



COMBINED HEAT AND POWER MANUFACTURING PLANT MICHELIN REIFENWERKE KGaA

OWNER
Michelin Hallstadt

LOCATION
Hallstadt, Germany

PRODUCT
Taurus™ 65 Gas Turbine

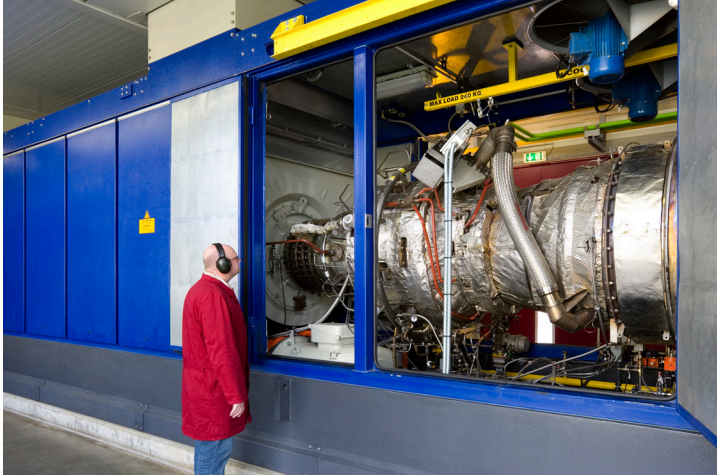
CUSTOMER VALUE
Reliable, Efficient, Environmentally Friendly Power

In 2005, Michelin decided to expand the production at their Hallstadt plant. They were looking for a reliable, efficient and cost effective energy supply for their modern combined heat and power (CHP) plant, which would provide the complete electricity generation and steam needs of the manufacturing plant. Michelin turned to Solar Turbines, who they had enjoyed a good working relationship with in the past, having purchased a Centaur® gas turbine for the Hallstadt plant in 1988, as well as seven other Solar® gas turbines providing power for Michelin manufacturing plants around the world. The return on investment for the 1988 Centaur was four years. At the heart of their modern Hallstadt CHP plant is a Taurus 65 gas turbine. The gas turbine generates 6.3 MW of power and, along with a boiler, provides enough power and steam to cover the energy needs of the plant.

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6.3 MWe COMBINED HEAT AND POWER PLANT



PLANT DATA

6.3 MW Taurus 65 Gas Turbine Generator Set

VKK Standard Boiler

Heat Recovery Steam Generator - Maximum Firing 30 Tons Per Hour

Fuel: Natural Gas

Steam: Up to 22 Tons Per Hour



OUR PRODUCTS & SERVICES

Taurus 65 Gas Turbine Package and Auxiliary Equipment

Startup and Commissioning

Operation and Maintenance Training

**SIGNIFICANT EMISSIONS
REDUCTION**

SHORT RETURN ON INVESTMENT

MODERNIZATION OF PLANT

TRUSTED SUPPLIER

Other equipment installed for the CHP plant was a VKK standard boiler and a 4 meter high, 62 ton waste heat boiler. The gas turbine and waste heat boiler generate 6.3 MW maximum electricity and 30 tons per hour of saturated steam. The CHP system can cover 5.4 MW of the energy needs of the tire plant and about 22 tons per hour of steam at full utilization. When needed, the manufacturing facility utilizes additional power from the city of Bamberg. Fuel use efficiency is 92%, considerably better than before the modernization. Compared with a conventional power and heat plant, the modernized facility at the Michelin tire plant with natural gas based steam generation and external power supply reduces carbon dioxide emissions by about 3,200 ton per year, the equivalent of planting 2,623 acres of forest per year. For more information on this project and how Solar Turbines can provide a sustainable, effective solution to meet your energy needs, contact us at infocorp@solarturbines.com or learn more about power generation projects at www.solarturbines.com/chp.

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