table 63. Japanese Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 64. Japanese Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales

Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 65. Japanese 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

4.EUROPE

A. Market Analysis

Industry Overview

Market Share of Leading Players

Table 66. European Market for Industrial and Specialty Gases (2006): Market Shares of the Leading Players by Value Sales- Linde, Air Liquide, Air Products, Praxair and Others (includes corresponding Graph/Chart)

Market Trends

Renewables Directive: The Pacemaker for the Growth of Hydrogen

Environmental Applications: Greener Pastures for Growth

Changing Landscape in the Eastern European Marketplace

Nitrogen and Oxygen: Best Sales Prospects in Eastern Europe

Market for Oxygen Driven by Environmental Regulations

Increase in Demand for Hydrogen by European Refineries

Increasing Liaison with FTC: Axing Industry's Consolidation Spirit

B. Market Analytics

Table 67. European Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Geographic Region – France, Germany, United Kingdom, Italy, Spain, Russia, and Rest of Europe Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 68. European Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and Other Industrial and Specialty Gases Markets Independently Analyzed

with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017
(includes corresponding Graph/Chart)

Table 69. European Historic Review for Industrial and Specialty Gases by Geographic Region – France, Germany, United Kingdom, Italy, Spain, Russia, and Rest of Europe Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 70. European Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 71. European 15-Year Perspective for Industrial and Specialty Gases by Geographic Region – Percentage Breakdown of Volume Sales for France, Germany, United Kingdom, Italy, Spain, Russia, and Rest of Europe Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

Table 72. European 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

4A.FRANCE

A. Market Analysis

Market Share of Leading Players

Table 73. French Market for Industrial and Specialty Gases (2006): Market Shares of Leading Players by Value Sales – Air Liquide, Linde, Air Products, Praxair and Others (includes corresponding Graph/Chart)

Key Player

B. Market Analytics

Table 74. French Recent Past, Current & Future Analysis for Industrial and Specialty

Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 75. French Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 76. French 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017(includes corresponding Graph/Chart)

4B.GERMANY

A. Market Analysis

Competitive Scenario

Table 77. German Market for Industrial and Specialty Gases (2006): Market Shares of Leading Players by Value Sales – Linde, Air Liquide, Praxair, Air Products and Others (includes corresponding Graph/Chart)

Focus on Key Player

B. Market Analytics

Table 78. German Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 79. German Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales

Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 80. German 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

4C.ITALY

Market Analytics

Table 81. Italian Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 82. Italian Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 83. Italian 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

4D.THE UNITED KINGDOM

A. Market Analysis

Competitive Scenario

Table 84. UK Market for Industrial and Specialty Gases (2006): Market Shares of Leading Players by Value Sales – Linde, Air Products, Air Liquide and Others (includes corresponding Graph/Chart)

B. Market Analytics

Table 85. UK Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 86. UK Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 87. UK 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

4E.SPAIN

Market Analytics

Table 88. Spanish Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 89. Spanish Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 90. Spanish 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon

Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

4F.RUSSIA

Market Analytics

Table 91. Russian Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 92. Russian Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 93. Russian 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017(includes corresponding Graph/Chart)

4G.REST OF EUROPE

Market Analytics

Table 94. Rest of Europe Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 95. Rest of Europe Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales

Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 96. Rest of Europe 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

5.ASIA-PACIFIC

A. Market Analysis

Key Markets

China

China – A Potential Hub for Industrial Gases

Accession to WTO – Fortifies China's Position

Table 97. Leading End-Use Market for Industrial Gases in China (2009): Percentage Breakdown by Value Sales for Steel, Chemicals, Medical, Electronics, Medical, Glass, Food, and Others (includes corresponding Graph/Chart)

China - A Promising Market

Acetylene Market in China

Market Share of Leading Players

Table 98. Leading Players in Industrial and Specialty Gases Market in Asia-Pacific (2008): Percentage Breakdown by Value Sales for Air Liquide, Linde, Air Products, Praxair and Others (includes corresponding Graph/Chart)

Table 99. Leading Players in Chinese Market for Industrial and Specialty Gases (2008): Percentage Breakdown of Value Sales for Linde/BOC, Praxair, Yingde, Air Products, Air Liquide, Messer, Harbin Liming Gas, Nippon Sanso, Shanghai Jiali, and Others (includes corresponding Graph/Chart)

Major Trends

Consumption to Grow at Premium to GDP

Joint Ventures Present Mode of Entry into Asian Markets

Demand Growth for Hydrogen Fueled by Secular Trends

Prospects Hinge on Long-Term Contracts

B. Market Analytics

Table 100. Asia-Pacific Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 101. Asia-Pacific Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 102. Asia-Pacific 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

6. THE MIDDLE EAST

Market Analytics

Table 103. Middle East Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Geographic Region – Iran, Iraq, Israel, Kuwait, Syria, Saudi Arabia, and UAE Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 104. Middle East Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 105. Middle East Historic Review of Industrial and Specialty Gases by Geographic Region – Iran, Iraq, Israel, Kuwait, Syria, Saudi Arabia, and UAE Markets

Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for years 2003 through 2008 (includes corresponding Graph/Chart)

Table 106. Middle East Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 107. Middle East 15-Year Perspective for Industrial and Specialty Gases by Geographic Region – Percentage Breakdown of Volume Sales for Iran, Iraq, Israel, Kuwait, Syria, Saudi Arabia, and UAE Markets for Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

Table 108. Middle East 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

6A.IRAN

Market Analytics

Table 109. Iranian Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 110. Iranian Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 111. Iranian 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets

for the Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

6B.IRAQ

Market Analytics

Table 112. Iraqi Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 113. Iraqi Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 114. Iraqi 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017(includes corresponding Graph/Chart)

6C.ISRAEL

Market Analytics

Table 115. Israeli Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 116. Israeli Historic Review of Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding

Graph/Chart)

Table 117. Israeli 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

6D.KUWAIT

Market Analytics

Table 118. Kuwaiti Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 119. Kuwaiti Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 120. Kuwaiti 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017(includes corresponding Graph/Chart)

6E.SYRIA

Market Analytics

Table 121. Syrian Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 122. Syrian Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 123. Syrian 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

6F.SAUDI ARABIA

Market Analytics

Table 124. Saudi Arabian Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 125. Saudi Arabian Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 126. Saudi Arabian 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017(includes corresponding Graph/Chart)

6G.THE UNITED ARAB EMIRATES

Market Analytics

Table 127. UAE Recent Past, Current & Future Analysis for Industrial and Specialty

Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 128. UAE Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 129. UAE 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017 (includes corresponding Graph/Chart)

7.LATIN AMERICA

A. Market Analysis

Market Shares of Leading Players

Table 130. Industrial and Specialty Gases Market in Latin America (2006): Market Shares of Leading Players by Value Sales for Praxair, Linde, Air Liquide, Air Products and Others (includes corresponding Graph/Chart)

Key Markets

Chile – Luring Major Players

B. Market Analytics

Table 131. Latin American Recent Past, Current & Future Analysis for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2009 through 2017 (includes corresponding Graph/Chart)

Table 132. Latin American Historic Review for Industrial and Specialty Gases by Product Segment – Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen,

and other Industrial and Specialty Gases Markets Independently Analyzed with Annual Sales Figures in Billion Cubic Feet for the Years 2003 through 2008 (includes corresponding Graph/Chart)

Table 133. Latin American 15-Year Perspective for Industrial and Specialty Gases by Product Segment – Percentage Breakdown of Volume Sales for Acetylene, Argon, Carbon Dioxide, Hydrogen, Nitrogen, Oxygen, and other Industrial and Specialty Gases Markets for the Years 2003, 2011 & 2017(includes corresponding Graph/Chart)

IV. COMPETITIVE LANDSCAPE

Total Companies Profiled: 82 (including Divisions/Subsidiaries - 151)

Region/CountryPlayers

The United States

Canada

Japan

Europe

France

Germany

The United Kingdom

Italy

Spain

Rest of Europe

Asia-Pacific (Excluding Japan)

Latin America

Africa

I would like to order

Product name: Industrial and Specialty Gases: Market Research Report

Product link: <https://marketpublishers.com/r/l41569864ACEN.html>

Price: US\$ 4,500.00 (Single User License / Electronic Delivery)

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

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/l41569864ACEN.html>