

# CASE **STUDY**

**MAGNADRIVE™**

**SOLUTION IMPROVES  
RELIABILITY AND  
SAFETY OF DRIVE  
TRAIN AT LARGE  
CHEMICAL PLANT**

CS080



**HAYLEY**

DEXIS

## HAYLEY DEXIS

### POWER TRANSMISSION // CHEMICALS

Focus on **value**

**TRACK  
UP**

#### THE SITUATION

A large chemical plant, producing titanium chemicals, was experiencing serious issues with the performance of their drive train. The specific application was a hot oil evacuation that had previously caused fires leading to injuries, downtime, and investigations from the HSE. The root cause of the failures was the overloading of the zirconium ball mills with too much titanium oxide powder, leading to coupling failure and in-turn, the hazardous spillages.

#### THE SOLUTION

The near-constant failures were a real cause for concern, as were the hazards that arose from them. The HAYLEY DEXIS local branch team were contacted, who immediately arranged to visit the site alongside a specialist drives and couplings third party. A highly-innovative MagnaDrive™ magnetic coupling solution was recommended, with a slight adjustment to the current configuration to enable a true 'drop-in' solution.

#### KEY VALUE AREAS



**INCOME**



**OTHER**

This involved mounting a belt pulley between two pillar block bearings on a small-length jack shaft, which was driven by the MagnaDrive™ couplings mounted on the motor shaft, all built on one bedplate.

#### THE RESULT

The MagnaDrive™ solution has provided the customer with a soft-start capability and the overload protection that the application had been calling for. Thanks to these new capabilities, the danger of burn injuries for staff working around machinery and the consequences

“

**OPERATIONAL  
DOWNTIME AND  
ITS IMPACT UPON  
REVENUE HAS BEEN  
DRAMATICALLY  
REDUCED.**

”

of forced operational downtime on the production and revenue of the business, have been dramatically reduced.

Following an initial order of two units, the customer has since replicated the MagnaDrive™ solution eight more times across its facility.

## CONTACT US!

Speak to your local HAYLEY DEXIS branch today!

You can find their details by using our online Branch Finder tool:

[www.hayley-group.co.uk/branch-finder](http://www.hayley-group.co.uk/branch-finder).

## KEY BRANDS



**MagnaDrive**  
CORPORATION

## KEY RESULTS

Further costly and unplanned downtime prevented.

Safety of operation improved.





**HAYLEY**

**DEXIS**