



Six MWM TCG 2020 V20 Gas Engines in Island Mode Supply World's Largest Motorcycle and Scooter Manufacturer with Power

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The Indian MWM service partner Green Power International Pvt. Ltd has installed six TCG 2020 V20 gas engines for the large motorcycle and scooter manufacturer Hero MotoCorp. The engines were commissioned in the years from 2010 to 2012. Three of the six gas engines were installed in the Hero MotoCorp factory in Gurgaon, and the other three in the factory in Dharuhera, Haryana.

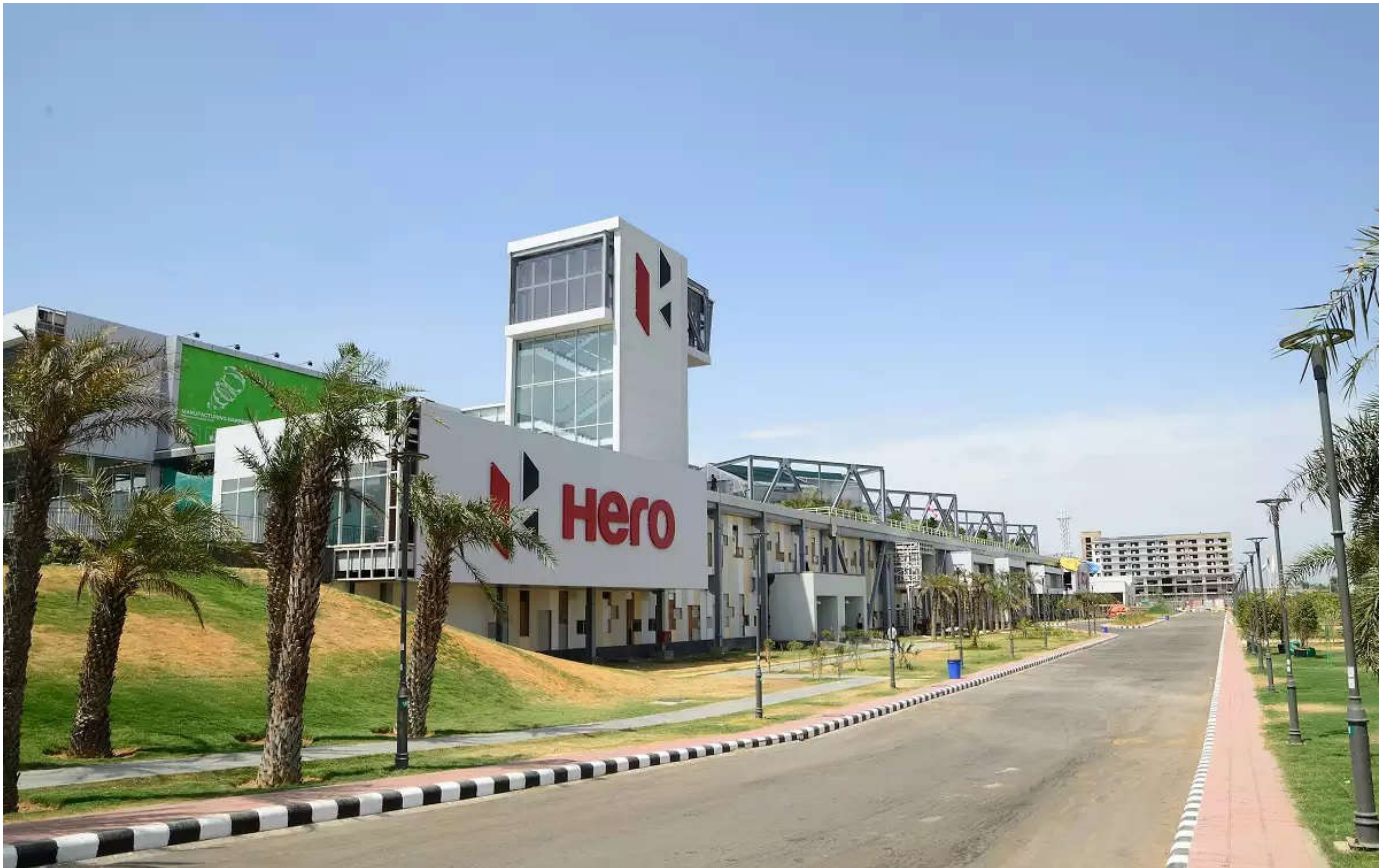
Island-Mode MWM Gas Engines Generate 12 MW of Electricity

The MWM gas engines operate in island mode, supplying the two factories with electricity for the production of motorcycles and scooters. The MWM gas engines are designed for parallel operation and island-mode operation and boast a high degree of efficiency. If no public power supply grid is available or if it is subject to frequent outages, island-mode operation is a more suitable solution. As the local laws do not permit Hero MotoCorp to implement parallel operation, the challenge posed by fluctuating loads could only be tackled by way of island-mode operation in the factories.

The MWM TCG 2020 V20 gas engines generate a total of 12 MW of power (6 MW per plant). The power continually supplied by the gas engines is used for the production of about 7.6 million motorcycles a year. All six installed MWM gas engines of Hero MotoCorp have been clocked more than 50,000 operating hours per engine. The engines continually supply the production facilities of the two factories with power.

Maximum Energy Reliability Thanks to Cogeneration Power Plants Capable of Island-Mode Operation

Uninterrupted power supply is vital especially in the field of industrial production. Especially companies such as food manufacturers and manufacturers of highly sensitive components depend on uninterrupted power supply and are severely impacted by power outages. The operation of a cogeneration power plant that is designed for island-mode operation ensures secure, reliable, and uninterrupted power supply and enables use of the engine exhaust heat for heating and cooling purposes.



Six MWM TCG 2020 V20 gas engines in island mode reliably supply the two factories of the large Indian motorcycle and scooter manufacturer Hero MotoCorp with power (Photograph: © Hero MotoCorp).

Cogeneration power plants in island mode can be used effectively in various industries. Following the modernization in 2019, the cogeneration power plants on the university campus in Bayreuth are no longer responsible solely for the emergency power supply of the Ecological Botanical Garden, but are now also connected to the heat grid. Prior to the conversion, both the cogeneration power plants and the power-to-heat plant were used exclusively in island mode for the emergency supply of the garden. Thus, the plant had to be kept on stand-by throughout the year although it only used to be operated in test mode for a few hours. Thanks to the modernization, the operating time of the MWM cogeneration plants now reaches about 4,300 hours a year, resulting in a significant increase in the energy efficiency of the CHP plant.

With its three installed MWM TCG 2020 V12 gas engines, Queen Elizabeth University Hospital in Glasgow, UK, saves more than £1 million/year on energy costs. The gas engines were commissioned in 2016. The CHP plant with its combined output of 3.6 MW of electrical energy and 3.6 MW of thermal energy is designed for

island-mode operation and is capable of supplying the entire university hospital with enough decentralized energy to prevent outages or delays in the hospital operations in the event of a power failure. Thanks to the energy-efficient MWM gas engines, the hospital's carbon emissions have also been reduced.

E-70 Maintenance (Major Overhaul) Successfully Completed

Recently, Green Power International Pvt. Ltd successfully completed the scheduled E-70 maintenance (major overhaul) of one of the gensets at Hero MotoCorp's Dharuhera site. Within the scope of the maintenance, Green Power International Pvt. Ltd disassembled the engine block, replaced the main bearings, and measured the crankshaft. Since the go-live of the gas engine system, Green Power has ensured the customer service and support, including spare part supply and plant maintenance.

MWM TCG 2020 V20 Gas Engines for Optimum Electrical and Thermal Efficiency

For manufacturers of highly sensitive components such as Hero MotoCorp, the MWM gas engines of the TCG 3016, TCG 2020, TCG 3020, and TCG 2032, which are suitable for deployment in CHP plants designed for island-mode operation, represent a viable option to ensure maximum energy independence. The MWM TCG 2020 gas engines are custom-tailored to the challenges of a dynamic market setting. The MWM gas engines in the output range from 1,000 to 2,000 kW_{el} fulfill the elevated requirements of a broad application spectrum and ensure efficiency, reliability, flexibility, environmental compatibility, low TCO, and high profitability.

Further information:

- MWM TCG 2020 Gas Engine
- MWM Gas Engines and Gensets
- MWM Cogeneration Power Plants
- MWM press release: Modernized MWM Cogeneration Power Plants for Ecological Botanical Garden of University of Bayreuth Designated as "Cogeneration Power Plant of the Month" of February
- MWM press release: Optimum Energy Security with Redundant Energy Systems and Digital Control of CHP Plants
- MWM press release: Queen Elizabeth University Hospital in Glasgow to Save More Than £1 Million a Year on Energy Costs with Three MWM TCG 2020 V12 Gas Engines