

Magnetic Refrigeration Market by Product ((Refrigeration Systems (Beverage Cooler, Cabinet Display, Refrigerator), Air Conditioning Systems)), Application (Domestic, Commercial, Transportation, and Industrial), and Geography - Global Forecast to 2027

<https://marketpublishers.com/r/M05BB8D9223EN.html>

Date: October 2020

Pages: 175

Price: US\$ 4,950.00 (Single User License)

ID: M05BB8D9223EN

Abstracts

The magnetic refrigeration market is expected to be commercialized by 2022 at USD 4 million, and it is expected to grow at a CAGR of 105.4 % from 2022 to 2027 to reach USD 165 million by 2027. One of the advantages of the magnetic refrigeration system is the compactness where solid substances are used as working materials and thus do not occupy a prominent place. This also reduces maintenance costs to a great extent and ensures smooth functioning. Secondly, magnetic refrigeration has higher energy efficiency than conventional refrigerators—the attainable efficiency of the former is in the range of 30–60% while that of the latter, according to a Carnot cycle, is only 5–10%.

High initial investment and limited field strength of permanent magnets are expected to restrain the growth of the magnetic refrigeration market. Moreover, the need for suitable magnetocaloric materials and lack of awareness of benefits of magnetic refrigeration technology acts as challenges to the market growth.

The magnetic refrigeration technology comes with several advantages in order to attain sustainable change, which is environmentally friendly. Despite its advantages, this technology is still mostly in the development phase and is yet to be commercialized. Once a clean energy technology is created and has been determined to have the potential of a strong market competitor, the focus shifts toward establishing the market by building product awareness and demand. Early adopters may already be eager to

purchase the technology once it hits the market, but considerable efforts will be needed to expand the market to the average consumer, who is naturally reluctant to change. Therefore, it is very important to raise public awareness regarding the technological, energy-saving, and environmental benefits of magnetic refrigeration.

“Refrigeration System: The largest shareholder of the product segment of magnetic refrigeration market.”

Refrigeration system is expected to be the major contributor to the magnetic refrigeration market since companies such as Ubiblu (France), BASF SE (Germany), Camfridge Ltd. (UK), VACUUMSCHMELZE GmbH & Co. KG (Germany), and Magnotherm Solutions (Germany) are expected to come up with products such as beverage coolers and cabinet displays in next few years. The demand is also likely to be driven by players focusing on entering the market with refrigeration systems. Magnetic refrigeration systems do not use compressors and refrigerants; therefore, they have reduced operational and maintenance expenses, along with increased energy efficiency. Many countries are focusing on phasing out environmentally harmful refrigerants such as HCFCs. Products for air conditioning systems are expected to be commercialized in 2023. Improved energy efficiency, environmental compatibility, and safety are the most important features of the magnetic refrigeration technology that are expected to drive the market and enable its adoption in a wide range of products.

“Commercial: The largest application segment of the magnetic refrigeration market.”

The commercial application includes places that are used for business, such as offices, malls, and shops. This sector is poised to grow significantly in the coming years with the commercialization of magnetic refrigeration technology. From a technological point of view, magnetic refrigeration is a clean technology that has revolutionized cooling systems, and it needs to be available in the market. There are various potential applications of magnetic refrigeration systems. Initial developments have been orientated toward the commercial and domestic refrigeration markets, and include display cases, beverage coolers, and commercial or domestic fridges.

“Europe: The largest-growing region in the global magnetic refrigeration market.”

Europe is expected to be the largest market for magnetic refrigeration technology due to the increased awareness about global warming and ozone-depleting refrigerants. The presence of major players in the region that are involved in the magnetic refrigeration technology, such as Ubiblu (France), BASF SE (Germany), and Camfridge Ltd. (UK),

is also one of the reasons behind the growth of the European market. These companies are initially focusing on local customers to sell their products and gradually create awareness among global customers. The growing market for packaged food and the rising concern for environmental issues are also expected to drive the European market.

The study contains insights from various industry experts, ranging from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

By Company Type: Tier 1 – 40%, Tier 2 – 25%, and Tier 3 – 35%

By Designation: C-level Executives – 35%, Directors – 28%, and Others – 37%

By Region: Europe – 45%, North America – 40%, APAC – 10%, and RoW – 5%

Ubiblue (France), Haier Smart Home Co., Ltd (China), Camfridge Ltd (UK), Astronautics Corporation of America (US), VACUUMSCHMELZE GmbH & Co. KG (Germany), BASF SE (Germany), ERAMET (France), Samsung Electronics Co., Ltd (South Korea), Toshiba Corporation (Japan), Whirlpool Corporation (US), MagnoTherm Solutions (Germany), Millipore Sigma (US), General Engineering and Research (US), KIRSCH (Germany), CCS SA (Switzerland), TCS Micropumps Ltd (UK), Kiutra (Germany) and Cemafruid (France) are among a few of the key players in the magnetic refrigeration market.

Research Coverage:

The report segments the magnetic refrigeration market and forecasts its size, by value, based on Product (Refrigeration System and Air Conditioning System), and by Application (Commercial, Domestic, Transportation and Industrial) and region (Asia Pacific, Europe, North America, and RoW),.

The report also provides a comprehensive review of market drivers, restraints, opportunities, and challenges in the magnetic refrigeration market. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Key Benefits of Buying the Report

The report will help the leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall market and the sub-

segments. This report will help stakeholders and gain more insights to better position their businesses and plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the fingerprint sensor market and provides them information on key market drivers, restraints, challenges, and opportunities. Report covers COVID-19 impact on overall refrigeration industry.

Contents

1 INTRODUCTION

- 1.1 STUDY OBJECTIVES
- 1.2 DEFINITION AND SCOPE
- 1.3 STUDY SCOPE
 - 1.3.1 MARKETS COVERED
 - 1.3.2 GEOGRAPHIC SCOPE
- 1.4 INCLUSIONS AND EXCLUSIONS
- 1.5 YEARS CONSIDERED
- 1.6 CURRENCY
- 1.7 STAKEHOLDERS
- 1.8 SUMMARY OF CHANGES

2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
 - FIGURE 1 MAGNETIC REFRIGERATION MARKET: RESEARCH DESIGN
 - 2.1.1 SECONDARY DATA
 - 2.1.1.1 Key data from secondary sources
 - 2.1.2 PRIMARY DATA
 - 2.1.2.1 Key industry insights
 - 2.1.2.2 Breakdown of primaries
 - 2.1.2.3 Key data from primary sources
- 2.2 MARKET SIZE ESTIMATION
 - FIGURE 2 RESEARCH FLOW OF MARKET SIZE ESTIMATION
 - 2.2.1 BOTTOM-UP APPROACH
 - 2.2.1.1 Approach for capturing market size by bottom-up analysis (demand side)
 - 2.2.2 TOP-DOWN APPROACH
 - 2.2.2.1 Approach for capturing market size by top-down analysis (supply side)
- FIGURE 3 SUPPLY SIZE ESTIMATION TO ARRIVE AT MARKET SIZE
- 2.3 MARKET BREAKDOWN AND DATA TRIANGULATION
 - FIGURE 4 DATA TRIANGULATION
- 2.4 RESEARCH ASSUMPTIONS
 - FIGURE 5 ASSUMPTIONS FOR RESEARCH STUDY

3 EXECUTIVE SUMMARY

FIGURE 6 REFRIGERATION SYSTEMS TO HOLD LARGEST MARKET SIZE DURING FORECAST PERIOD

FIGURE 7 COMMERCIAL APPLICATION TO HOLD LARGEST MARKET SIZE FOR MAGNETIC REFRIGERATION DURING FORECAST PERIOD

FIGURE 8 MAGNETIC REFRIGERATION MARKET IN APAC TO GROW AT HIGHEST CAGR DURING FORECAST PERIOD

4 PREMIUM INSIGHTS

4.1 ATTRACTIVE OPPORTUNITIES IN MAGNETIC REFRIGERATION MARKET

FIGURE 9 GOVERNMENT REGULATIONS IN VARIOUS COUNTRIES TO ADOPT GREEN TECHNOLOGY TO DRIVE MARKET GROWTH

4.2 MAGNETIC REFRIGERATION MARKET IN EUROPE, BY PRODUCT AND APPLICATION

FIGURE 10 REFRIGERATION SYSTEM AND COMMERCIAL APPLICATION SEGMENTS

TO HOLD LARGEST SHARES OF MAGNETIC REFRIGERATION MARKET IN EUROPE BY 2027

4.3 MAGNETIC REFRIGERATION MARKET, BY TYPE

FIGURE 11 BEVERAGE COOLERS TO HOLD LARGEST MARKET SIZE OF MAGNETIC REFRIGERATION SYSTEM

4.4 MAGNETIC REFRIGERATION MARKET, BY COUNTRY

FIGURE 12 MAGNETIC REFRIGERATION MARKET IN CHINA TO GROW AT HIGHEST CAGR FROM 2022 TO 2027

5 MARKET OVERVIEW

5.1 MARKET DYNAMICS

FIGURE 13 GROWING ADOPTION OF MAGNETIC REFRIGERATION TECHNOLOGY DUE TO RISING FOCUS ON ENERGY EFFICIENT AND ENVIRONMENTALLY FRIENDLY PRODUCTS

FIGURE 14 MAGNETIC REFRIGERATION MARKET DRIVERS AND THEIR IMPACT

FIGURE 15 MAGNETIC REFRIGERATION MARKET RESTRAINTS AND THEIR IMPACT

FIGURE 16 MAGNETIC REFRIGERATION MARKET OPPORTUNITIES AND THEIR IMPACT

FIGURE 17 MAGNETIC REFRIGERATION MARKET CHALLENGES AND THEIR

IMPACT

5.1.1 DRIVERS

5.1.1.1 Increasing government initiatives on green technology

5.1.1.2 Low maintenance costs

5.1.1.3 Compact design and high energy efficiency

FIGURE 18 DISTRIBUTION OF GLOBAL REFRIGERATION SECTOR'S ELECTRICITY CONSUMPTION

5.1.2 RESTRAINTS

5.1.2.1 High initial investment

5.1.2.2 Limited field strength of permanent magnets

5.1.3 OPPORTUNITIES

5.1.3.1 Adoption of magnetic refrigeration in commercial sector

5.1.3.2 High potential in industrial sector

5.1.4 CHALLENGES

5.1.4.1 Need for suitable magnetocaloric materials

5.1.4.2 Lack of awareness of benefits of magnetic refrigeration

5.2 VALUE CHAIN ANALYSIS

5.3 GOVERNMENT REGULATIONS RELATED TO REFRIGERATION & AIR-CONDITIONING

5.4 TECHNOLOGY ANALYSIS

5.5 PATENT ANALYSIS

5.6 USE CASES FOR MAGNETIC REFRIGERATION

5.7 ASP ANALYSIS OF MAGNETIC REFRIGERATION SYSTEM

FIGURE 19 ASP ANALYSIS OF MAGNETIC REFRIGERATION SYSTEM

5.8 ECOSYSTEM FOR REFRIGERATION INDUSTRY

FIGURE 20 ECOSYSTEM FOR REFRIGERATION INDUSTRY

6 MAGNETIC REFRIGERATION MARKET, BY PRODUCT

6.1 INTRODUCTION

FIGURE 21 REFRIGERATION SYSTEM TO HOLD LARGEST MARKET SIZE OF MAGNETIC REFRIGERATION MARKET DURING FORECAST PERIOD

TABLE 1 MAGNETIC REFRIGERATION MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 2 MAGNETIC REFRIGERATION MARKET IN TERMS OF VOLUME, 2022–2027 (THOUSAND UNITS)

6.2 REFRIGERATION SYSTEM

FIGURE 22 BEVERAGE COOLERS TO DOMINATE MAGNETIC REFRIGERATION MARKET DURING FORECAST PERIOD

TABLE 3 MAGNETIC REFRIGERATION MARKET FOR REFRIGERATION SYSTEM, BY TYPE, 2022–2027 (USD MILLION))

FIGURE 23 COMMERCIAL APPLICATION TO HOLD LARGEST MARKET SIZE FOR MAGNETIC REFRIGERATION SYSTEMS DURING FORECAST PERIOD

TABLE 4 MAGNETIC REFRIGERATION MARKET FOR REFRIGERATION SYSTEM, BY APPLICATION, 2022–2027 (USD MILLION)

TABLE 5 MAGNETIC REFRIGERATION MARKET FOR REFRIGERATION SYSTEM FOR TRANSPORTATION, BY APPLICATION, 2024–2027 (USD MILLION)

TABLE 6 MAGNETIC REFRIGERATION MARKET FOR REFRIGERATION SYSTEM FOR INDUSTRIAL, BY APPLICATION, 2023–2027 (USD MILLION)

FIGURE 24 EUROPE TO HOLD LARGEST MARKET SIZE FOR MAGNETIC REFRIGERATION SYSTEMS DURING FORECAST PERIOD

TABLE 7 MAGNETIC REFRIGERATION MARKET FOR REFRIGERATION SYSTEM, BY REGION, 2022–2027 (USD MILLION)

6.2.1 BEVERAGE COOLERS

6.2.1.1 Compactness and energy efficiency to drive market growth

FIGURE 25 APAC TO GROW AT HIGHEST RATE FOR BEVERAGE COOLERS IN MAGNETIC REFRIGERATION MARKET

TABLE 8 MAGNETIC REFRIGERATION MARKET FOR BEVERAGE COOLERS, BY REGION, 2022–2027 (USD MILLION)

6.2.2 CABINET DISPLAYS

6.2.2.1 Higher efficiency and greater reliability to propel market growth

TABLE 9 MAGNETIC REFRIGERATION MARKET FOR CABINET DISPLAYS, BY REGION, 2022–2027 (USD MILLION)

6.2.3 ICE CREAM CABINETS

6.2.3.1 Ice cream cabinets induced with magnetic cooling technology to have lower maintenance costs, leading to better ROI

TABLE 10 MAGNETIC REFRIGERATION MARKET FOR ICE CREAM CABINETS, BY REGION, 2022–2027 (USD MILLION)

6.2.4 FREEZERS

6.2.4.1 Rising government initiatives to phase out harmful refrigerants to drive market growth

TABLE 11 MAGNETIC REFRIGERATION MARKET FOR FREEZERS, BY REGION, 2023–2027 (USD MILLION)

6.2.5 REFRIGERATORS

6.2.5.1 Refrigerators to grow at highest CAGR

TABLE 12 MAGNETIC REFRIGERATION MARKET FOR REFRIGERATORS, BY REGION, 2023–2027 (USD MILLION)

6.3 AIR CONDITIONING SYSTEMS

FIGURE 26 STATIONARY AIR CONDITIONERS TO HOLD LARGEST SIZE OF MAGNETIC REFRIGERATION MARKET FOR AIR CONDITIONING SYSTEMS
TABLE 13 MAGNETIC REFRIGERATION MARKET FOR AIR CONDITIONING SYSTEM, BY TYPE, 2023–2027 (USD MILLION)

FIGURE 27 COMMERCIAL APPLICATION TO HOLD LARGEST SIZE OF MAGNETIC REFRIGERATION MARKET FOR AIR CONDITIONING SYSTEMS

TABLE 14 MAGNETIC REFRIGERATION MARKET FOR AIR CONDITIONING SYSTEMS, BY APPLICATION, 2023–2027 (USD THOUSAND)

TABLE 15 MAGNETIC REFRIGERATION FOR AIR CONDITIONING SYSTEM MARKET FOR TRANSPORTATION, BY APPLICATION, 2024–2027 (USD THOUSAND)

TABLE 16 MAGNETIC REFRIGERATION MARKET FOR AIR CONDITIONING SYSTEM FOR INDUSTRIAL, BY APPLICATION, 2023–2027 (USD MILLION)

FIGURE 28 EUROPE TO HOLD LARGEST MARKET SIZE OF AIR CONDITIONING SYSTEMS DURING FORECAST PERIOD

TABLE 17 MAGNETIC REFRIGERATION MARKET FOR AIR-CONDITIONING SYSTEMS, BY REGION, 2022–2027 (USD MILLION)

6.3.1 STATIONARY AIR CONDITIONERS

6.3.1.1 Stationary air conditioners to hold largest market size for air conditioning systems

TABLE 18 MAGNETIC REFRIGERATION MARKET FOR STATIONARY AIR CONDITIONING, BY REGION, 2023–2027 (USD MILLION)

6.3.2 MOBILE AIR CONDITIONERS

6.3.2.1 Mobile air conditioners' compact design to drive market growth
FIGURE 29 EUROPE TO HOLD LARGEST MARKET SIZE OF MOBILE AIR CONDITIONING SYSTEMS DURING FORECAST PERIOD

TABLE 19 MAGNETIC REFRIGERATION MARKET FOR MOBILE AIR CONDITIONING, BY REGION, 2024–2027 (USD THOUSAND)

6.3.3 CHILLERS

6.3.3.1 Chillers possess huge scope for industrial applications
TABLE 20 MAGNETIC REFRIGERATION MARKET FOR CHILLERS, BY REGION, 2024–2027 (USD MILLION)

6.4 IMPACT OF COVID-19 ON REFRIGERATION INDUSTRY

7 MAGNETIC REFRIGERATION MARKET, BY APPLICATION

7.1 INTRODUCTION

FIGURE 30 COMMERCIAL APPLICATION TO HOLD LARGEST MARKET SIZE FOR MAGNETIC REFRIGERATION DURING FORECAST PERIOD

TABLE 21 MAGNETIC REFRIGERATION MARKET, BY APPLICATION, 2022–2027
(USD MILLION)

7.2 COMMERCIAL

7.2.1 COMMERCIAL APPLICATION TO HOLD HIGHEST MARKET SHARE

TABLE 22 COMMERCIAL APPLICATION: MAGNETIC REFRIGERATION MARKET,
BY PRODUCT, 2022–2027 (USD MILLION)

FIGURE 31 APAC TO GROW AT HIGHEST CAGR FOR COMMERCIAL
APPLICATIONS OF MAGNETIC REFRIGERATION MARKET

TABLE 23 COMMERCIAL APPLICATION: MAGNETIC REFRIGERATION MARKET,
BY REGION, 2022–2027 (USD MILLION)

TABLE 24 COMMERCIAL APPLICATION: MAGNETIC REFRIGERATION MARKET
FOR REFRIGERATION SYSTEM, BY REGION, 2022–2027 (USD MILLION)

TABLE 25 COMMERCIAL APPLICATION: MAGNETIC REFRIGERATION MARKET
FOR

AIR CONDITIONING, BY REGION, 2023–2027 (USD MILLION)

7.3 INDUSTRIAL

FIGURE 32 FOOD & BEVERAGE FOR INDUSTRIAL APPLICATION TO GROW AT
HIGHEST CAGR DURING FORECAST PERIOD

TABLE 26 INDUSTRIAL APPLICATION: MAGNETIC REFRIGERATION MARKET, BY
APPLICATION, 2023–2027 (USD MILLION)

TABLE 27 INDUSTRIAL APPLICATION: MAGNETIC REFRIGERATION MARKET, BY
PRODUCT, 2023–2027 (USD MILLION)

FIGURE 33 EUROPE HOLDS HIGHEST MARKET SHARE FOR INDUSTRIAL
APPLICATIONS OF MAGNETIC REFRIGERATION

TABLE 28 INDUSTRIAL APPLICATION: MAGNETIC REFRIGERATION MARKET, BY
REGION, 2023–2027 (USD MILLION)

TABLE 29 INDUSTRIAL APPLICATION: MAGNETIC REFRIGERATION MARKET FOR
REFRIGERATION SYSTEM, BY REGION, 2023–2027 (USD MILLION)

TABLE 30 INDUSTRIAL APPLICATION: MAGNETIC REFRIGERATION MARKET FOR
AIR CONDITIONING, BY REGION, 2023–2027 (USD THOUSAND)

7.3.1 FOOD & BEVERAGE

7.3.1.1 Growing global market for processed food and increasing concerns to
maintain their quality to drive market

TABLE 31 FOOD & BEVERAGE APPLICATION: MAGNETIC REFRIGERATION
MARKET, BY PRODUCT, 2022–2027 (USD MILLION)

FIGURE 34 APAC TO GROW AT HIGHEST CAGR FOR MAGNETIC
REFRIGERATION MARKET FOR FOOD & BEVERAGE DURING FORECAST
PERIOD

TABLE 32 FOOD & BEVERAGE APPLICATION: MAGNETIC REFRIGERATION

MARKET, BY REGION, 2023–2027 (USD MILLION)

TABLE 33 FOOD & BEVERAGE APPLICATION: MAGNETIC REFRIGERATION MARKET FOR REFRIGERATION SYSTEM, BY REGION, 2023–2027 (USD MILLION)

TABLE 34 FOOD & BEVERAGE APPLICATION: MAGNETIC REFRIGERATION MARKET FOR AIR CONDITIONING, BY REGION, 2023–2027 (USD THOUSAND)

7.3.2 HEALTHCARE

7.3.2.1 Need to monitor and store critical pharmaceuticals to create need for advanced cooling solutions globally

TABLE 35 HEALTHCARE APPLICATION: MAGNETIC REFRIGERATION MARKET, BY PRODUCT, 2023–2027 (USD THOUSAND)

TABLE 36 HEALTHCARE APPLICATION: MAGNETIC REFRIGERATION MARKET, BY REGION, 2023–2027 (USD THOUSAND)

TABLE 37 HEALTHCARE APPLICATION: MAGNETIC REFRIGERATION MARKET FOR REFRIGERATION SYSTEM, BY REGION, 2023–2027 (USD THOUSAND)

TABLE 38 HEALTHCARE APPLICATION: MAGNETIC REFRIGERATION MARKET FOR

AIR CONDITIONING, BY REGION, 2023–2027 (USD THOUSAND)

7.4 TRANSPORTATION

FIGURE 35 LOGISTICS HOLDS HIGHEST MARKET SHARE FOR TRANSPORTATION APPLICATION OF MAGNETIC REFRIGERATION MARKET DURING FORECAST PERIOD

TABLE 39 TRANSPORTATION APPLICATION: MAGNETIC REFRIGERATION MARKET, BY TYPE, 2024–2027 (USD THOUSAND)

TABLE 40 TRANSPORTATION APPLICATION: MAGNETIC REFRIGERATION MARKET, BY PRODUCT, 2024–2027 (USD MILLION)

FIGURE 36 APAC TO GROW AT HIGHEST CAGR FOR TRANSPORTATION APPLICATION OF MAGNETIC REFRIGERATION MARKET

TABLE 41 TRANSPORTATION APPLICATION: MAGNETIC REFRIGERATION MARKET FOR TRANSPORTATION BY REGION, 2024–2027 (USD MILLION)

TABLE 42 TRANSPORTATION APPLICATION: MAGNETIC REFRIGERATION MARKET FOR REFRIGERATION, BY REGION, 2024–2027 (USD MILLION)

TABLE 43 TRANSPORTATION APPLICATION: MAGNETIC REFRIGERATION MARKET FOR AIR CONDITIONING, BY REGION, 2024–2027 (USD MILLION)

7.4.1 LOGISTICS

7.4.1.1 Need for maintaining quality of commodity throughout value chain drives market growth

TABLE 44 LOGISTICS APPLICATION: MAGNETIC REFRIGERATION MARKET, BY PRODUCT, 2024–2027 (USD MILLION)

FIGURE 37 EUROPE TO HOLD LARGEST MARKET SIZE FOR LOGISTICS IN

LOGISTICS APPLICATION DURING FORECAST PERIOD

TABLE 45 LOGISTICS APPLICATION: MAGNETIC REFRIGERATION MARKET, BY REGION, 2024–2027 (USD MILLION)

TABLE 46 LOGISTICS APPLICATION: MAGNETIC REFRIGERATION MARKET FOR REFRIGERATION SYSTEM, BY REGION, 2024–2027 (USD MILLION)

TABLE 47 LOGISTICS APPLICATION: MAGNETIC REFRIGERATION MARKET FOR AIR CONDITIONING, BY REGION, 2024–2027 (USD THOUSAND)

7.4.2 AUTOMOTIVE

7.4.2.1 Reduced energy consumption trait of magnetic refrigeration technology to provide opportunity

TABLE 48 AUTOMOTIVE APPLICATION: MAGNETIC REFRIGERATION MARKET, BY PRODUCT, 2024–2027 (USD MILLION)

TABLE 49 AUTOMOTIVE APPLICATION: MAGNETIC REFRIGERATION MARKET, BY REGION, 2024–2027 (USD MILLION)

TABLE 50 AUTOMOTIVE APPLICATION: MAGNETIC REFRIGERATION MARKET, FOR REFRIGERATION SYSTEM, BY REGION, 2024–2027 (USD THOUSAND)

TABLE 51 AUTOMOTIVE APPLICATION: MAGNETIC REFRIGERATION MARKET FOR

AIR CONDITIONING, BY REGION, 2024–2027 (USD THOUSAND)

7.4.3 AEROSPACE

7.4.3.1 Lower consumption of energy by magnetic refrigeration systems helps lower overall operational & maintenance costs

TABLE 52 AEROSPACE APPLICATION: MAGNETIC REFRIGERATION MARKET, BY PRODUCT, 2025–2027 (USD THOUSAND)

TABLE 53 AEROSPACE APPLICATION: MAGNETIC REFRIGERATION MARKET, BY REGION, 2025–2027 (USD THOUSAND)

TABLE 54 AEROSPACE APPLICATION: MAGNETIC REFRIGERATION MARKET FOR REFRIGERATION SYSTEM, BY REGION, 2025–2027 (USD THOUSAND)

TABLE 55 AEROSPACE APPLICATION: MAGNETIC REFRIGERATION MARKET FOR

AIR CONDITIONING, BY REGION, 2025–2027 (USD THOUSAND)

7.4.4 MARINE

7.4.4.1 Marine application to be commercialized later than other applications

TABLE 56 MARINE APPLICATION: MAGNETIC REFRIGERATION MARKET, BY PRODUCT, 2025–2027 (USD THOUSAND)

TABLE 57 MARINE APPLICATION: MAGNETIC REFRIGERATION MARKET, BY REGION, 2025–2027 (USD THOUSAND)

TABLE 58 MARINE APPLICATION: MAGNETIC REFRIGERATION MARKET FOR

REFRIGERATION SYSTEM, BY REGION, 2025–2027 (USD THOUSAND)

TABLE 59 MARINE APPLICATION: MAGNETIC REFRIGERATION MARKET FOR AIR CONDITIONING, BY REGION, 2025–2027 (USD THOUSAND)

7.5 DOMESTIC

7.5.1 DEMAND FOR LOW POWER CONSUMPTION IN HOUSEHOLD APPLIANCES TO DRIVE MARKET

TABLE 60 DOMESTIC APPLICATION: MAGNETIC REFRIGERATION MARKET, BY PRODUCT, 2023–2027 (USD MILLION)

TABLE 61 DOMESTIC APPLICATION: MAGNETIC REFRIGERATION MARKET, BY REGION, 2023–2027 (USD THOUSAND)

TABLE 62 DOMESTIC APPLICATION: MAGNETIC REFRIGERATION MARKET FOR REFRIGERATION SYSTEM, BY REGION, 2023–2027 (USD THOUSAND)

TABLE 63 DOMESTIC APPLICATION: MAGNETIC REFRIGERATION MARKET FOR AIR CONDITIONING, BY REGION, 2023–2027 (USD THOUSAND)

7.6 IMPACT OF COVID-19 ON REFRIGERATION APPLICATIONS

8 MATERIALS USED FOR MAGNETIC REFRIGERATION

8.1 INTRODUCTION

8.2 GADOLINIUM

8.3 DYSPROSIUM ALLOYS

8.4 ERBIUM

8.5 OTHERS

9 MAGNETIC REFRIGERATION SYSTEM, BY TYPE

9.1 INTRODUCTION

9.2 RECIPROCATING TYPE

9.3 ROTARY TYPE

10 GEOGRAPHIC ANALYSIS

10.1 INTRODUCTION

FIGURE 38 EUROPE TO LEAD MAGNETIC REFRIGERATION MARKET DURING FORECAST PERIOD

TABLE 64 MAGNETIC REFRIGERATION MARKET, BY REGION, 2022–2027 (USD MILLION)

10.2 NORTH AMERICA

FIGURE 39 NORTH AMERICA: MAGNETIC REFRIGERATION MARKET SNAPSHOT

FIGURE 40 US TO GROW AT HIGHEST CAGR FOR NORTH AMERICAN MAGNETIC REFRIGERATION DURING FORECAST PERIOD

TABLE 65 MAGNETIC REFRIGERATION MARKET IN NORTH AMERICA, BY COUNTRY, 2022–2027 (USD MILLION)

TABLE 66 MAGNETIC REFRIGERATION MARKET IN NORTH AMERICA, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 67 MAGNETIC REFRIGERATION MARKET IN NORTH AMERICA, BY APPLICATION, 2022–2027 (USD MILLION)

TABLE 68 MAGNETIC REFRIGERATION MARKET IN NORTH AMERICA FOR COMMERCIAL, BY COUNTRY, 2022–2027 (USD MILLION)

TABLE 69 MAGNETIC REFRIGERATION MARKET IN NORTH AMERICA FOR DOMESTIC, BY COUNTRY, 2023–2027 (USD THOUSAND)

TABLE 70 MAGNETIC REFRIGERATION MARKET IN NORTH AMERICA FOR INDUSTRIAL, BY COUNTRY, 2023–2027 (USD MILLION)

TABLE 71 MAGNETIC REFRIGERATION MARKET IN NORTH AMERICA FOR TRANSPORTATION, BY COUNTRY, 2024–2027 (USD THOUSAND)

TABLE 72 MAGNETIC REFRIGERATION MARKET IN NORTH AMERICA FOR INDUSTRIAL, BY APPLICATION, 2023–2027 (USD MILLION)

TABLE 73 MAGNETIC REFRIGERATION MARKET IN NORTH AMERICA FOR TRANSPORTATION, BY APPLICATION, 2024–2027 (USD MILLION)

10.2.1 US

10.2.1.1 Increasing demand for eradicating harmful refrigerants to drive market

10.2.2 CANADA

10.2.2.1 Ongoing developments for commercial refrigeration industry to augment market growth

10.2.3 MEXICO

10.2.3.1 Rising demand for commercial and domestic refrigeration applications to propel demand for magnetic refrigeration

10.3 EUROPE

FIGURE 41 EUROPE: MAGNETIC REFRIGERATION MARKET SNAPSHOT

TABLE 74 MAGNETIC REFRIGERATION MARKET IN EUROPE, BY COUNTRY, 2022–2027 (USD MILLION)

TABLE 75 MAGNETIC REFRIGERATION MARKET IN EUROPE, BY PRODUCT, 2022–2027 (USD MILLION)

TABLE 76 MAGNETIC REFRIGERATION MARKET IN EUROPE, BY APPLICATION, 2022–2027 (USD MILLION)

TABLE 77 MAGNETIC REFRIGERATION MARKET IN EUROPE FOR COMMERCIAL, BY COUNTRY, 2022–2027 (USD MILLION)

TABLE 78 MAGNETIC REFRIGERATION MARKET IN EUROPE FOR DOMESTIC, BY COUNTRY, 2023–2027 (USD THOUSAND)

TABLE 79 MAGNETIC REFRIGERATION MARKET IN EUROPE FOR INDUSTRIAL, BY COUNTRY, 2023–2027 (USD THOUSAND)

TABLE 80 MAGNETIC REFRIGERATION MARKET IN EUROPE FOR TRANSPORTATION, BY COUNTRY, 2024–2027 (USD THOUSAND)

TABLE 81 MAGNETIC REFRIGERATION MARKET IN EUROPE FOR INDUSTRIAL, BY APPLICATION, 2023–2027 (USD MILLION)

TABLE 82 MAGNETIC REFRIGERATION MARKET IN EUROPE FOR TRANSPORTATION, BY APPLICATION, 2024–2027 (USD MILLION)

10.3.1 UK

10.3.1.1 Growing government initiatives to curb usage of harmful refrigerants to drive market

10.3.2 GERMANY

10.3.2.1 Germany to hold highest market share for magnetic refrigeration in Europe during forecast period

10.3.3 FRANCE

10.3.3.1 Increasing adoption of F-gas regulations to drive market growth

10.3.4 ITALY

10.3.4.1 Growing adoption of commercial refrigeration systems to provide opportunity

10.3.5 REST OF EUROPE

10.4 APAC

FIGURE 42 APAC: MAGNETIC REFRIGERATION MARKET SNAPSHOT

FIGURE 43 CHINA TO HOLD LARGEST MARKET SHARE FOR MAGNETIC REFRIGERATION DURING FORECAST PERIOD

TABLE 83 MAGNETIC REFRIGERATION MARKET IN APAC, BY COUNTRY, 2022–2027 (USD THOUSAND)

TABLE 84 MAGNETIC REFRIGERATION MARKET IN APAC, BY APPLICATION, 2022–2027 (USD MILLION)

TABLE 85 MAGNETIC REFRIGERATION MARKET IN APAC FOR COMMERCIAL, BY COUNTRY, 2022–2027 (USD THOUSAND)

TABLE 86 MAGNETIC REFRIGERATION MARKET IN APAC FOR DOMESTIC, BY COUNTRY, 2023–2027 (USD THOUSAND)

TABLE 87 MAGNETIC REFRIGERATION MARKET IN APAC FOR INDUSTRIAL, BY COUNTRY, 2023–2027 (USD THOUSAND)

TABLE 88 MAGNETIC REFRIGERATION MARKET IN APAC FOR TRANSPORTATION, BY COUNTRY, 2024–2027 (USD THOUSAND)

TABLE 89 MAGNETIC REFRIGERATION MARKET IN APAC FOR INDUSTRIAL, BY

APPLICATION, 2023–2027 (USD MILLION)

TABLE 90 MAGNETIC REFRIGERATION MARKET IN APAC FOR
TRANSPORTATION, BY APPLICATION, 2024–2027 (USD MILLION)

10.4.1 CHINA

10.4.1.1 China to hold highest market share for magnetic
refrigeration in APAC

10.4.2 JAPAN

10.4.2.1 Active participation of government to reduce HCFC emission to
drive market growth

10.4.3 SOUTH KOREA

10.4.3.1 Increasing per capita income to drive market growth across commercial
refrigeration, eventually propelling market growth across magnetic refrigeration
applications

10.4.4 REST OF APAC

10.5 ROW

TABLE 91 MAGNETIC REFRIGERATION MARKET IN ROW, BY REGION, 2022–2027
(USD THOUSAND)

TABLE 92 MAGNETIC REFRIGERATION MARKET IN ROW, BY PRODUCT,
2022–2027 (USD MILLION)

TABLE 93 MAGNETIC REFRIGERATION MARKET IN ROW, BY APPLICATION,
2022–2027 (USD MILLION)

TABLE 94 MAGNETIC REFRIGERATION MARKET IN ROW FOR COMMERCIAL, BY
REGION, 2022–2027 (USD THOUSAND)

TABLE 95 MAGNETIC REFRIGERATION MARKET IN ROW FOR DOMESTIC, BY
REGION, 2023–2027 (USD THOUSAND)

TABLE 96 MAGNETIC REFRIGERATION MARKET IN ROW FOR INDUSTRIAL, BY
REGION, 2023–2027 (USD THOUSAND)

TABLE 97 MAGNETIC REFRIGERATION MARKET IN ROW FOR
TRANSPORTATION, BY REGION, 2024–2027 (USD THOUSAND)

TABLE 98 MAGNETIC REFRIGERATION MARKET IN ROW FOR INDUSTRIAL, BY
APPLICATION, 2023–2027 (USD THOUSAND)

TABLE 99 MAGNETIC REFRIGERATION MARKET IN ROW FOR
TRANSPORTATION, BY APPLICATION, 2024–2027 (USD THOUSAND)

10.5.1 SOUTH AMERICA

10.5.1.1 Brazil to provide significant opportunities

10.5.2 MIDDLE EAST & AFRICA

10.5.2.1 Rising demand for energy-efficient solutions to drive growth of magnetic
refrigeration

10.5.3 IMPACT OF COVID-19

11 COMPETITIVE LANDSCAPE

11.1 OVERVIEW

11.2 MARKET RANKING ANALYSIS, 2022

FIGURE 44 GLOBAL MAGNETIC REFRIGERATION MARKET RANKING ANALYSIS, 2022

11.3 COMPANY EVALUATION MATRIX

11.3.1 STAR

11.3.2 EMERGING LEADER

11.3.3 PERVASIVE

11.3.4 PARTICIPANT

FIGURE 45 MAGNETIC REFRIGERATION MARKET (GLOBAL) COMPANY EVALUATION MATRIX, 2022

11.4 PRODUCT & BUSINESS FOOTPRINT ANALYSIS OF TOP PLAYERS

FIGURE 46 PRODUCT PORTFOLIO ANALYSIS OF TOP PLAYERS IN MAGNETIC REFRIGERATION MARKET

11.5 KEY MARKET DEVELOPMENTS

11.5.1 PRODUCT PROTOTYPE LAUNCHES & DEVELOPMENTS

TABLE 100 PRODUCT LAUNCHES & DEVELOPMENTS, 2016–2020

11.5.2 PARTNERSHIPS & COLLABORATIONS

TABLE 101 PARTNERSHIPS & COLLABORATIONS, 2016–2020

11.5.3 ACQUISITIONS

TABLE 102 ACQUISITIONS, 2016

12 COMPANY PROFILES

12.1 INTRODUCTION

12.2 KEY PLAYERS

(Business Overview, Products/Solutions/Services Offered, Recent Developments, SWOT Analysis, and MnM View)*

12.2.1 UBIBLUE

12.2.2 HAIER SMART HOME CO., LTD

FIGURE 47 HAIER SMART HOME CO., LTD: COMPANY SNAPSHOT

12.2.3 CAMFRIDGE LTD

12.2.4 ASTRONAUTICS CORPORATION OF AMERICA

12.2.5 VACUUMSCHMELZE GMBH & CO. KG

12.2.6 BASF SE

FIGURE 48 BASF SE: COMPANY SNAPSHOT

12.2.7 ERAMET

FIGURE 49 ERAMET S.A.: COMPANY SNAPSHOT

12.2.8 SAMSUNG ELECTRONICS CO., LTD

FIGURE 50 SAMSUNG ELECTRONICS CO., LTD: COMPANY SNAPSHOT

12.2.9 TOSHIBA CORPORATION

FIGURE 51 TOSHIBA CORPORATION: COMPANY SNAPSHOT

12.2.10 WHIRLPOOL CORPORATION

FIGURE 52 WHIRLPOOL CORPORATION: COMPANY SNAPSHOT

*Business Overview, Products/Solutions/Services Offered, Recent Developments, SWOT Analysis, and MnM View might not be captured in case of unlisted companies.

12.3 RIGHT TO WIN

12.4 OTHER KEY PLAYERS

12.4.1 CCS SA

12.4.2 CEMAFROID

12.4.3 GENERAL ENGINEERING & RESEARCH

12.4.4 KIRSCH

12.4.5 KIUTRA

12.4.6 MAGNOTHERM SOLUTIONS

12.4.7 MILLIPORE SIGMA

12.4.8 TCS MICROPUMPS LTD

12.4.9 VCU INNOVATION GATEWAY

13 APPENDIX

13.1 DISCUSSION GUIDE

13.2 KNOWLEDGE STORE: MARKETSandMARKETS' SUBSCRIPTION PORTAL

13.3 AVAILABLE CUSTOMIZATIONS

13.4 RELATED REPORTS

13.5 AUTHOR DETAILS

I would like to order

Product name: Magnetic Refrigeration Market by Product ((Refrigeration Systems (Beverage Cooler, Cabinet Display, Refrigerator), Air Conditioning Systems)), Application (Domestic, Commercial, Transportation, and Industrial), and Geography - Global Forecast to 2027

Product link: <https://marketpublishers.com/r/M05BB8D9223EN.html>

Price: US\$ 4,950.00 (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/M05BB8D9223EN.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