

# CASE **STUDY**

**CONVEYOR SLAT**

**REDESIGN BY  
HAYLEY 24/7 DEXIS  
ENABLES VEHICLE  
MANUFACTURER  
TO MAINTAIN  
OPERATIONS**

CS016



**HAYLEY**

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**MECHANICAL ENGINEERING SERVICES //  
AUTOMOTIVE**

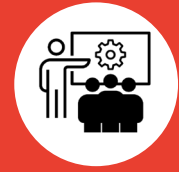
Focus on **value**

**TRACK  
UP**

**KEY VALUE AREAS**



**INCOME**



**SERVICES**

## THE SITUATION

The client, a leading car manufacturer, was facing a problem with the slats of their conveyor bending inward under the weight of vehicles being driven across them.

The issue was that the slats were only designed to bear the weight of unmanned vehicles being moved along them.

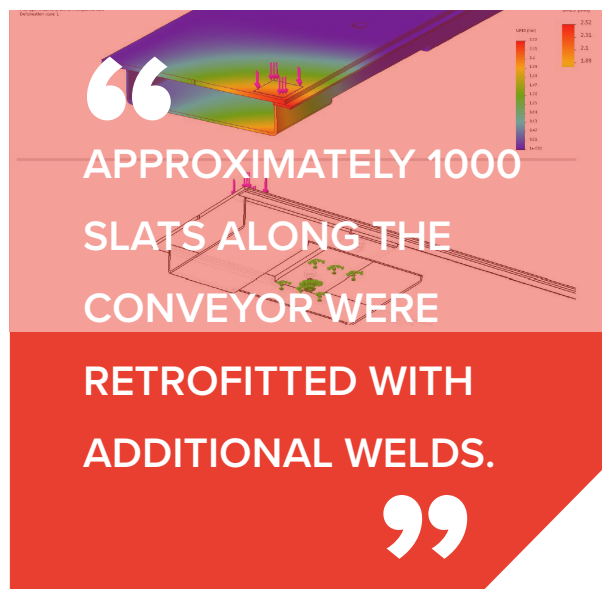
The client opted for the most economical option provided; a retro-redesign involving additional welds being applied to their existing slats.

## THE SOLUTION

The team set to work on conducting failure mode evaluation analysis (FMEA) on the existing conveyor slats, to determine the load rating of the design. The analysis was conducted on a corner and central position of both the client's existing slats and on four alternative redesign options offered to the client by the HAYLEY 24/7 DEXIS team.

## THE RESULT

The chosen redesign was proven by a physical load test. During the execution of the work, a total of approximately 1000 slats along the conveyor were retrofitted with additional welds. The job was completed over a short period of weekends and scheduled shutdowns, which significantly reduced the impact of operational downtime.



Throughout the process, each slat was given a unique ID number which was hard-stamped and recorded on an asset register. This also included full inspection verification as per the original OEM drawing and all NDT of the existing weld structures. A batch of 25 new slats were manufactured to replace those deemed beyond repair.

## 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 RESULTS

Production capability of conveyor maintained.

Individual assets now recorded and registered.





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