

STAMFORD® PRIME POWER

Case History

Reliable and sustainable power solution for a palm oil mill

Where: Shah Alam, Malaysia

Specified: STAMFORD P80 Low Voltage (LV)

Purpose: Steam Turbine for Palm Oil Mill.



STAMFORD P80 LV

STAMFORD AVK

Wasco AgroTech Sdn. Bhd. is a company that serves clients internationally and operates in the renewable energy and agro-based industry sectors, specializing in equipment for the palm oil industry.

Wasco has been in partnership with STAMFORD | AvK directly since 2018 and have since sold between 250 to 300 alternators from the STAMFORD P7 and P80 series, ranging from 1400kVA to 4200kVA.

Situated in Malaysia, they initiated a 2.5MW Steam Turbine Power project in 2022 with the objective of providing a dependable power solution for a palm oil mill in East Malaysia, which operates daily for 12-24 hours. The client had a specific power requirement of 2500kW, and they opted for a STAMFORD P80 LV alternator after considering market feedback that attested to the reliability of STAMFORD products.

Sustainability was a key factor in the project, with the unit being coupled to a steam turbine running on steam generated from a renewable source. The exceptional product quality and reliability provided by STAMFORD | AvK, even in harsh environmental conditions, have greatly contributed to the success of our project



The prime mover used for the project was a Shinko turbine, coupled with a STAMFORD P80 LVSI804 alternator; specifically chosen for its reliability and performance, ensuring a seamless integration of the power generation system.

Steam turbine utilising renewable sources

The project aimed to address the power needs requiring a power solution with a capacity of 2500kW. Sustainability was a key factor in the project, with the unit being coupled to a steam turbine running on steam generated from a renewable source. This approach aligns with the palm oil industry's increasing focus on environmental responsibility and the utilisation of alternative fuels.

Steam turbines are used to convert the thermal energy from pressurised steam into mechanical energy, which is further transformed into electrical energy using an alternator or generator. The high-pressure steam, produced by burning a fuel source such as palm oil waste or biomass, flows through the turbine blades, causing it to rotate. The rotation of the turbine shaft generates mechanical energy, which is then converted into electrical energy by the alternator. The successful delivery of the project is attributed to the support provided by the STAMFORD | AvK Applications and Service Team in China, with implementation delivering positive results for the customer and end-user. The project helped improve power efficiency and reduce costs in the palm oil mill's operations.

This steam turbine power project in Malaysia demonstrates the successful implementation of a reliable and sustainable power solution for a palm oil mill. Through the collaboration between STAMFORD | AvK and Wasco, the project achieved its goals of improving power efficiency and reducing costs. By leveraging the expertise and high-quality products of STAMFORD | AvK, the customer was able to meet their power needs effectively and efficiently.



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