30 MWe
COMBINED HEAT AND POWER TISSUE INDUSTRY - HAYAT GROUP

OWNER
Hayat Group

LOCATION
Gölcük, Turkey

PRODUCT
Taurus 70 Gas Turbines

CUSTOMER VALUE
Lower Energy Cost

Hayat Tissue, the largest manufacturer in Eastern Europe and the Middle East, achieved a decisive competitive advantage thanks to its efficient use of energy in its Gölcük plant.

Hayat installed a total of four Taurus™ 70 generator sets from Solar Turbines, two on each of its large tissue machines. The exhaust gases of the gas turbines are guided into the Yankee hoods to directly dry the tissue. The energy from the Yankee hood flue gas is then recovered - first by the steam generator and then by economizers which produce the steam and hot water required by the plant. Chilled water is then produced by a steam-fired absorption chiller.

Solar® Turbines
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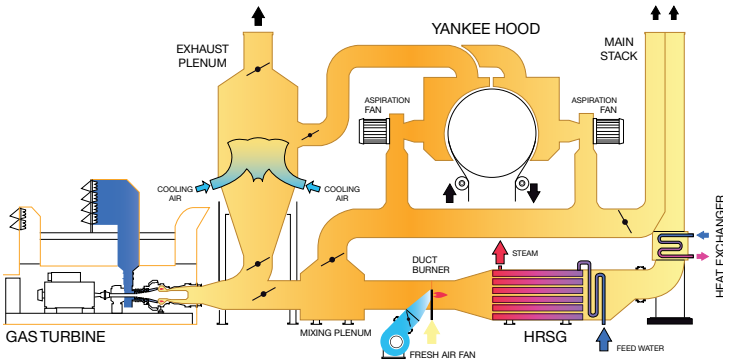
30 MWe Gas Turbine Combined Heat and Power Plant



PLANT DATA

- Four Taurus 70 Gas Turbines (30 MWe)
- Customized Ducting to Yankee Hood and Controls (Valmet)
- Heat Recovery Steam Generators (HRSG)
- Steam Fired Vapor Absorption Machine (VAM)
- Fuel: Natural Gas

OUR PRODUCTS & SERVICES

- Gas Turbine Package and Auxiliaries
- Gas Turbine Design
- Full Installation and Commissioning
- Gas Turbine Maintenance
- Preventive Maintenance Including Equipment Health Management - Beneficial Use Overhaul Agreement

COST EFFICIENT SOLUTION

GRID INDEPENDENT

FAST RETURN ON INVESTMENT

REDUCED EMISSIONS

RELIABILITY

All of the thermal energy for most of the tissue grades is provided by the gas turbines with no natural gas being used, either in the HRSG or in the Yankee hood. Additionally, Hayat has exceeded a plant combined heat and power (CHP) efficiency of 80%.

The preventive maintenance agreement and the proactive, technology-based equipment health management program powered by the state-of-the-art InSight Platform™, enable the Hayat Gölcük plant to meet the highest reliability and availability standards required for tissue production.

Besides the cost savings, Hayat reduced its CO2 and NOx emissions compared to the standard methane burners traditionally used for drying. As an added benefit, the company has the ability to produce the plant's electrical power onsite, thus avoiding the impact of national grid outages.

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