

Mining Automation: Technologies and Global Markets

<https://marketpublishers.com/r/M8F9A4001FEEN.html>

Date: November 2018

Pages: 245

Price: US\$ 1,250.00 (Single User License)

ID: M8F9A4001FEEN

Abstracts

Report Scope:

The scope of this report includes the market for mining automation technologies focused on specific technology categories and systems -

Overburden removal and tunneling.

Ore extraction, ore transport, crushing and sorting.

Automated mining controls.

The study also considers -

Remote control mining technologies.

Driver-assist systems.

Teleoperated mining technologies.

Fully automated mining technologies.

Market breakdowns are provided at these category levels within the report. Tables provide additional information regarding the types of equipment included in each category, as applicable. The study considers surface and underground mining, but it does not consider in situ leach mining or fluid extraction, such as petroleum or natural gas extraction.

Report Includes:

53 data tables and 53 additional tables

An overview of the global market for mining automation and technologies

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

In-depth analysis of major mining automation equipment technologies

Analyses of the market by automated equipment, sensors, and applications

Focus on rapid growth segments within the overall mining equipment industry

Coverage of the industry structure, including major end users and trends in price and price-performance

Company profiles of major equipment manufacturers in the market including Accenture, CISCO Systems, Coldeco, Honeywell and Volvo Group

Contents

CHAPTER 1 INTRODUCTION

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

CHAPTER 2 SUMMARY AND HIGHLIGHTS

CHAPTER 3 MARKET AND TECHNOLOGY BACKGROUND

Mining Automation
Automated Mining: A Brief History
Landmarks: Achieving 100% Automation
Mining Types
Surface Mining
Underground Mining
Automated Mining Technologies and Classifications: Automation Levels
Remote Control Mining Technologies
Driver-Assist Systems
Teleoperated Mining Technologies
Fully Automated Mining Technologies
Automated Mining Technologies and Classifications: Equipment and Service Categories
Automated Drills and Blasting Equipment
Overburden Removal and Tunneling
Ore Extraction Equipment
Ore Transport Equipment
Automated Crushing and Sorting Equipment
Automated Mining Control Systems
Benefits of Automated Mining Technologies
Drawbacks of Automated Mining Technologies

Technologies Not Considered

CHAPTER 4 AUTOMATED MINING: GLOBAL MARKET SUMMARY

Introduction to Automated Mining Markets

Scope of the Market Analysis

Global Market for Automated Mining Technologies

CHAPTER 5 MARKET BREAKDOWN BY AUTOMATED MINING TECHNOLOGY

Global Market for Automated Overburden Removal and Tunneling Equipment

Global Summary

Global Market for Automated Ore Extraction Equipment

Global Summary

Global Market for Automated Ore Transport Equipment

Global Summary

Global Market for Automated Crushing and Sorting Equipment

Global Summary

Global Market for Automated Mining Controls

Global Summary

CHAPTER 6 MARKET BREAKDOWN BY APPLICATION

Global Market for Remote Control Mining Technologies

Global Summary

Global Market for Driver-Assist Systems

Global Summary

Global Market for Teleoperated Mining Technologies

Global Summary

Global Market for Fully Automated Mining Technologies

Global Summary

CHAPTER 7 ANALYSIS OF INDUSTRY TRENDS AND MARKET OPPORTUNITIES

Automated Mining Equipment Supply Chains

Supply Chain Efficiency

Industry Organizations

Key Trends Influencing Markets

Cost of Labor

Mining Economic Pressures and the Drive to Automate
Retrofit Market
Environmental Regulations
Financing
Quest for Energy Efficiency
Possibility that Manufacturing Growth Might Drive Markets in the U.S.

CHAPTER 8 PATENT REVIEW AND NEW DEVELOPMENTS

Annual Granted Patents
Country of Patent Origin
Key Players
Patent Code Map
Technology Map
Patent Detail

CHAPTER 9 COMPANY PROFILES

AB PRECISION (POOLE) LTD.
ABB LTD.
ACCENTURE
AKER WIRTH
ATLAS COPCO
AUTONOMOUS SOLUTIONS INC.
BECKER MINING SYSTEMS AG
BENTEK SYSTEMS
BHP
CATERPILLAR
CISCO SYSTEMS
CODELCO
DASSAULT SYSTEMES
DATAMINE
DONGFANG MEASUREMENT AND CONTROL TECHNOLOGY CO.
FLANDERS INC.
FLUIDMESH NETWORKS
FURUKAWA ROCK DRILL CO.
GE AUTOMATION
HEXAGON
HITACHI CONSTRUCTION MACHINERY

HONEYWELL
IBM ROBOTIC PROCESS AUTOMATION
IMP AUTOMATION
KENNAMETAL
KOMATSU
METSO
MICROMINE
MINE SITE TECHNOLOGIES (MST) GLOBAL
MOTION METRICS
NEWMONT MINING
OMEGA INDUSTRIES
REMOTE CONTROL TECHNOLOGIES
RIO TINTO
ROCKWELL AUTOMATION
RYONIC ROBOTICS
SANDVIK
SCHALKE EISENHUTTE
SCHLUMBERGER
SCHNEIDER ELECTRIC
SUNCOR ENERGY
TRIMBLE
VERMEER
VOLVO GROUP
WENCO INTERNATIONAL MINING SYSTEMS

CHAPTER 10 APPENDIX: PATENT DETAILS

List Of Tables

LIST OF TABLES

Summary Table: Global Market for Automated Mining Equipment, by Technology, Through 2023

Table 1: Automated Mining Technology Categories Considered in This Study

Table 2: Levels of Mining Equipment Automation

Table 3: Mining Automation Information Sources Included in This Study

Table 4: Automated Mining Technology Categories Considered in This Study

Table 5: Mining Equipment Automation Levels

Table 6: Automated Mining Equipment and Service Categories

Table 7: Global Market for Automated Mining Technologies, by Region, Through 2023

Table 8: North American Market for Automated Mining Technologies, by Country, Through 2023

Table 9: European Market for Automated Mining Technologies, by Country, Through 2023

Table 10: Asia-Pacific Market for Automated Mining Technologies, by Country, Through 2023

Table 11: South American Market for Automated Mining Technologies, by Country, Through 2023

Table 12: Global Market for Automated Mining Equipment, by Technology, Through 2023

Table 13: Global Market for Automated Mining Equipment, by Application, Through 2023

Table 14: Global Market for Automated Overburden Removal and Tunneling Equipment, by Region, Through 2023

Table 15: North American Market for Automated Overburden Removal and Tunneling Equipment, by Country, Through 2023

Table 16: European Market for Automated Overburden Removal and Tunneling Equipment, by Country, Through 2023

Table 17: Asia-Pacific Market for Automated Overburden Removal and Tunneling Equipment, by Country, Through 2023

Table 18: South American Market for Automated Overburden Removal and Tunneling Equipment, by Country, Through 2023

Table 19: Global Market for Automated Ore Extraction Equipment, by Region, Through 2023

Table 20: North American Market for Automated Ore Extraction Equipment, by Country, Through 2023

Table 21: European Market for Automated Ore Extraction Equipment, by Country, Through 2023

Table 22: Asia-Pacific Market for Automated Ore Extraction Equipment, by Country, Through 2023

Table 23: South American Market for Automated Ore Extraction Equipment, by Country, Through 2023

Table 24: Global Market for Automated Ore Transport Equipment, by Region, Through 2023

Table 25: North American Market for Automated Ore Transport Equipment, by Country, Through 2023

Table 26: European Market for Automated Ore Transport Equipment, by Country, Through 2023

Table 27: Asia-Pacific Market for Automated Ore Transport Equipment, by Country, Through 2023

Table 28: South American Market for Automated Ore Transport Equipment, by Country, Through 2023

Table 29: Global Market for Automated Crushing and Sorting Equipment, by Region, Through 2023

Table 30: North American Market for Automated Crushing and Sorting Equipment, by Country, Through 2023

Table 31: European Market for Automated Crushing and Sorting Equipment, by Country, Through 2023

Table 32: Asia-Pacific Market for Automated Crushing and Sorting Equipment, by Country, Through 2023

Table 33: South American Market for Automated Crushing and Sorting Equipment, by Country, Through 2023

Table 34: Global Market for Automated Mining Controls Equipment, by Region, Through 2023

Table 35: North American Market for Automated Mining Controls Equipment, by Country, Through 2023

Table 36: European Market for Automated Mining Controls Equipment, by Country, Through 2023

Table 37: Asia-Pacific Market for Automated Mining Controls Equipment, by Country, Through 2023

Table 38: South American Market for Automated Mining Controls Equipment, by Country, Through 2023

Table 39: Global Market for Remote Control Mining Equipment, by Region, Through 2023

Table 40: North American Market for Remote Control Mining Equipment, by Country,

Through 2023

Table 41: European Market for Remote Control Mining Equipment, by Country, Through 2023

Table 42: Asia-Pacific Market for Remote Control Mining Equipment, by Country, Through 2023

Table 43: South American Market for Remote Control Mining Equipment, by Country, Through 2023

Table 44: Global Market for Driver-Assist Systems, by Region, Through 2023

Table 45: North American Market for Driver-Assist Systems, by Country, Through 2023

Table 46: European Market for Driver-Assist Systems, by Country, Through 2023

Table 47: Asia-Pacific Market for Driver-Assist Systems, by Country, Through 2023

Table 48: South American Market for Driver-Assist Systems, by Country, Through 2023

Table 49: Global Market for Teleoperated Mining Technologies, by Region, Through 2023

Table 50: North American Market for Teleoperated Mining Technologies, by Country, Through 2023

Table 51: European Market for Teleoperated Mining Technologies, by Country, Through 2023

Table 52: Asia-Pacific Market for Teleoperated Mining Technologies, by Country, Through 2023

Table 53: South American Market for Teleoperated Mining Technologies, by Country, Through 2023

Table 54: Global Market for Fully Automated Mining Technologies, by Region, Through 2023

Table 55: North American Market for Fully Automated Mining Technologies, by Country, Through 2023

Table 56: European Market for Fully Automated Mining Technologies, by Country, Through 2023

Table 57: Asia-Pacific Market for Fully Automated Mining Technologies, by Country, Through 2023

Table 58: South American Market for Fully Automated Mining Technologies, by Country, Through 2023

Table 59: Summary of Mining Industry Organizations

Table 60: AB Precision (Poole) Ltd.: Overview

Table 61: ABB Ltd.: Overview

Table 62: Accenture: Overview

Table 63: Aker Wirth: Overview

Table 64: Atlas Copco: Overview

Table 65: Autonomous Solutions Inc.: Overview

| |
|---|
| Table 66: Becker Mining Systems: Overview |
| Table 67: BenteK Systems: Overview |
| Table 68: BHP: Overview |
| Table 69: Caterpillar: Overview |
| Table 70: CISCO Systems: Overview |
| Table 71: Codelco: Overview |
| Table 72: Dassault Syst?mes: Overview |
| Table 73: Datamine: Overview |
| Table 74: Dongfang Measurement and Control Technology Company: Overview |
| Table 75: Flanders Inc.: Overview |
| Table 76: Fluidmesh Networks: Overview |
| Table 77: Furukawa: Overview |
| Table 78: GE Automation: Overview |
| Table 79: Hexagon Mining: Overview |
| Table 80: Hitachi Construction Machinery: Overview |
| Table 81: Honeywell: Overview |
| Table 82: IBM Robotic Process Automation: Overview |
| Table 83: IMP Automation: Overview |
| Table 84: Kennametal: Overview |
| Table 85: Komatsu: Overview |
| Table 86: Metso: Overview |
| Table 87: MicroMine: Overview |
| Table 88: Mine Site Technologies: Overview |
| Table 89: Motion Metrics: Overview |
| Table 90: Newmont Mining: Overview |
| Table 91: Omega Industries: Overview |
| Table 92: Remote Control Technologies: Overview |
| Table 93: Rio Tinto: Overview |
| Table 94: Rockwell Automation: Overview |
| Table 95: Ryonlc Robotics: Overview |
| Table 96: Sandvik: Overview |
| Table 97: Schalke Eisenh?tte: Overview |
| Table 98: Schlumberger: Overview |
| Table 99: Schneider Electric: Overview |
| Table 100: Suncor Energy: Overview |
| Table 101: Trimble: Overview |
| Table 102: Vermeer: Overview |
| Table 103: Volvo Group: Overview |
| Table 104: Wenco International Mining Systems: Overview |

Table 105: Patent Details, by Assignee

List Of Figures

LIST OF FIGURES

Summary Figure: Global Market for Automated Mining Equipment, by Technology, 2017–2023

Figure 1: Open-Pit Surface Mining: Coeur Rochester Silver Mine in the Humboldt River Basin, Nevada, 2005

Figure 2: Underground Mining: Carlsbad, New Mexico, 2016

Figure 3: Dragline for Removing Overburden at a Surface Mine

Figure 4: Longwall Mining Head for an Underground Coal Seam, 2013

Figure 5: Continuous Mining System

Figure 6: Mining Truck at a Surface Mining Site

Figure 7: Global Market for Automated Mining Technologies, by Region, 2017–2023

Figure 8: North American Market for Automated Mining Technologies, by Country, 2017-2023

Figure 9: European Market for Automated Mining Technologies, by Country, 2017-2023

Figure 10: Asia-Pacific Market for Automated Mining Technologies, by Country, 2017-2023

Figure 11: South American Market for Automated Mining Technologies, by Country, 2017-2023

Figure 12: Global Market for Automated Mining Equipment, by Technology, 2017-2023

Figure 13: Global Market for Automated Mining Equipment, by Application, 2017-2023

Figure 14: Global Market for Automated Overburden Removal and Tunneling Equipment, by Region, 2017-2023

Figure 15: North American Market for Automated Overburden Removal and Tunneling Equipment, by Country, 2017-2023

Figure 16: European Market for Automated Overburden Removal and Tunneling Equipment, by Country, 2017-2023

Figure 17: Asia-Pacific Market for Automated Overburden Removal and Tunneling Equipment, by Country, 2017-2023

Figure 18: South American Market for Automated Overburden Removal and Tunneling Equipment, by Country, 2017-2023

Figure 19: Global Market for Automated Ore Extraction Equipment, by Region, 2017-2023

Figure 20: North American Market for Automated Ore Extraction Equipment, by Country, 2017-2023

Figure 21: European Market for Automated Ore Extraction Equipment, by Country, 2017-2023

Figure 22: Asia-Pacific Market for Automated Ore Extraction Equipment, by Country, 2017-2023

Figure 23: South American Market for Automated Ore Extraction Equipment, by Country, 2017-2023

Figure 24: Global Market for Automated Ore Transport Equipment, by Region, 2017-2023

Figure 25: North American Market for Automated Ore Transport Equipment, by Country, 2017-2023

Figure 26: European Market for Automated Ore Transport Equipment, by Country, 2017-2023

Figure 27: Asia-Pacific Market for Automated Ore Transport Equipment, by Country, 2017-2023

Figure 28: South American Market for Automated Ore Transport Equipment, by Country, 2017-2023

Figure 29: Global Market for Automated Crushing and Sorting Equipment, by Region, 2017-2023

Figure 30: North American Market for Automated Crushing and Sorting Equipment, by Country, 2017-2023

Figure 31: European Market for Automated Crushing and Sorting Equipment, by Country, 2017-2023

Figure 32: Asia-Pacific Market for Automated Crushing and Sorting Equipment, by Country, 2017-2023

Figure 33: South American Market for Automated Crushing and Sorting Equipment, by Country, 2017-2023

Figure 34: Global Market for Automated Mining Controls Equipment, by Region, 2017-2023

Figure 35: North American Market for Automated Mining Controls Equipment, by Country, 2017-2023

Figure 36: European Market for Automated Mining Controls Equipment, by Country, 2017-2023

Figure 37: Asia-Pacific Market for Automated Mining Controls Equipment, by Country, 2017-2023

Figure 38: South American Market for Automated Mining Controls Equipment, by Country, 2017-2023

Figure 39: Global Market for Remote Control Mining Equipment, by Region, 2017-2023

Figure 40: North American Market for Remote Control Mining Equipment, by Country, 2017-2023

Figure 41: European Market for Remote Control Mining Equipment, by Country, 2017-2023

Figure 42: Asia-Pacific Market for Remote Control Mining Equipment, by Country, 2017-2023

Figure 43: South American Market for Remote Control Mining Equipment, by Country, 2017-2023

Figure 44: Global Market for Driver-Assist Systems, by Region, 2017-2023

Figure 45: North American Market for Driver-Assist Systems, by Country, 2017-2023

Figure 46: European Market for Driver-Assist Systems, by Country, 2017-2023

Figure 47: Asia-Pacific Market for Driver-Assist Systems, by Country, 2017-2023

Figure 48: South American Market for Driver-Assist Systems, by Country, 2017-2023

Figure 49: Global Market for Teleoperated Mining Technologies, by Region, 2017-2023

Figure 50: North American Market for Teleoperated Mining Technologies, by Country, 2017-2023

Figure 51: Europe Market for Teleoperated Mining Technologies, by Country, 2017-2023

Figure 52: Asia-Pacific Market for Teleoperated Mining Technologies, by Country, 2017-2023

Figure 53: South American Market for Teleoperated Mining Technologies, by Country, 2017-2023

Figure 54: Global Market for Fully Automated Mining Technologies, by Region, 2017-2023

Figure 55: North American Market for Fully Automated Mining Technologies, by Country, 2017-2023

Figure 56: European Market for Fully Automated Mining Technologies, by Country, 2017-2023

Figure 57: Asia-Pacific Market for Fully Automated Mining Technologies, by Country, 2017-2023

Figure 58: South American Market for Fully Automated Mining Technologies, by Country, 2017-2023

Figure 59: Supply Chain Automated Mining Equipment

Figure 60: Supply Chain Automated Mining Controls

Figure 61: Quarterly Changes in U.S. Cost of Labor in Goods Producing Industries, Including Mining, 2016-2018

Figure 62: Annual Granted Patents for Automated Mining, Through the First Quarter of 2008-2018

Figure 63: Regional Distribution of Patents for Automated Mining, Through the First Quarter of 2018

Figure 64: Corporate Leaders in Automated Mining Registered Patents, Through the First Quarter of 2018

Figure 65: Code Map Detail for Automated Mining, Registered Patents, Through the

First Quarter of 2018

Figure 66: Technology Map for Automated Mining, Registered Patents, Through the First Quarter of 2018

I would like to order

Product name: Mining Automation: Technologies and Global Markets

Product link: <https://marketpublishers.com/r/M8F9A4001FEEN.html>

Price: US\$ 1,250.00 (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/M8F9A4001FEEN.html>

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

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer 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