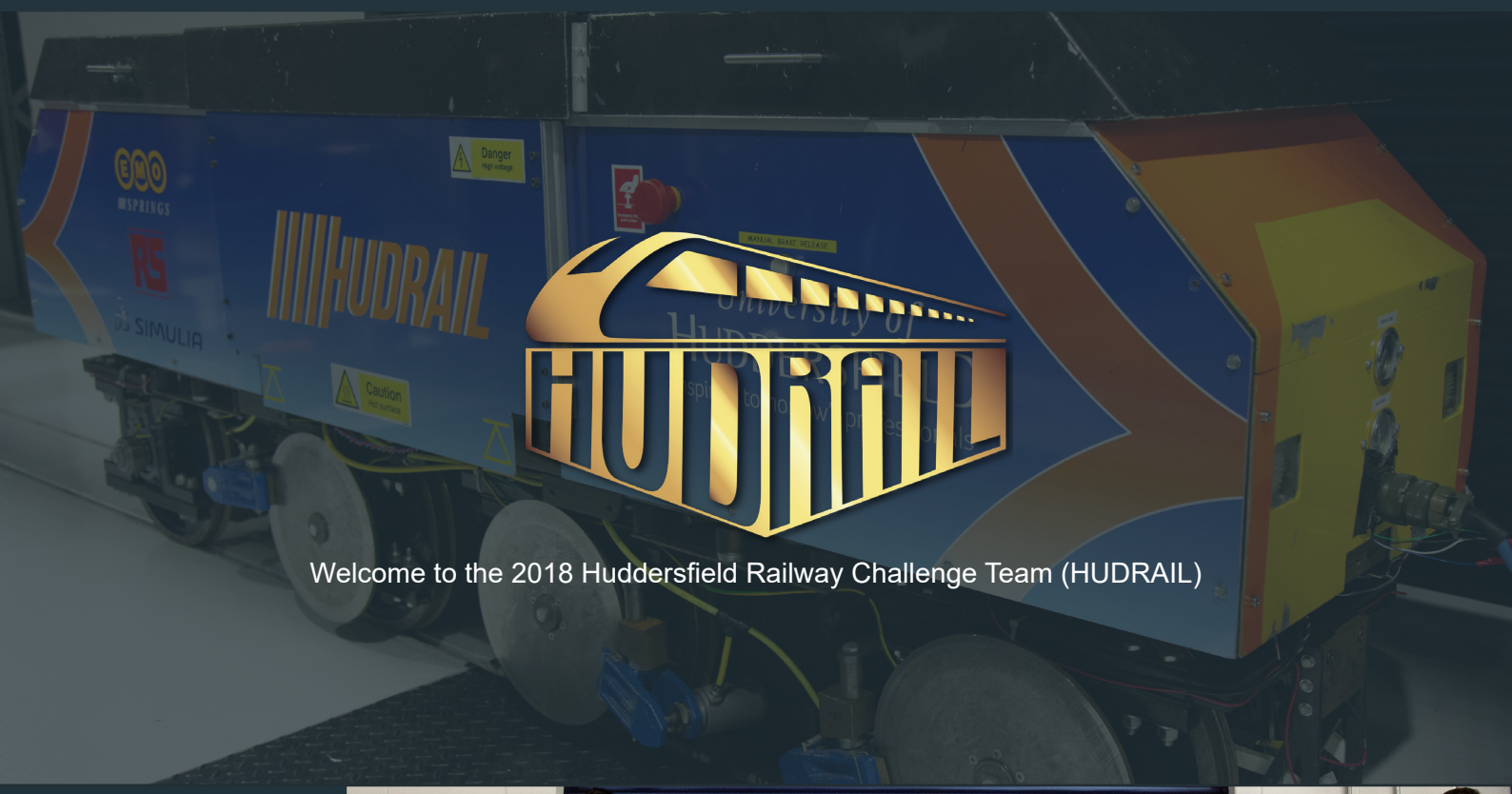
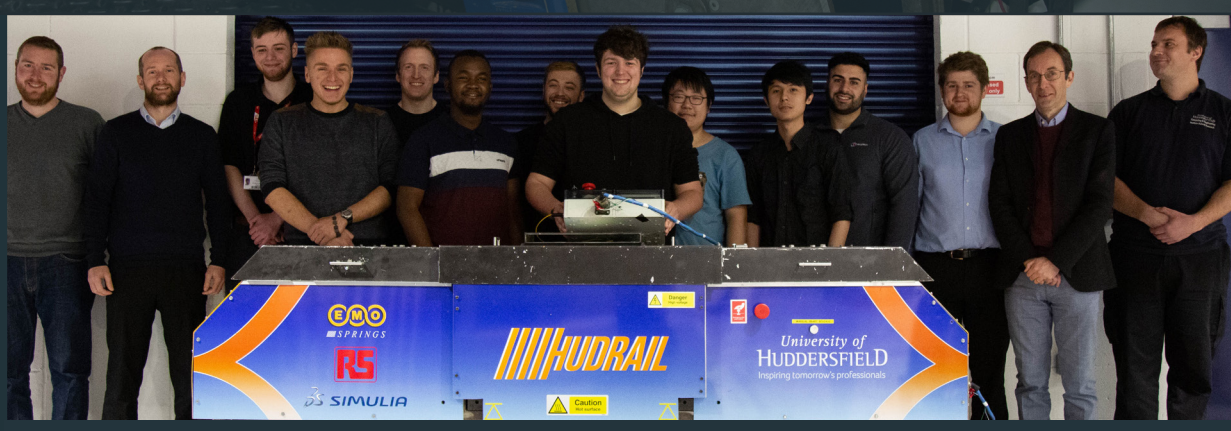
Newsletter December 2018



CONTENTS



Team Introduction

The new HUDRAIL challenge team is eager to start the year off right, with students already starting multiple projects to improve the existing design of the HUDRAIL Locomotive. The team this year has made it their goal to once again win the Railway Challenge and be the University to end the winning streak of non-academic, industrial competitors. The team is confident as each individual exhibits a high level of enthusiasm and commitment to achieving success this year.

What is the Railway Challenge?

The Railway Challenge is an annual competition organised by the Institution of Mechanical Engineers, in which both Universities and members of industry can compete. The aim of the competition is to design and manufacture a scaled down (10.25" gauge) railway locomotive in accordance with strict rules and a detailed technical specification. The challenge is an excellent opportunity for participants to showcase and gain new skills, expertise, knowledge and business acumen.
A list of some of the parameters that the locomotive will be tested on are as follows:

• Energy Storage	150 points	• Reliability	300 points
• Traction	150 points	• Design	150 points
• Ride Comfort	150 points	• Business Case	150 points
• Noise	150 points	• Technical Poster	150 points
• Auto-Stop	150 points	• Innovation	150 points
• Maintainability	150 points		

Historically, the University of Huddersfield has been the only university team to win the railway challenge, with each other year going to members of industry. The Railway Challenge is now in its eighth successful year and is continuing to bring together teams from across the world.

What is Happening at HUDRAIL?

With the formation of the new team a vast amount of projects have been allocated to help improve the existing design of the locomotive:

- A rolling road design is currently on hold for manufacture to help aid in testing the locomotive before track days as well as a lifting mechanism to elevate the locomotive onto the rolling road.
- A test carriage dynamometer is being designed by two members of the team that will be pulled behind the carriage and sat on by a user to control the locomotive from and to also simulate an incline on the locomotive of 1:80.
- A member of our team is trying to optimise the PLC coding of the control box for the locomotive.

Sponsorship

Currently the team is working hard to try and secure sponsorships from a variety of different companies. Many thanks to Thomas Brown for being the first sponsorship deal of the year. Your support towards these projects will help make our goal of winning that little closer to happening.

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