Synchronous Condenser Market Insights: The Future of Reactive Power & Grid Stability

Global Synchronous Condenser Market Price to Strike US$ 751 Million by 2030

WILMINGTON, DE, UNITED STATES, November 27, 2024 / EINPresswire.com/ --

According to a new report published by Allied Market Research, The synchronous condenser market size was valued at $568.9 million in 2020, and is projected to reach $751 million by 2030, growing at a CAGR of 2.8% from 2021 to 2030.

Synchronous condenser is the device used to generate or absorb reactive power as per the need for stabilization of electric utilities. It is an alternative to capacitor bank to correct the power factor in power grids. The installation of synchronous condensers in electric utilities and industrial applications is same as of large electric motors. During short circuits or fluctuating loads, the energy stored in the rotor of synchronous condensers is used to stabilize power system by compensating reactive power and correcting power factor of grid system.

> Rise in demand for reactive power compensation & power factor correction and rapid growth in renewable power integration are the key trends in the synchronous condenser market”
>
> *Allied Market Research*

Download PDF Brochure: https://www.alliedmarketresearch.com/request-sample/10956

Asia-Pacific is expected to grow at the fastest rate, registering a CAGR of 3.9%, throughout the forecast period.

In 2020, Europe dominated the global synchronous condenser market with more than 35.8% of the share, in terms of revenue.

Europe garnered the dominant share in 2020, and anticipated to maintain this synchronous condenser market trend during the forecast period. This is attributed to numerous factors such as presence of huge consumer base, rapid expansion of the renewable energy sector, high-voltage direct current (HVDC) systems, and the existence of key players in the region.

The key players operating and profiled in the global synchronous condenser industry report include ABB, Ltd., Andritz, Eaton Corporation Plc, Fuji Electric, General Electric, Ideal Electric Power Co., Mitsubishi Electric Corporation, Siemens Energy, Voith GmbH & Co. KGaA, and WEG Group.

Other players operating in the synchronous condenser market are Toshiba Corporation, Brush Group, Sustainable Power Systems, Inc., Power Systems & Controls, Inc., Ansaldo Energia, and Modern Power Systems.

Presence of the countries such as Germany, the UK, France and Spain is anticipated to contribute toward the growth of the synchronous condenser market in Europe.

Significant development of the end-use industries such as oil & gas, telecom, mining, and healthcare is fueling the growth of the synchronous condenser market, owing to rise in demand for reactive power to compensate lagging power factor created by inductive loads in the abovementioned industries. In addition, increase in demand for synchronous condenser for grid stabilization applications from electric utilities such as power generation plants, transmission, distribution, and other utilities in developing economies is driving the growth of the market, globally.

Depending on the type, the new segment garnered the highest synchronous condenser market share of about 78.6% in 2020, and is expected to maintain its dominance during the forecast period. This is attributed to rise in demand for reactive power compensation from electric utilities such as transmission system, power plants, and other industrial applications. In addition, advantages associated with synchronous condenser such as power factor correction, reactive power compensation, grid stability, and voltage regulation are anticipated to fuel the global synchronous condenser market growth of in the coming years.

Enquiry Before Buying: https://www.alliedmarketresearch.com/purchase-enquiry/A10591

On the basis of cooling type, the air-cooled segment acquired the largest share in 2020, in terms of revenue, and is expected to maintain its dominance during the forecast period. This is attributed to rise in demand for synchronous condensers from high-voltage DC system, wind/solar power generations, synchronous condenser upgrading, and other reactive power compensation applications in electric utilities. One of the major advantages with using air cooled system in synchronous condenser is simple operation and maintenance. This is further expected to fuel the market growth of this segment in the upcoming years.

On the basis of starting method, static frequency converter segment held the largest share in 2020, in terms of revenue, and is expected to maintain its dominance during the forecast period. This growth is attributed to rapid expansion of heavy industries & projects such as dams, power plants, power grids, refineries, and mills. In addition, rise in hydropower projects across the globe act as the key driving force of the static frequency converter-based synchronous condenser in the coming years.

On the basis of end user, the electric utilities segment garnered the largest share in 2020, in terms of revenue, and is expected to grow at a CAGR of 2.6%, owing to rise in demand for electricity & related products, which, in turn, fuels the demand for grid infrastructure. Moreover, rapid penetration of electric vehicles led to increase in charging stations, which acts as a key growth factor and creates the new opportunities for renewable power integration in charging station. The synchronous condenser can be used in these stations to improve power factor by absorbing or generating reactive power as per capacity and requirement in the station. This is further anticipated to propel the demand for synchronous condensers in upcoming years.

On the basis of reactive power rating, up to 100 MVAR segment dominated in 2020, in terms of revenue, and is expected to grow at a CAGR of 2.5%. This is attributed to rise in demand for power factor correction and reactive power compensation due to multiple inductive loads present in the industrial applications. In addition, increased short circuit Mega volt ampere (MVA), high response excitation system, high overload capability, prolonged service life, and enhanced reliability are the key advantages of using synchronous condenser in utility applications which is expected to drive the growth of the market during the forecast period.

In 2020, the new segment accounted for about 78.6% of the share in the global synchronous condenser market, and is expected to maintain its dominance till the end of the synchronous condenser market forecast period.

In 2020, the air-cooled synchronous condenser segment is accounted for 55.7% market share, and is anticipated to grow at a rate of 2.5% in terms of revenue.

In 2020, the electrical utilities segment accounted for 85.7% market share, and is anticipated to grow at a rate of 2.6% in terms of revenue.

Hydrogen-cooled is the rapidly growing segment in the global synchronous condenser market, and is expected to grow at a CAGR of 3.7% during 2021–2030.

Trending Reports in Energy and Power Industry:

Synchronous Condenser Market

https://www.globenewswire.com/news-release/2021/08/09/2277250/0/en/Synchronous-Condenser-Market-to-Reach-751-0-million-by-2030-Allied-Market-Research.html

Ceramic Capacitor Market

https://www.alliedmarketresearch.com/ceramic-capacitor-market-A219122

Capacitor Bank Market

https://www.alliedmarketresearch.com/capacitor-bank-market-A31818

High Voltage Capacitor Market

https://www.alliedmarketresearch.com/high-voltage-capacitors-market

Electronic Load Devices Market

https://www.globenewswire.com/news-release/2022/09/30/2526117/0/en/Electronic-Load-Devices-Market-Is-Expected-to-Generate-5-2-Billion-by-2031-Allied-Market-Research.html

Solid Electrolyte Market

https://www.globenewswire.com/news-release/2021/10/04/2308027/0/en/Global-Solid-Electrolyte-Market-To-Garner-56-6-Million-by-2030-Allied-Market-Research.html

Molded Case Circuit Breakers Market

https://www.alliedmarketresearch.com/molded-case-circuit-breakers-market-A15559

Medium Voltage Switchgear Market

https://www.alliedmarketresearch.com/medium-voltage-switchgear-market-A31300

Circuit Breakers Market

https://www.alliedmarketresearch.com/circuit-breakers-market

Gas Insulated Switchgear Market

https://www.alliedmarketresearch.com/gas-insulated-switchgear-market-A304202

Power Quality Equipment Market

https://www.alliedmarketresearch.com/power-quality-equipment-market-A15551

Low Voltage Circuit Breaker Market

https://www.alliedmarketresearch.com/low-voltage-circuit-breaker-market-A06639

About Us

Allied Market Research (AMR) is a full-service market research and business-consulting wing of Allied Analytics LLP based in Portland, Oregon. Allied Market Research provides global enterprises as well as medium and small businesses with unmatched quality of "Market Research Reports" and "Business Intelligence Solutions." AMR has a targeted view to provide business insights and consulting to assist its clients to make strategic business decisions and achieve sustainable growth in their respective market domain.

Pawan Kumar, the CEO of Allied Market Research, is leading the organization toward providing high-quality data and insights. We are in professional corporate relations with various companies and this helps us in digging out market data that helps us generate accurate research data tables and confirms utmost accuracy in our market forecasting. Each and every data presented in the reports published by us is extracted through primary interviews with top officials from leading companies of domain concerned. Our secondary data procurement methodology includes deep online and offline research and discussion with knowledgeable professionals and analysts in the industry.

David Correa
Allied Market Research
+1 800-792-5285
email us here
Visit us on social media:
Facebook
X