Process heat and power supply

ARTICLE OF **AUGUST THE 29th 2023**HEAT SUPPLY



The process heat supply system for a new crisps line includes a customised thermal oil heater.

Intec Engineering GmbH is a globally active, family-run company based and manufacturing in Germany. The company designs, manufactures and supplies customized plants for industrial process heat supply and regenerative power generation. For example, it has been working for years with one of the world's largest beverage and food companies.

For its latest plant for the production of snacks in Bangladesh, the delivery of a process heat supply system for a new potato chips production line was ordered. This involves heating a frying line with blancher as well as a starch drying system. The thermal oil heater, which is tailor-made for this special application and has a net heating capacity of 2000 kW, was calculated, planned and designed in-house and then manufactured at the manufacturer's plant in Bruchsal. The primary heat transfer medium used in this process is an HT1-registered thermal oil, which also meets the purity requirements of FDA regulations 21 CFR 172.878. The process heat is safely and gently transferred from the primary heat transfer medium to the food oil in contact with the fried food by means of a specially designed intermediate heat exchanger.

A particular challenge here is the constant and most accurate possible temperature control of the process heat. Based on its extensive experience in this field, the company also supplied the necessary control equipment, including the control valves, to reliably meet these high requirements.