Metalworking Fluids Market: by Fluid Type (straight oils, soluble oils, synthetic oils, and semi-synthetic oils), Application (transportation equipment, industrial machinery, automotive, construction, metal fabrication), and Region – Forecast till 2023

Metalworking fluids are the range of oils and lubricating liquids that are used to cool and/or smoothen the metal work-piece when they undergo various mechanical processes such as machining, grounding, milling, and others. These fluids help to prevent the heat generation and excessive friction between the cutting tools and the work-piece. Additionally, the use of metalworking fluid helps to improve the quality of the workpiece by continuously removing the fines, chips, and the small pieces of metal, from the tool being used and the surface of the workpiece. They serve the important metalworking operations such as removal, forming, cutting, treating fluids, and protection. For any of these things to happen smoothly, it is imperative that the fluid gets to the point of operation and that it gets there with sufficient volume and velocity to do the work required. The metalworking fluids find their applications in numerous end-user wherein metal is an integral part of the process. The major applications of the metalworking fluids can be found in transportation & automotive, industrial machinery, metal fabrication, and construction industry, among others.

The protuberant factors driving the growth of the global metalworking fluids are the rapid industrialization in Asia-Pacific and African countries, growing automotive industry, and increasing construction activities around the world. The global vehicle sale marked nearly 80 million units in 2017 and it is expected to grow at significant rate in coming years due to rising demand for the passenger vehicles from the emerging economies. The global transportation sector is witnessing new normal with flourishing world trade. Being the largest consumer of metalworking fluid, this growth trend in the transportation sector is likely to favor growth of the global metalworking fluids market. Moreover, shifting consumer preference towards the customized cars and increasing demand for the light-weight, fuel-efficient vehicles on the backdrop of increasing environmental concerns is projected to fuel demand for the metalworking fluids in coming years. However, the capital-intensive nature of metalworking, gradual reduction of metal parts in automotive, and volatility of crude oil prices are the major factors restraining the growth of the market during the forecast period. Nevertheless, the major end-use industries such as aerospace, defense, and marine will continue to use the metal-based structures on account for the strength the material provides.

Global metalworking fluids market share, by application 2016 (%)
Regional Analysis:

There are five key regions in the global metalworking fluids market. It includes Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. Asia Pacific is the fastest growing market owing to the rapid industrialization and growth of major end users such as building & construction and automotive industry. India, Japan, South Korea, and China are the dynamic economies in this region, holding a major share of this regional market. North America is the second largest region in the global metalworking fluids market, following Asia Pacific. The U.S. is the major market in this region due to the presence of well-established end users such as aerospace & defense, and marine. Europe is another significant region in the global metalworking fluids market. Major contributors to the regional market are the U.K, France, Germany, and Switzerland. Industrial machinery and automotive industries in Europe are fetching maximum demand for the metalworking fluids in this region. Latin America is witnessing a steady growth of end-user industries majorly in countries namely Brazil and Mexico. In coming years increasing opportunities for the building & construction industry may help propel the growth of the regional market.

Segmentation:

The global metalworking fluids market has been segmented into fluid type, application, and region.

On the basis of fluid type, the market is divided into straight oils, soluble oils, synthetic oils, semi-synthetic oils, and others.

Based on application the global metalworking fluids market is segmented into transportation equipment, industrial machinery, automotive, construction, metal fabrication, and others.

Regionally, the market is divided into five key regions, including Asia Pacific, North America, Europe, Latin America, and the Middle East & Africa.

Key Players:

The prominent players operating in the global metalworking fluids market are Total S.A. (France), Indian Oil Corporation Ltd (India), Chevron Corporation (U.S.), Henkel AG & Co. KGaA (Germany), Exxon Mobil Corporation (U.S.), HPCL (India), Houghton International Inc. (U.S.), BP (India), Shell (the Netherlands), Croda International Plc. (U.K), and China Petrochemical Corporation (China), among others.

Intended Audience
Metalworking fluids Manufacturers
- Traders and distributors of metalworking fluids
- Research and development institutes
- Potential investors
- Raw material suppliers
- Nationalized laboratory

Contents:

TABLE OF CONTENTS

1 Executive Summary

2 Scope of the Report
2.1 Market Definition
2.2 Scope of the Study
2.2.1 Research Objectives
2.2.2 Assumptions & Limitations
2.3 Markets Structure

3 Market Research Methodology
3.1 Research Process
3.2 Secondary Research
3.3 Primary Research
3.4 Forecast Model

4 Market Landscape
4.1 Five Forces Analysis
4.1.1 Threat of New Entrants
4.1.2 Bargaining power of buyers
4.1.3 Threat of substitutes
4.1.4 Segment rivalry
4.2 Value Chain/Supply Chain of Global Metalworking fluids Market

5 Industry Overview of Global Metalworking fluids Market
5.1 Introduction
5.2 Growth Drivers
5.3 Impact analysis
5.4 Market Challenges

6 Market Trends
6.1 Introduction
6.2 Growth Trends
6.3 Impact analysis

7. Global Metalworking Fluids Market by Type
7.1 Introduction
7.2 Straight Oils
7.2.1 Market Estimates & Forecast, 2016-2023
7.2.2 Market Estimates & Forecast by Region, 2016-2023
7.3 Soluble Oils
7.3.1 Market Estimates & Forecast, 2016-2023
7.3.2 Market Estimates & Forecast by Region, 2016-2023
7.4 Synthetic Oils
7.4.1 Market Estimates & Forecast, 2016-2023
7.4.2 Market Estimates & Forecast by Region, 2016-2023
5 Semi-Synthetic Oils
5.1 Market Estimates & Forecast, 2016-2023
5.2 Market Estimates & Forecast by Region, 2016-2023
5.6 Others
5.6.1 Market Estimates & Forecast, 2016-2023
5.6.2 Market Estimates & Forecast by Region, 2016-2023
6 Global Metalworking Fluids Market by Application
6.1 Introduction
6.2 Transportation Equipment
6.2.1 Market Estimates & Forecast, 2016-2023
6.2.2 Market Estimates & Forecast by Region, 2016-2023
6.3 Industrial Machinery
6.3.1 Market Estimates & Forecast, 2016-2023
6.3.2 Market Estimates & Forecast by Region, 2016-2023
6.4 Automotive
6.4.1 Market Estimates & Forecast, 2016-2023
6.4.2 Market Estimates & Forecast by Region, 2016-2023
6.5 Construction
6.5.1 Market Estimates & Forecast, 2016-2023
6.5.2 Market Estimates & Forecast by Region, 2016-2023
6.6 Metal Fabrication
6.6.1 Market Estimates & Forecast, 2016-2023
6.6.2 Market Estimates & Forecast by Region, 2016-2023
6.7 Others
6.7.1 Market Estimates & Forecast, 2016-2023
6.7.2 Market Estimates & Forecast by Region, 2016-2023
7 Global Metalworking fluids Market by Region
7.1 Introduction
7.2 North America
7.2.1 Market Estimates & Forecast, 2016-2023
7.2.2 Market Estimates & Forecast by Type, 2016-2023
7.2.3 Market Estimates & Forecast by Application, 2016-2023
7.2.4 US
7.2.4.1 Market Estimates & Forecast, 2016-2023
7.2.4.2 Market Estimates & Forecast by Type, 2016-2023
7.2.4.3 Market Estimates & Forecast by Application, 2016-2023
7.2.5 Canada
7.2.5.1 Market Estimates & Forecast, 2016-2023
7.2.5.2 Market Estimates & Forecast by Type, 2016-2023
7.2.5.3 Market Estimates & Forecast by Application, 2016-2023
7.3 Europe
7.3.1 Market Estimates & Forecast, 2016-2023
7.3.2 Market Estimates & Forecast by Type, 2016-2023
7.3.3 Market Estimates & Forecast by Application, 2016-2023
7.3.4 Germany
7.3.4.1 Market Estimates & Forecast, 2016-2023
7.3.4.2 Market Estimates & Forecast by Type, 2016-2023
7.3.4.3 Market Estimates & Forecast by Application, 2016-2023
9.3.5 France
9.3.5.1 Market Estimates & Forecast, 2016-2023
9.3.5.2 Market Estimates & Forecast by Type, 2016-2023
9.3.5.3 Market Estimates & Forecast by Application, 2016-2023

9.3.6 Italy
9.3.6.1 Market Estimates & Forecast, 2016-2023
9.3.6.2 Market Estimates & Forecast by Type, 2016-2023
9.3.6.3 Market Estimates & Forecast by Application, 2016-2023

9.3.7 Spain
9.3.7.1 Market Estimates & Forecast, 2016-2023
9.3.7.2 Market Estimates & Forecast by Type, 2016-2023
9.3.7.3 Market Estimates & Forecast by Application, 2016-2023

9.3.8 U.K
9.3.8.1 Market Estimates & Forecast, 2016-2023
9.3.8.2 Market Estimates & Forecast by Type, 2016-2023
9.3.8.3 Market Estimates & Forecast by Application, 2016-2023

9.3.9 Russia
9.3.9.1 Market Estimates & Forecast, 2016-2023
9.3.9.2 Market Estimates & Forecast by Type, 2016-2023
9.3.9.3 Market Estimates & Forecast by Application, 2016-2023

9.3.10 Poland
9.3.10.1 Market Estimates & Forecast, 2016-2023
9.3.10.2 Market Estimates & Forecast by Type, 2016-2023
9.3.10.3 Market Estimates & Forecast by Application, 2016-2023

9.4 Asia Pacific
9.4.1 Market Estimates & Forecast, 2016-2023
9.4.2 Market Estimates & Forecast by Type, 2016-2023
9.4.3 Market Estimates & Forecast by Application, 2016-2023

9.4.4 China
9.4.4.1 Market Estimates & Forecast, 2016-2023
9.4.4.2 Market Estimates & Forecast by Type, 2016-2023
9.4.4.3 Market Estimates & Forecast by Application, 2016-2023

9.4.5 India
9.4.5.1 Market Estimates & Forecast, 2016-2023
9.4.5.2 Market Estimates & Forecast by Type, 2016-2023
9.4.5.3 Market Estimates & Forecast by Application, 2016-2023

9.4.6 Japan
9.4.6.1 Market Estimates & Forecast, 2016-2023
9.4.6.2 Market Estimates & Forecast by Type, 2016-2023
9.4.6.3 Market Estimates & Forecast by Application, 2016-2023

9.4.7 Australia
9.4.7.1 Market Estimates & Forecast, 2016-2023
9.4.7.2 Market Estimates & Forecast by Type, 2016-2023
9.4.7.3 Market Estimates & Forecast by Application, 2016-2023

9.4.8 New Zealand
9.4.8.1 Market Estimates & Forecast, 2016-2023
9.4.8.2 Market Estimates & Forecast by Type, 2016-2023
9.4.8.3 Market Estimates & Forecast by Application, 2016-2023
9.4.9 Rest of Asia Pacific
9.4.9.1 Market Estimates & Forecast, 2016-2023
9.4.9.2 Market Estimates & Forecast by Type, 2016-2023
9.4.9.3 Market Estimates & Forecast by Application, 2016-2023
9.5 Middle East & Africa
9.5.1 Market Estimates & Forecast, 2016-2023
9.5.2 Market Estimates & Forecast by Type, 2016-2023
9.5.3 Market Estimates & Forecast by Application, 2016-2023
9.5.4 Turkey
9.5.4.1 Market Estimates & Forecast, 2016-2023
9.5.4.2 Market Estimates & Forecast by Type, 2016-2023
9.5.4.3 Market Estimates & Forecast by Application, 2016-2023
9.5.5 Israel
9.5.5.1 Market Estimates & Forecast, 2016-2023
9.5.5.2 Market Estimates & Forecast by Type, 2016-2023
9.5.5.3 Market Estimates & Forecast by Application, 2016-2023
9.5.6 North Africa
9.5.6.1 Market Estimates & Forecast, 2016-2023
9.5.6.2 Market Estimates & Forecast by Type, 2016-2023
9.5.6.3 Market Estimates & Forecast by Application, 2016-2023
9.5.7 GCC
9.5.7.1 Market Estimates & Forecast, 2016-2023
9.5.7.2 Market Estimates & Forecast by Type, 2016-2023
9.5.7.3 Market Estimates & Forecast by Application, 2016-2023
9.5.8 Rest of Middle East & Africa
9.5.8.1 Market Estimates & Forecast, 2016-2023
9.5.8.2 Market Estimates & Forecast by Type, 2016-2023
9.5.8.3 Market Estimates & Forecast by Application, 2016-2023
9.6 Latin America
9.6.1 Market Estimates & Forecast, 2016-2023
9.6.2 Market Estimates & Forecast by Type, 2016-2023
9.6.3 Market Estimates & Forecast by Application, 2016-2023
9.6.4 Brazil
9.6.4.1 Market Estimates & Forecast, 2016-2023
9.6.4.2 Market Estimates & Forecast by Type, 2016-2023
9.6.4.3 Market Estimates & Forecast by Application, 2016-2023
9.6.5 Argentina
9.6.5.1 Market Estimates & Forecast, 2016-2023
9.6.5.2 Market Estimates & Forecast by Type, 2016-2023
9.6.5.3 Market Estimates & Forecast by Application, 2016-2023
9.6.6 Mexico
9.6.6.1 Market Estimates & Forecast, 2016-2023
9.6.6.2 Market Estimates & Forecast by Type, 2016-2023
9.6.6.3 Market Estimates & Forecast by Application, 2016-2023
9.6.7 Rest of Latin America
9.6.7.1 Market Estimates & Forecast, 2016-2023
9.6.7.2 Market Estimates & Forecast by Type, 2016-2023
9.6.7.3 Market Estimates & Forecast by Application, 2016-2023
10. Company Landscape

11. Company Profiles

11.1 Total S.A.
11.1.1 Company Overview
11.1.2 Type/Business Segment Overview
11.1.3 Financial Updates
11.1.4 Key Developments

11.2 Indian Oil Corporation Ltd
11.2.1 Company Overview
11.2.2 Type/Business Segment Overview
11.2.3 Financial Updates
11.2.4 Key Developments

11.3 Chevron Corporation
11.3.1 Company Overview
11.3.2 Type/Business Segment Overview
11.3.3 Financial Updates
11.3.4 Key Developments

11.4 Henkel AG & Co. KGaA
11.4.1 Company Overview
11.4.2 Type/Business Segment Overview
11.4.3 Financial Updates
11.4.4 Key Developments

11.5 Exxon Mobil Corporation
11.5.1 Company Overview
11.5.2 Type/Business Segment Overview
11.5.3 Financial Updates
11.5.4 Key Developments

11.6 HPCL
11.6.1 Company Overview
11.6.2 Type/Business Segment Overview
11.6.3 Financial Updates
11.6.4 Key Developments

11.7 Houghton International Inc.
11.7.1 Company Overview
11.7.2 Type/Business Segment Overview
11.7.3 Financial Updates
11.7.4 Key Developments

11.8 BP
11.8.1 Company Overview
11.8.2 Type/Business Segment Overview
11.8.3 Financial Updates
11.8.4 Key Developments

11.9 Shell
11.9.1 Company Overview
11.9.2 Type/Business Segment Overview
11.9.3 Financial Updates
11.9.4 Key Developments

11.10 Croda International Plc.
11.10.1 Company Overview
11.10.2 Type/Business Segment Overview
11.10.3 Financial Updates
11.10.4 Key Developments
11.11 China Petrochemical Corporation
11.11.1 Company Overview
11.11.2 Type/Business Segment Overview
11.11.3 Financial Updates
11.11.4 Key Developments

12. Conclusion

LIST OF TABLES
Table 1 World Population by Major Regions (2016 To 2030)
Table 2 Global Metalworking fluids Market: By Region, 2016-2023
Table 3 North America Metalworking fluids Market: By Country, 2016-2023
Table 4 Europe Metalworking fluids Market: By Country, 2016-2023
Table 5 Asia-Pacific Metalworking fluids Market: By Country, 2016-2023
Table 7 Middle East & Africa Metalworking fluids Market: By Country, 2016-2023
Table 6 Latin America Metalworking fluids Market: By Country, 2016-2023
Table 8 Global Metalworking fluids by Types Market: By Regions, 2016-2023
Table 9 North America Metalworking fluids by Types Market: By Country, 2016-2023
Table 10 Europe Metalworking fluids by Types Market: By Country, 2016-2023
Table 11 Asia-Pacific Metalworking fluids by Types Market: By Country, 2016-2023
Table 12 Latin America Metalworking fluids by Types Market: By Country, 2016-2023
Table 14 North America Metalworking fluids for Application Market: By Country, 2016-2023
Table 15 Europe Metalworking fluids for Application Market: By Country, 2016-2023
Table 16 Asia-Pacific Metalworking fluids for Application Market: By Country, 2016-2023
Table 17 Latin America Metalworking fluids for Application Market: By Country, 2016-2023
Table 23 Global Types Market: By Region, 2016-2023
Table 24 Global Application Market: By Region, 2016-2023
Table 25 North America Metalworking fluids Market, By Country
Table 26 North America Metalworking fluids Market, By Types
Table 27 North America Metalworking fluids Market, By Application
Table 28 Europe: Metalworking fluids Market, By Country
Table 29 Europe: Metalworking fluids Market, By Types
Table 30 Europe: Metalworking fluids Market, By Application
Table 31 Asia-Pacific: Metalworking fluids Market, By Country
Table 32 Asia-Pacific: Metalworking fluids Market, By Types
Table 33 Asia-Pacific: Metalworking fluids Market, By Application
Table 34 Middle East & Africa: Metalworking fluids Market, By Country
Table 35 Middle East & Africa: Metalworking fluids Market, By Types
Table 36 Middle East & Africa: Metalworking fluids Market, By Application
Table 37 Middle East & Africa: Metalworking fluids Market, By Country
Table 38 Latin America: Metalworking fluids Market, By Country
Table 39 Latin America: Metalworking fluids Market, By Types
Table 40 Latin America: Metalworking fluids Market, By Application

LIST OF FIGURES
FIGURE 1 Global Metalworking fluids Market segmentation
FIGURE 2 Forecast Methodology
FIGURE 3 Five Forces Analysis of Global Metalworking fluids Market
FIGURE 4 Value Chain of Global Metalworking fluids Market
FIGURE 5 Share of Global Metalworking fluids Market in 2016, by country (in %)
FIGURE 6 Global Metalworking fluids Market, 2016-2023,
FIGURE 7 Sub segments of Type
FIGURE 8 Global Metalworking fluids Market size by Type, 2016
FIGURE 9 Share of Global Metalworking fluids Market by Type, 2016 to 2023
FIGURE 10 Sub segments of Application
FIGURE 11 Global Metalworking fluids Market size by Application, 2016
FIGURE 12 Share of Global Metalworking fluids Market by Application, 2016 to 2023