



COMBINED HEAT AND POWER WOOD PRODUCTS GEORGIA-PACIFIC WOOD PRODUCTS

OWNER

Georgia-Pacific Wood Products

LOCATION

Taylorsville, Mississippi, USA

PRODUCT

Taurus™ 70 (8 MWe) Modular Power Plant

CUSTOMER VALUE

**Reduced Plant Energy Cost, Increased Reliability,
Resiliency**

Georgia-Pacific (GP) is one of the world's leading manufacturers of tissue, pulp, packaging, building products and related chemicals. The GP building products facility in Taylorsville, Mississippi produces high quality plywood for a variety of indoor and outdoor projects. GP believes in improving people's lives by using fewer resources but still providing quality products and services to their customers.

GP's Taylorsville plant was facing both high energy costs and a critical milestone with implementation of the boiler maximum achievable control technology (MACT) requirements. They needed a new solution to reduce emissions while taking advantage of the low gas prices. A new combined heat and power (CHP) plant was the answer, and Solar could provide a complete solution in a critical timeline.

Solar® Turbines

A Caterpillar Company

Combined Heat and Power – Wood Products



PLANT DATA

One Taurus 70 (8 MWe) Modular Power Plant (MPP)

Heat Recovery Steam Generator (HRSG)

Black Start Generator

Electrical Equipment Room (EER)



OUR PRODUCTS AND SERVICES

Modular Power Plant Solution

Gas Turbine Design

Installation and Commissioning

Equipment Health Management (EHM) Agreement

The plant is powered by our Taurus™ 70 MPP solution. This includes our low emissions SoLoNOx™ turbine generator set, an HRSG and the EER producing electricity and heat for the drying process. The plant uses the high temperature exhaust from the combustion turbine for process and building cooling needs thanks to an HRSG equipped with high duct firing and fresh air fan. The fresh air fan allows for continuous operation of the HRSG even when the turbine is down, while the duct firing allows for increased steam production between 34,000 and 100,000 lb/h to follow the plant steam variations needs. The EER is equipped with all electrical gears and auxiliary components to operate the complete scope. Solar was selected due to our experience in providing resilient engineered modular plants while reducing customer interfaces. The Taurus 70 MPP provided a complete power plant solution with reduced lead time and risk upon installation and commissioning.

GP also entered into a long-term service agreement using Solar's EHM program to ensure high reliability, availability and optimum performance are achieved. This service plan is comprised of people, processes and technology and is a fully managed solution to ensure the savings and operability of the paper plant without interruption. The EHM includes a variety of advanced tools and applications such as real-time troubleshooting, measurable performance and reporting, a condition-based overhaul and maintenance philosophy and predictive analytics. It includes information such as equipment details, operation and maintenance manuals, technical bulletins, performance, and other key metrics on the turbines to help ensure the machines are operating cost effectively. All of this is accessible by both GP and Solar personnel, allowing for close collaboration to rapidly resolve problems and ensure the highest levels of availability and performance for the plywood plant while optimizing the maintenance outages to reduce downtime.

Solar Turbines Incorporated
Tel: +1 619 544 5352
Mail: infocorp@solarturbines.com Web: www.solarturbines.com

Caterpillar is a registered trademark of Caterpillar Inc. Solar, Taurus and SoLoNOx are trademarks of Solar Turbines Incorporated.
©2021 Solar Turbines Incorporated. Specifications subject to change without notice. All rights reserved.
CSCHP-GPWP/0521/E0

Solar® Turbines

A Caterpillar Company