

LAUDA, the Constant temperature equipment specialist, acted as a successful general contractor

Large plant concept for Swiss chemicals customer optimally realized

Lauda-Königshofen, October 8, 2015 – For a large chemicals company in Switzerland, the task was to develop an optimized temperature control concept in the temperature range from 50 to 360 °C for controlling the temperatures of various reactors and catalyzers. Electrical heating was excluded on the grounds of the required 3.0-Megawatt heating capacity and the resulting high cost of electricity. The specialists of LAUDA Heating and cooling systems therefore decided to use two gas-fired, thermal oil heaters, with a power of 1.5 Megawatt each, as the central heating system.

LAUDA acted as general contractor for the complete temperature control system. This also included the manufacture of the two gas heaters with double-flue chimney and heat recovery system. This made LAUDA directly responsible for the complete project management as well as for the welding supervision and quality assurance of all suppliers. Consequently, throughout the whole project period, the Swiss chemicals company had just one, central point of contact. An important prerequisite for continuously smooth communication and successful project completion.

A 3-D plan of the complete installation provided optimum visualization for planning the complex piping layout. This greatly simplified information exchange with the customer, including for planning the layout with regard to maintenance and operability. A further important planning point was the complete instrumentation in accordance with the customer's works standard.

For the open-air installation and for cooling, air coolers with a capacity of around 250 kilowatt proved to be optimal, since the thermal oil must be cooled from 350 to 50 °C. This meant we could do without a complex water cooling system. This decision led to another advantage: the risk of the cooling water freezing in winter was eliminated. As usual, before delivery, LAUDA carried out a complete Factory Acceptance Test (FAT) of all plant components with thermal oil in their main factory, Lauda-Königshofen, in the presence of the customer. Commissioning in Switzerland was carried out by staff of the LAUDA Service Center in close collaboration with the LAUDA suppliers.



Picture: Perfect teamwork: For a chemicals company in Switzerland, the temperature control specialist, LAUDA, developed and realized a complete concept for controlling the temperatures of reactors and catalyzers over the temperature range from 50 to 360 °C.