Gas insulated substation Market Research Report- Forecast till 2023

Description:


Market Scenario

Gas insulated substation is a structured substation in a sealed environment with sulfur hexafluoride as the insulating medium. The major component of gas insulated substation consist of busbar, circuit breaker, earthing switch, current transformer, feeder disconnector, cable termination, and control panel. These substations find its application mainly in utilities and industries. The main advantages of gas insulated substation include compact size, high flexibility and reliability, less outages, and maintenance free. Moreover, factor such as non-availability of sufficient space also drives the market of gas insulated substation which requires very compact space.

Medium voltage segment is estimated to dominate the gas insulated substation market during the forecast period. Moreover, it is also estimated that the growth of Asia Pacific will be driven by increasing installations of gas insulated substations in the region propelled by development of new smart grid projects in urban areas where space is a contraint. Moreover, big players such as ABB Ltd are having a continous engagement with Asian economies in order to strengthen the efficiency and reliability of their T&D networks. Also, factors such as increased power consumption, government mandates on energy efficiency, rising influx of renewable resources in the energy mix, and upgradation of ageing hydropower plants in Asia-Pacific are driving the market for global gas insulated substation.

Power distribution segment dominates the market as gas insulated substations create a new opportunity for power distribution utility providers where space constraint is a challenge. These kinds of substations are compact in size, thus overcome the major challenge of space constraint.

Global gas insulated substation market has been segmented based on voltage, installation, end-user, and region. Based on voltage, the market has been classified into medium voltage, high voltage, extra-high voltage, and ultra-high voltage. Medium voltage gas insulated substation segment dominates the market due to rapid improvement in the power distribution sector through the implementation of smart grid and smart metering technologies. Moreover, these substations are majorly used in distribution sector where space is a big issue. Therefore, the compact design of gas insulated substation allows the best utilization of space and offers most efficient and economical solutions to the end-users.

Based on installation, the market is segmented in to indoor and outdoor. Indoor segment is estimated to account for the largest share during the forecast period. The low maintenance of gas insulated substation minimizes the substation’s space requirement by as much as 70%, enabling it to be installed indoors, especially in urban areas. This would further drive the market of indoor gas insulated substation segment.

The global gas insulated substation market is expected to grow at 19.50% CAGR during the forecast period.

Market Segmentation
Global Gas insulated substation Market

Global gas insulated substation market is expected to witness a high growth during the forecast period due to increasing investments in T&D sector and rising energy demand of energy & limitation of space. For instance, it is also estimated that Asia-Pacific region would also be the fastest growing market during the forecast period. Moreover, factors such as increased power consumption, government mandates on energy efficiency, rising influx of renewable resources in the energy mix, and upgradation of ageing hydropower plants in Asia-Pacific are driving the market for global gas insulated substation.

Key Players

The key players of global turboexpanders market are Toshiba Corporation (Japan), Siemens AG (Germany), Fuji Electric Co. Ltd (Japan), Crompton Greaves (India), Hitachi Ltd. (Japan), ABB Ltd. (Switzerland), Schneider Electric (France), Larsen & Toubro (India), General Electric (US), Hyundai Heavy Industries (South Korea), Hyosung Corporation (South Korea), and Mitsubishi Electric Company (Japan).
4.1.2. GOVERNMENT INITIATIVE TOWARDS IMPROVING ELECTRICITY ACCESS

4.2. RESTRAINTS
4.2.1. HIGH COST OF EQUIPMENT AS COMPARED TO AIR INSULATED SUBSTATION
4.2.2. STRINGENT ENVIRONMENTAL & SAFETY REGULATIONS

4.3. OPPORTUNITIES
4.3.1. REPLACEMENT OF OLD SUBSTATION IN DEVELOPED REGIONS SUCH AS NORTH AMERICA

4.4. PORTER’S FIVE FORCES ANALYSIS
4.4.1. THREAT OF NEW ENTRANTS
4.4.2. BARGAINING POWER OF BUYERS
4.4.3. BARGAINING POWER OF SUPPLIERS
4.4.4. THREAT OF SUBSTITUTES
4.4.5. INTENSITY OF RIVALRY

4.5. VALUE CHAIN/SUPPLY CHAIN ANALYSIS

5. GLOBAL GAS INSULATED SUBSTATION MARKET, BY VOLTAGE
5.1. INTRODUCTION
5.2. MEDIUM VOLTAGE
5.2.1. MARKET ESTIMATES & FORECAST, 2018–2023
5.2.2. MARKET ESTIMATES & FORECAST BY REGION, 2018–2023
5.3. HIGH VOLTAGE
5.3.1. MARKET ESTIMATES & FORECAST, 2018–2023
5.3.2. MARKET ESTIMATES & FORECAST BY REGION, 2018–2023
5.4. EXTRA HIGH VOLTAGE
5.4.1. MARKET ESTIMATES & FORECAST, 2018–2023
5.4.2. MARKET ESTIMATES & FORECAST BY REGION, 2018–2023
5.5. ULTRA HIGH VOLTAGE
5.5.1. MARKET ESTIMATES & FORECAST, 2018–2023
5.5.2. MARKET ESTIMATES & FORECAST BY REGION, 2018–2023

6. GLOBAL GAS INSULATED SUBSTATION MARKET, BY INSTALLATION
6.1. INTRODUCTION
6.2. INDOOR
6.2.1. MARKET ESTIMATES & FORECAST, 2018–2023
6.2.2. MARKET ESTIMATES & FORECAST BY REGION, 2018–2023
6.3. OUTDOOR
6.3.1. MARKET ESTIMATES & FORECAST, 2018–2023
6.3.2. MARKET ESTIMATES & FORECAST BY REGION, 2018–2023

7. GLOBAL GAS INSULATED SUBSTATION MARKET, BY END-USER
7.1. INTRODUCTION
7.2. POWER DISTRIBUTION
7.2.1. MARKET ESTIMATES & FORECAST, 2018–2023
7.2.2. MARKET ESTIMATES & FORECAST BY REGION, 2018–2023
7.3. POWER TRANSMISSION
7.3.1. MARKET ESTIMATES & FORECAST, 2018–2023
7.3.2. MARKET ESTIMATES & FORECAST BY REGION, 2018–2023
7.4. POWER GENERATION
7.4.1. MARKET ESTIMATES & FORECAST, 2018–2023
7.4.2. MARKET ESTIMATES & FORECAST BY REGION, 2018–2023
7.5. INFRASTRUCTURE & TRANSPORTATION
7.5.1. MARKET ESTIMATES & FORECAST, 2018–2023
7.5.2. MARKET ESTIMATES & FORECAST BY REGION, 2018–2023

7.6. INDUSTRIES
7.6.1. MARKET ESTIMATES & FORECAST, 2018–2023
7.6.2. MARKET ESTIMATES & FORECAST BY REGION, 2018–2023

8. GLOBAL GAS INSULATED SUBSTATION MARKET, BY REGION

8.1. INTRODUCTION

8.2. NORTH AMERICA
8.2.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.2.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.2.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.2.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.2.5. US
8.2.5.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.2.5.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.2.5.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.2.5.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.2.6. CANADA
8.2.6.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.2.6.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.2.6.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.2.6.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.2.7. MEXICO
8.2.7.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.2.7.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.2.7.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.2.7.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023

8.3. EUROPE
8.3.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.3.1.1. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.3.1.2. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.3.1.3. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.3.2. GERMANY
8.3.2.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.3.2.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.3.2.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.3.2.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.3.3. FRANCE
8.3.3.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.3.3.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.3.3.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.3.3.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.3.4. UK
8.3.4.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.3.4.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.3.4.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.3.4.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.3.5. ITALY
8.3.5.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.3.5.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.3.5.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.3.5.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.3.6. REST OF EUROPE
8.3.6.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.3.6.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.3.6.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.3.6.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.4. ASIA-PACIFIC
8.4.1.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.4.1.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.4.1.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.4.1.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.4.2. CHINA
8.4.2.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.4.2.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.4.2.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.4.2.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.4.3. JAPAN
8.4.3.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.4.3.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.4.3.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.4.3.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.4.4. INDIA
8.4.4.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.4.4.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.4.4.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.4.4.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.4.5. SOUTH KOREA
8.4.5.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.4.5.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.4.5.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.4.5.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.4.6. AUSTRALIA
8.4.6.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.4.6.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.4.6.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.4.6.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.4.7. MALAYSIA
8.4.7.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.4.7.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.4.7.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.4.7.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.4.8. REST OF ASIA-PACIFIC
8.4.8.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.4.8.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.4.8.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.4.8.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.5. MIDDLE EAST & AFRICA
8.5.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.5.1.1. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.5.1.2. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.5.1.3. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.5.2. SAUDI ARABIA
8.5.2.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.5.2.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.5.2.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.5.2.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.5.3. UAE
8.5.3.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.5.3.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.5.3.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.5.3.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.5.4. IRAN
8.5.4.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.5.4.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.5.4.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.5.4.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.5.5. SOUTH AFRICA
8.5.5.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.5.5.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.5.5.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.5.5.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.5.6. REST OF MIDDLE EAST & AFRICA
8.5.6.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.5.6.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.5.6.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.5.6.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.6. SOUTH AMERICA
8.6.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.6.1.1. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.6.1.2. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.6.1.3. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.6.2. BRAZIL
8.6.2.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.6.2.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.6.2.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.6.2.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
8.6.3. ARGENTINA
8.6.3.1. MARKET ESTIMATES & FORECAST, 2018–2023
8.6.3.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
8.6.3.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
8.6.3.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
1.1.1. VENEZUELA
1.1.1.1. MARKET ESTIMATES & FORECAST, 2018–2023
1.1.1.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
1.1.1.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
1.1.1.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023
1.1.2. REST OF SOUTH AMERICA
1.1.2.1. MARKET ESTIMATES & FORECAST, 2018–2023
1.1.2.2. MARKET ESTIMATES & FORECAST BY VOLTAGE, 2018–2023
1.1.2.3. MARKET ESTIMATES & FORECAST BY INSTALLATION, 2018–2023
1.1.2.4. MARKET ESTIMATES & FORECAST BY END-USER, 2018–2023

2. COMPETITIVE LANDSCAPE

3. COMPANY PROFILE

3.1. TOSHIBA CORPORATION (JAPAN)
3.1.1. COMPANY OVERVIEW
3.1.2. PRODUCTS/SERVICES OFFERING
3.1.3. FINANCIAL OVERVIEW
3.1.4. KEY DEVELOPMENTS
3.1.5. STRATEGY
3.1.6. SWOT ANALYSIS

3.2. SIEMENS AG (GERMANY)
3.2.1. COMPANY OVERVIEW
3.2.2. PRODUCTS/SERVICES OFFERING
3.2.3. FINANCIAL OVERVIEW
3.2.4. KEY DEVELOPMENTS
3.2.5. STRATEGY
3.2.6. SWOT ANALYSIS

3.3. FUJI ELECTRIC CO. LTD (JAPAN)
3.3.1. COMPANY OVERVIEW
3.3.2. PRODUCTS/SERVICES OFFERING
3.3.3. FINANCIAL OVERVIEW
3.3.4. KEY DEVELOPMENTS
3.3.5. STRATEGY
3.3.6. SWOT ANALYSIS

3.4. CROMPTON & GREAVES (INDIA)
3.4.1. COMPANY OVERVIEW
3.4.2. PRODUCTS/SERVICES OFFERING
3.4.3. FINANCIAL OVERVIEW
3.4.4. KEY DEVELOPMENTS
3.4.5. STRATEGY
3.4.6. SWOT ANALYSIS

3.5. HITACHI LTD. (JAPAN)
3.5.1. COMPANY OVERVIEW
3.5.2. PRODUCTS/SERVICES OFFERING
3.5.3. FINANCIAL OVERVIEW
3.5.4. KEY DEVELOPMENTS
3.5.5. STRATEGY
3.5.6. SWOT ANALYSIS

3.6. ABB LTD. (SWITZERLAND)
3.6.1. COMPANY OVERVIEW
3.6.2. PRODUCTS/SERVICES OFFERING
3.6.3. FINANCIAL OVERVIEW
LIST OF TABLES
TABLE 44 MIDDLE EAST & AFRICA: GAS INSULATED SUBSTATION MARKET, BY END-USER
TABLE 45 SOUTH AMERICA: GAS INSULATED SUBSTATION MARKET, BY COUNTRY
TABLE 46 SOUTH AMERICA: GAS INSULATED SUBSTATION MARKET, BY VOLTAGE
TABLE 47 SOUTH AMERICA: GAS INSULATED SUBSTATION MARKET, BY INSTALLATION
TABLE 48 SOUTH AMERICA GAS INSULATED SUBSTATION MARKET, BY END-USER

LIST OF FIGURES

FIGURE 1 RESEARCH PROCESS OF MRFR
FIGURE 2 TOP-DOWN & BOTTOM-UP APPROACH
FIGURE 3 MARKET DYNAMICS
FIGURE 4 IMPACT ANALYSIS: MARKET DRIVERS
FIGURE 5 IMPACT ANALYSIS: MARKET RESTRAINTS
FIGURE 6 PORTER’S FIVE FORCES ANALYSIS
FIGURE 7 VALUE CHAIN ANALYSIS
FIGURE 8 GLOBAL GAS INSULATED SUBSTATION MARKET SHARE, BY VOLTAGE, 2017 (%)
FIGURE 9 GLOBAL GAS INSULATED SUBSTATION MARKET, BY VOLTAGE, 2018–2023 (USD MILLION)
FIGURE 10 GLOBAL GAS INSULATED SUBSTATION MARKET SHARE, BY INSTALLATION, 2017 (%)
FIGURE 11 GLOBAL GAS INSULATED SUBSTATION MARKET, BY INSTALLATION, 2018–2023 (USD MILLION)
FIGURE 12 GLOBAL GAS INSULATED SUBSTATION MARKET SHARE, BY END-USER, 2017 (%)
FIGURE 13 GLOBAL GAS INSULATED SUBSTATION MARKET, BY END-USER, 2018–2023 (USD MILLION)
FIGURE 14 GLOBAL GAS INSULATED SUBSTATION MARKET SHARE (%), BY REGION, 2017
FIGURE 15 GLOBAL GAS INSULATED SUBSTATION MARKET, BY REGION, 2018–2023 (USD MILLION)
FIGURE 16 NORTH AMERICA: GAS INSULATED SUBSTATION MARKET SHARE (%), 2017
FIGURE 17 NORTH AMERICA: GAS INSULATED SUBSTATION MARKET BY COUNTRY, 2018–2023 (USD MILLION)
FIGURE 18 EUROPE GAS INSULATED SUBSTATION MARKET SHARE (%), 2017
FIGURE 19 EUROPE GAS INSULATED SUBSTATION MARKET BY COUNTRY, 2018–2023 (USD MILLION)
FIGURE 20 ASIA-PACIFIC GAS INSULATED SUBSTATION MARKET SHARE (%), 2017
FIGURE 21 ASIA-PACIFIC GAS INSULATED SUBSTATION MARKET BY COUNTRY, 2018–2023 (USD MILLION)
FIGURE 22 MIDDLE EAST & AFRICA GAS INSULATED SUBSTATION MARKET SHARE (%), 2017
FIGURE 23 MIDDLE EAST & AFRICA GAS INSULATED SUBSTATION MARKET BY COUNTRY, 2018–2023 (USD MILLION)
FIGURE 24 SOUTH AMERICA GAS INSULATED SUBSTATION MARKET SHARE (%), 2017
FIGURE 25 SOUTH AMERICA GAS INSULATED SUBSTATION MARKET BY COUNTRY, 2018–2023 (USD MILLION)