Flowtech Case Study: Torr Works Quarry

Summary:



Location: Somerset



Product Area:

Hydraulics Power Packs & Pipework



Service Area:

Advanced design & installation

Our engineering team were tasked with assisting a mining company with fixing a fault in their crusher's hydraulic system. In doing so, we outlined a solution that would be delivered efficiently, whilst reducing the impact on operations.

Challenge

Flowtech were initially contacted by Aggregate Industries to investigate a hydraulic fault on a hydraulic power pack for a stone crusher at Torr Works Quarry in Somerset. Within hours of diagnosis it was discovered there was a problem with one of three main hydraulic pumps being driven from three 160kw electric motors.

The pump performance was very low and not swashing to the correct position, which was causing the crusher to unevenly lift its three feet, creating further issues given the crusher is six stories high.

Our challenge was to investigate the options available in alleviating the issue, while minimising disruption to ongoing operations.



Concept

The team investigated system drawings and quoted to install three new hydraulic power packs, as there was not an internal team in place to carry out a project of this scale.

Once this concept was agreed, they removed the three redundant power packs and were given a window of two weeks where the crusher could be shut down for the work to begin.

In this time the team would have to fit an auxiliary power pack and cap the main service lines to the hydraulic cylinders so that they could pressurise the lift cylinders with 70 Bar pressure, which would give the crusher stability while crushing.

Thankfully, due to the diligence of our team, this happened over an afternoon and they were back crushing later that day.





Solution

The pump room was completely stripped and new flooring was fitted to allow the three new power packs to be lifted into position and new pipework fitted.

There was a further one day window to shut down the whole system and connect in the new auxiliary power packs to operate the leg stabilising pressure and the auxiliary conveyor controls.

Three of our engineers worked through the night to get the project completed, where they tested the auxiliary's and commission.



Benefit

The project was completed well within the initial scope and disruption was kept to a minimum, which meant our customer made plans for further projects that our team would be able to assist with.

They described our team as "highly skilled professionals with great attention to detail," as well as calling out our "commitment and professionalism," during the delivery of the project. We have continued a positive relationship with them following this project and we hope to work with them in the future.



What We Do

1

We are a high service, product provider

- Access to thousands of industry leading brands
- High stock availability
- Supplier consolidation
 - Technical applicational advice

2

We design, manufacture, repair and overhaul assets

- In-house manufacturing
- Service and repair teams
- Design & engineering solutions
 - Onsite diagnostics

3

We deliver major engineering projects and onsite solutions

- End to end ownership
- Onsite maintenance services
- In-house design and solutions capabilities
- Engineering teams

Read more of our Case Studies at www.flowtech.co.uk

