# CASE STUDY

# **RECURRENCE OF**

CATASTROPHIC
BREAKDOWNS
AT STEELWORKS
PREVENTED BY
CONDITION-BASED
MONITORING SYSTEM



# **HAYLEY DEXIS**

# CONDITION-BASED MONITORING // METALS

Focus on value



# THE SITUATION

A West Yorkshire-based steelworks had suffered a catastrophic breakdown on their production line. A shot blasting machine had caught fire and the resulting damage was so serious that the machine had to be decommissioned.

The cause was identified to be a hot ember that had attached itself to a piece of steel during the pre-heat stage. Loan equipment was quickly acquired, but damage costs were already estimated to be around £300,000.

# THE SOLUTION

HAYLEY 247 DMS DEXIS, a leading provider of condition-based monitoring solutions was contacted for assistance. The customer wanted to avoid such a costly and dangerous event happening again, so HAYLEY 247 DMS DEXIS developed a suitable system that would provide early warning of any possible issues moving forwards. The system, using a thermal scanning device and Machine Guard sensor technology, has been configured to continuously monitor the steel as it moves from the pre-heater

# KEY VALUE AREAS INCOME SERVICES

to the shot blast machine. Any irregularities in temperature are reported in real time with the relevant staff notified and the conveyor drive stopped for a manual inspection to take place.

# THE RESULT

The solution put in place has since prevented a repeat of the damaging fire from happening on the continuous process line at the plant. On this occasion, the roller conveyor was abruptly halted when a thermal irregularity was detected. Upon inspection, it was found that another hot ember was present on the steel.



This was promptly removed and the line restarted.

The Operations Director responsible for the running of the site said, "It's pretty clear to us that this incident was a repeat of the events that lead to the failure of the previous shot blast machine. However, this time we had the benefit of the Machine Guard system. As a result, we not only avoided the inevitable disruption caused by a serious failure, but also potential damage costs of £300,000!"

# **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.

# **KEY SOLUTION**

Machine Guard.

Thermal scanning technology.

# **KEY RESULTS**

Future production stoppages prevented.

£300,000 in damage costs avoided.

Future machinery hire and replacement costs saved.



