A cooler safer work environment increasing overall plant productivity and profits

CUSTOMER
Pelletizing Plant and
Distribution Centre

aggreko

LOCATION Sohar, Oman

SECTOR Mining

APPLICATIONTemperature Control

KEY FACTS

18 locationsTo cool in the plant

\$18 million per year

Production USD cost savings

24/7

Support

THE CHALLENGE

Cooling and sustaining ambient temperature in multiple operational areas of an industrial complex

A Pelletizing Plant and Distribution Centre (OICF) had no cooling equipment at their plant and with no cooling method in any of their operational areas, they were relying on those areas cooling naturally with the factory ambient temperature, during planned or emergency shutdown periods. As this process took two or three days or even up to a week in some areas, it was ultimately keeping them offline longer, resulting in production loss and stopping them realising their full production capacity.

In additional to this, complaints by the operational team had been increasing in the production and operational areas about the temperature rise in plant during shutdowns, especially in summer where working at the facility was unbearable. This environmentally conscious customer, cares not just about plant productivity and its impact on the surrounding community.

They also care about their workforce within the plant and wanted to mitigate the negative impact the high temperatures were having, while increasing plant productivity.

The customer needed a highly experienced reliable partner who could prove the concept, meet the engineering and technical challenges of their temperature control issues across multiple operational areas and provide a bespoke solution that considered the environment and safety priorities.

Industrial chillers and supporting HVAC applications used in conjunction with air handling equipment, and power generation delivering a complete reliable cooling system

The customer contacted Aggreko to help prove the concept back in 2015, trialling it first in one or two areas. Once the concept was proven, they put the contract out to competitive tender.

Aggreko won the tender process and secured an initial three year contract in 2016. Our first action was to calculate the heat load and develop the necessary design configuration of the cooling solutions to be deployed across the 12 different locations. As we worked closely with the customer, and they saw our full capability and expertise in this specific type of temperature control application, the contract was amended to include an additional 6 locations, bringing our scope to 18 locations in total.

The design was based on our industrial chiller units supporting HVAC applications and used in conjunction with our air-handling equipment. Together they would deliver reliable space cooling should the customer's plant fail, require maintenance or need extra capacity.

We also provided ducting and cabling, together with power generation, pumps and any other equipment needed to give client a complete, reliable cooling system.

Working with the customer on an "On call" approach, while we respond to their requests typically with 7 days' notice, in any emergency or breakdown, we're ready to mobilise equipment within 24 hours, and

we're able to do so with by keeping local technicians and equipment on standby in Sohar.

This contract is supported 24/7 by Aggreko expert technicians who know the site, ensuring any issues are addressed immediately and their operations are safeguarded from any temperature matters.

Aggreko's industrial cooling equipment keeps crucial operations running. Whether our customers are facing an emergency, need a temporary fix during peak demand or operational cooling for planned maintenance, we provide around the clock industrial cooling equipment that you can count on.



THE AGGREKO DIFFERENCE

When the temperature rises, we can help you keep your cool

THE IMPACT

Substantial cost savings delivered through minimised time and production loss

Our solution was designed to prevent any loss of time, loss of production and reduce their spend in the maintenance and repair of planned or unplanned issues.

The customer estimates our cooling solution has saved them approximately \$18 million USD per year and have just extended the contract by another year - bringing the total savings to \$81 million over the duration of the contract. In addition to this, it provides a comfortable and safe working environment for the team in the field

during maintenance, and they have seen a reduction in safety and site complaints.

During a shutdown they can have up to 300 contractors on site, where health and safety risks increase drastically. We have been recognised for our exceptional approach to safety by the customer.

Our contract was recently given another one-year extension as the customer has yet to find another provider that can do the full scope that we can.