

The Global Industrial Gas Business

https://marketpublishers.com/r/G1C08517932EN.html

Date: August 2018

Pages: 156

Price: US\$ 1,375.00 (Single User License)

ID: G1C08517932EN

Abstracts

Report Scope

This study presents data on supply of and demand for industrial gases by type, technology and application in current U.S. dollars for the major global regions. The report starts with an overview describing the importance of the industrial gas industry in relation to the overall global economy. Major products and applications are then reviewed.

The next section contains a detailed description of current and emerging technologies for the production, distribution and end use of industrial gases. The government environmental and energy regulation scene is discussed as it applies to industrial gases, and there are descriptions of environmental regulation changes and the agencies involved.

The core of the report is an analysis of the industrial gas market's size and segmentation from 2017 through 2023. The market is segmented by product type, enduser type, application, production technology, purity grade, region, distribution channel and supply mode (e.g., pipeline and cylinder).

The report concludes with an analysis of the structure of the industrial gas industry, including its major players, market shares, and merger and acquisition trends. Patents relating to industrial gases are analyzed, and another chapter contains profiles of companies involved in the industrial gas business.

Report Includes:

27 tables



An overview of the industrial gas business that includes data on supply and demand for industrial gases by type, technology, and application in the global market

Analyses of global market trends, with data from 2017, estimates for 2018, and projections of compound annual growth rates (CAGRs) through 2023

Detailed analyses of the importance of the industrial gas industry to the overall global economy

Discussion of major product reviews and their applications

Overview of current and emerging technologies for the production, distribution, and end use of industrial gases

Coverage of government environmental and energy regulations, and descriptions of environmental regulation changes and the agencies involved

Comprehensive company profiles of major players in the market, including Atlas Copco, TechnipFMC Plc, Diversified Energy Corp., ThyssenKrupp Industrial Solutions AG and Siemens AG



Contents

CHAPTER 1 INTRODUCTION

Study Goals and Objectives
Reasons for Doing This Study
Scope of Report
Information Sources
Methodology
Geographic Breakdown
Analyst's Credentials
Related BCC Research Reports

CHAPTER 2 SUMMARY AND HIGHLIGHTS

CHAPTER 3 MARKET AND TECHNOLOGY BACKGROUND

Importance of Industrial Gases

Principal Industrial Gas Types and Their Applications

Carbon Dioxide

Hydrogen

Helium

Nitrogen

Oxygen

Industrial Gas Production Technologies

Reforming

Noncatalytic Partial Oxidation

Shift-Conversion and Methanation Technology

Air Separation

New Production Technologies

Distribution Technologies

Oxygen-Producing Vacuum Pressure Swing Systems

Nitrogen Membrane Systems

On-Site Industrial Gas Production Technology

Bulk Liquid Delivery and Storage

Microbulk Gas Delivery System

High-Pressure Gas Delivery and Storage Technology

Nitrogen Pumping Units

Pipelines



Industrial Gas Storage Technology

Liquefaction Technology

Compression Technology

Above-Ground Storage Technology

Underground Storage Technology

Transportation and Storage Technologies

End-User Technologies

Petroleum Production and Refining Technology

Primary Metals Production and Fabrication Technology

Chemical Production Technology

Electronics Manufacturing Technology

Laser Technology

Fuel Cells

Internal Combustion Engine

Hydrogen Sensors

CHAPTER 4 MARKET BY PRODUCT TYPE, APPLICATION AND END-USER

Summary

Industrial Gas Market by End-Use Segment

Refining and Chemical Processing

Metal Manufacturing and Fabrication

Medical

Food and Beverage

Electronics

Pulp and Paper

Other End-Use Market Segments

Industrial Gas Market by Product Type

Oxygen

Nitrogen

Specialty Gases

Argon

Hydrogen

Carbon Dioxide

Rare Gases

Acetylene

Helium

Liquefied Petroleum Gas

Synthesis Gas



Other

Industrial Gas Market by Application

Nitrogen

Oxygen

Hydrogen

Argon

Carbon Dioxide

Synthesis Gas

Acetylene

Helium

Liquefied Petroleum Gas

Specialty Industrial Gases

Rare Gases

Industrial Gas Market by Production Technology

Cryogenic Air Separation

Vacuum Pressure-Swing Adsorption

Membrane Technology

Reforming

Gasification

Manufacturing Byproducts

Other Technologies

Industrial Gas Market by Purity Grade

Research Grade

Ultra-High Purity and Instrument Grade

High-Purity and Process Grade

CHAPTER 5 MARKET BY REGION, DISTRIBUTION CHANNEL AND SUPPLY MODE

Market by Region

Europe

North America

Asia-Pacific

Industrial Gas Market by Distribution Channel and Supply Mode

Distribution Channels

Gas Supply Modes

Package Cylinders

Bulk Shipments

On-Site Plants and Pipelines

Marketing



Support Services

CHAPTER 6 ROLE OF GOVERNMENT

U.S.

Federal Initiatives

European Union

EU Programs

EU Framework Program

Carbon Dioxide Emission Restrictions

EU Member States

Japan

China

India

Other Countries

Australia

Canada

Iceland

South Korea

Russia

Intergovernmental Programs

U.S.-EU Collaboration

International Partnership for the Hydrogen Economy

International Energy Agency Hydrogen Coordination Group

CHAPTER 7 INDUSTRIAL GAS HEALTH AND SAFETY ISSUES

Overview

Industrial Gas Training Courses for Industrial Sectors

Safety

Occupational Health and Hygiene

Environment

Quality

CHAPTER 8 INDUSTRY STRUCTURE

Industry Structure and Characteristics Number and Size of Firms



Leading Firms
Ownership Trends

CHAPTER 9 PATENT REVIEW

CHAPTER 10 COMPANY PROFILES

Component and Equipment Manufacturers

ATLAS COPCO

CHICAGO BRIDGE & IRON CO. N.V.

Fabrication and Construction

TECHNIPFMC

Enabling Technologies Providers

XEBEC ADSORPTION INC.

Licensors, Contactors and Operators

DIVERSIFIED ENERGY CORP.

HALDOR TOPSOE A/S

MLEA INC.

SIEMENS AG

THYSSENKRUPP INDUSTRIAL SOLUTIONS

UNIVERSAL INDUSTRIAL GASES INC.

Producers and Distributors

AIR LIQUIDE AMERICA SPECIALTY GASES LLC.



AIR PRODUCTS AND CHEMICALS INC.
AIR WATER INC.
AIRGAS INC.
ALEXANDER CHEMICAL CORP.
AMERICAN GAS GROUP
CARBUROS METALICOS S.A.
AMEC FOSTER WHEELER CORP.
L'AIR LIQUIDE SA
LINDE AG
MESSER GROUP GMBH
MITSUBISHI GAS CHEMICAL CO.
NUCO2 INC.
OZONO ELECTRONICA INTERNATIONALE SRL
PRAXAIR INC.
REGO PRODUCTS
SCOTTISH CHEMICAL INDUSTRIES
SERVOMEX GROUP LTD.
SHOWA DENKO GAS PRODUCTS CO. LTD.
SPECIAL GAS SERVICES INC.

The Global Industrial Gas Business

TAIYO NIPPON SANSO CORP.



TAIYO TOYO SANSO CO. LTD.

TOLL GAS AND WELDING SUPPLY

UTTAM AIR PRODUCTS PVT. LTD.

VOLTAIX INC.

Manufacturers of Fuel Cells and Components

BALLARD POWER SYSTEMS

FUEL CELL ENERGY INC.

HYDROGENICS CORP.

PLUG POWER LLC

PROTON ONSITE



List Of Tables

LIST OF TABLES

Summary Table: Global Market for Industrial Gases, by End Use, Through 2023

Table 1: Pressure and Temperature Data for Various Cryogenic Industrial Gases

Table 2: Technologies for Technical Grade Industrial Gas Production

Table 3: Air Separation Technology: Cryogenic vs. Noncryogenic Processes

Table 4: Hydrotreating Reactions of Different Refinery Systems

Table 5: Global Industrial Gas Market, by End-Use, Through 2023

Table 6: Global Industrial Gas Market, by Product, Through 2023

Table 7: Global Nitrogen Market, by Application, Through 2023

Table 8: Global Oxygen Market, by Application, Through 2023

Table 9: Global Hydrogen Market, by Application, Through 2023

Table 10: Global Argon Market, by Application, Through 2023

Table 11: Global Liquid and Solid Carbon Dioxide Market, by Application, Through 2023

Table 12: Global Gaseous Carbon Dioxide Market, by Application, Through 2023

Table 13: Global Synthesis Gas Market, by Application, Through 2023

Table 14: Global Acetylene Market, by Application, Through 2023

Table 15: Global Helium Market, by Application, Through 2023

Table 16: Global Liquefied Petroleum Gas Market, by Application, Through 2023

Table 17: Global Specialty Gas Market, by Application, Through 2023

Table 18: Gas Mixtures, by Application

Table 19: Global Rare Gas Market, by Application, Through 2023

Table 20: Global Industrial Gas Market, by Production Technology, Through 2023

Table 21: Global Industrial Gas Market, by Purity Grade, Through 2023

Table 22: Global Industrial Gas Market, by Region, Through 2023

Table 23: Global Industrial Gas Market, by Distribution Channel, Through 2023

Table 24: Global Industrial Gas Market, by Distribution Channel and Region, Through 2023

Table 25: Global Industrial Gas Market Share, by Supply Mode, 2017-2023

Table 26: U.S. Patent Awards for Industrial Gas Process Technologies, 2013-2017



List Of Figures

LIST OF FIGURES

Summary Figure: Global Market for Industrial Gases, by End Use, 2017-2023

Figure 1: Global Industrial Gas Market, 2016-2023

Figure 2: Global Industrial Gas Market Share, by End-Use, 2017 vs. 2023

Figure 3: Global Industrial Gas Market Share, by Product, 2017 vs. 2023

Figure 4: Global Nitrogen Market Share, by Application, 2017 vs. 2023

Figure 5: Global Oxygen Market Share, by Application, 2017 vs. 2023

Figure 6: Global Hydrogen Market Share, by Application, 2017 vs. 2023

Figure 7: Global Argon Market Share, by Application, 2017 vs. 2023

Figure 8: Global Liquid and Solid Carbon Dioxide Market Share, by Application, 2017 vs. 2023

Figure 9: Global Gaseous Carbon Dioxide Market Share, by Application, 2017 vs. 2023

Figure 10: Global Synthesis Gas Market Share, by Application, 2017 vs. 2023

Figure 11: Global Acetylene Market Share, by Application, 2017 vs. 2023

Figure 12: Global Helium Market Share, by Application, 2017 vs. 2023

Figure 13: Global Liquefied Petroleum Gas Market Share, by Application, 2017 vs. 2023

Figure 14: Global Specialty Gas Market Share, by Application, 2017 vs. 2023

Figure 15: Global Rare Gas Market Share, by Application, 2017 vs. 2023

Figure 16: Global Industrial Gas Market Shares, by Production Technology, 2017 vs. 2023

Figure 17: Global Industrial Gas Market Shares, by Purity Grade, 2017 vs. 2023

Figure 18: Global Industrial Gas Market Shares, by Region, 2017 vs. 2023

Figure 19: Global Industrial Gas Market Shares, by Distribution Channel, 2017 vs. 2023

Figure 20: Global Market Share for Distributors of Industrial Gases, by Region,

2017-2023

Figure 21: U.S. Department of Energy Hydrogen and Fuel Cell Funding, 2007-2017

Figure 22: Office of Energy Efficiency and Renewable Energy Hydrogen Budget, 2017

Figure 23: Global Industrial Gas Market, by Leading suppliers, 2017

Figure 24: U.S. Patent Award Trends for Industrial Gas Process Technologies,

2013-2017



I would like to order

Product name: The Global Industrial Gas Business

Product link: https://marketpublishers.com/r/G1C08517932EN.html

Price: US\$ 1,375.00 (Single User License / Electronic Delivery)

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

Service:

info@marketpublishers.com

Payment

First name: Last name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G1C08517932EN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970