



aggreko

Increasing PVC production in the summer heat

CUSTOMER

PVC Manufacturer

LOCATION

Tarragona, Spain

SECTOR

Petrochemical

KEY FACTS

2x

Air cooled chillers

1600 kW

Of power

4

Months

THE CHALLENGE

Improve the production capacity of a polymerisation reactor

Summer is when PVC demand peaks. One of the most prominent manufacturers wanted to take advantage of this opportunity, but needed to increase the cooling of their batch reactor, which was equipped with an external jacket and a reflux condenser.

Heat generated by the polymerisation process is

removed by cooling water, which is circulated within the jacket. Evaporation techniques are also used to lower the heat by using vinyl chloride inside the reflux condenser atop the reactor.

The PVC manufacturer needed an experienced partner who could integrate a cooling package within the current system.

THE SOLUTION

Aggreko Process Services makes an analysis of the process to find the best solution

Our expert team simulated operating conditions in order to find the most optimised process to help the customer. After extensive test runs, it was evident that the most efficient method to keep the correct temperature was

to chill the condenser inlet cooling water.

To achieve this, two air condensed chillers would be required, as well as a constant presence to monitor the temperature so changes could be adapted to.

THE AGGREKO DIFFERENCE

We help you rise to meet demand

THE IMPACT

Production increases as far as 15%

Thanks to our temperature control expertise and modular equipment, the customer could upscale production during the rise in demand. Our solution was perfectly synchronised with the customer's current processes too. The package delivered exactly what

the customer needed and production increased as far as 15%. A study looking into using the same solution for other reactors will happen in the future too, highlighting how our involvement was the ideal partner for the customer.