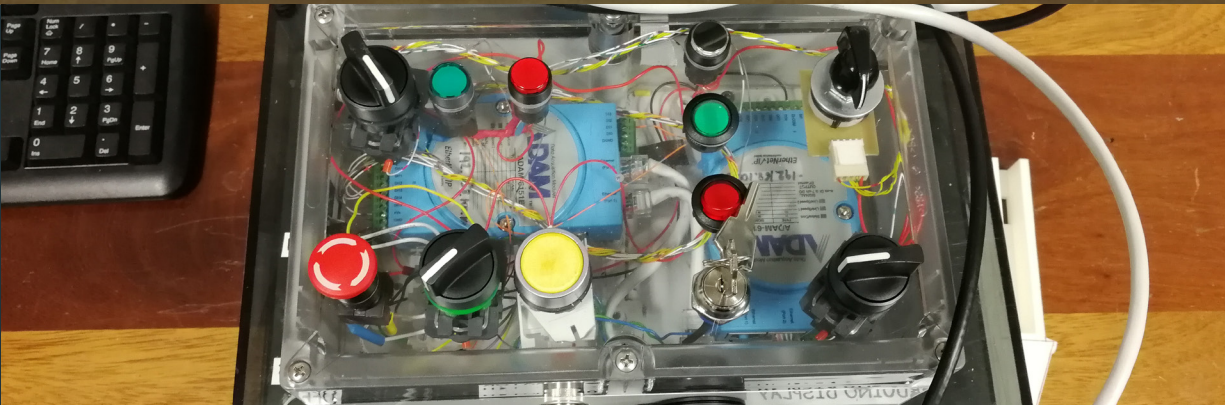




Welcome to the 2019 Huddersfield Railway Challenge Team (HUDRAIL)

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Rolling Road

The rolling road is nearly ready for testing the locomotives drive functions and fine-tuning the PLC. The PLC controls the energy recovery system and many other essential systems. Having access to the rolling road will potentially help the team gain more points in the energy recovery challenge as well as the maintainability challenge. A picture of the rolling road can be found above. The rolling road will be placed under the rear wheelset of the locomotive and restrained for the tests to follow.

Control Box

Our team has made some great progress on the locomotive this month. The largest amount of progress comes in the form of the locomotives control box which has been completely redesigned. The control box is designed to be handheld. The idea is that the user of the control box can sit behind the locomotive or walk alongside it and control parameters such as; speed, braking, direction, horn and on/off in a safe manner. A tablet will be attached to the control box to display the values of air pressure and speed. This will help the user diagnose potential problems and stop them proactively, to prevent damage. The control box uses ADAMS units which will communicate to the PLC via an Ethernet connection.

As well as the control box being assembled, the team has nearly finished the necessary wiring required for the locomotive to be tested. The wiring of the HudRail locomotive has been simplified and rearranged to look neater than in previous years. In addition, the team has found a way of labelling each wire and has then notated them on their corresponding wiring diagrams. As a result, this will make any future adjustments to the locomotive much easier and error handling will be more efficient.

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HudRail Advertisement Board

To help increase the publicity and awareness of HudRail, we have been gifted a billboard. The team has decided to place this billboard outside of the HudRail lab which is located in the Technology Building. Please feel free to come and knock on our door and if we are there, we will be happy to answer any questions about the team or The Railway Challenge. If we are not in our lab, please read our board to learn about the newest activities for the team and an explanation of the team’s objectives and The Railway Challenge itself.

IMechE Prize



The team is happy to announce that it has won a £2000 prize from the IMechE. Each team was allowed to submit a report to the IMechE to gain the £2000 bursary and it seems that the IMechE liked what we proposed. This extra money will be added to the HudRail budget and could be used on numerous pieces of equipment and materials to help improve the locomotive further before the competition.