Logo

Description automatically generated with medium confidence

The scrutineering checklist contributes to Design Competition and does not constitute a pass / fail criteria entry, with the exception of the areas dedicated to safety and integrity. The devices are scored on day of Finals (regional and national) by the judging panel.

Checklist applicable to categories 4.17.2 and 4.17.3 – See IMechE Design Challenge - General Specification 2024.

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| **UNIVERSITY NAME** |  |
| **TEAM NAME** |  |
| **TEAM #** |  |

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| **Source** | **Section/**  **Rule #** | **Description of check** | **Pass [🗸]** |
| General Spec. | 1.6 | Check that the team is eligible for the overall win. Are all the static sections of the competition been delivered in the correct format and within the deadlines? |  |
| General Spec. | 4.8 | Check that the design has been signed off by a staff member. |  |
| General Spec. | 4.12 | Check signed risk assessment to accompanies their device at the competition |  |
| General Spec. | 4.13 | Check that fuses, electrical cables and joint protections, and any other safety related item shall be present on the vehicle at any point and not come loose in any phase of the competition. |  |
| General Spec. | 4.31 | Check the team has supplied their own safety glasses as appropriate. Teams that fail to provide suitable PPE or wear those when required will have the score of the run involved erased /  not accounted for. Two PPE fault in the same event will lead to the team disqualified from The Challenge section of the event. |  |
| General Spec. | 4.32 | Check that no lithium batteries are installed |  |
| General Spec. | 4.33 | Check that fuses, cables, connections and electrical joints are protected at any point during the competition |  |
| General Spec. | 4.7 | Check sample receipts to ensure BoM costs include VAT. |  |
| General Spec. | 4.8 | Check sample receipts to ensure 20p items are correct (and include VAT). |  |
| General Spec. | 4.12 | Check for components or materials ‘in-kind’ and if used ensure they are costed as appropriate at its as-new price. |  |
| General Spec. | 4.14 | Check for use of spares, especially batteries - any parts used on the device on the day of competition must be included in the total cost. |  |
| General Spec. | 4.19 | Check the mass of 3D printed parts is accurate to ensure the BoM cost is accurate. |  |
| General Spec. | 4.24 | Check that no lithium batteries are being used – not permitted |  |
| General Spec. | 4.25 | Check if a pressurised system is being used and whether it is legal. Volume <1 L, pressure volume<50 bar L. |  |
| General Spec. | 4.26 | Check that no explosive charges or combustion is being used – not permitted |  |
| General Spec. | 6.2 | Check and score the accuracy of the virtual model compared to the real device on display, including fasteners and standard parts |  |
| Project Spec. | 4.1 | Check the device is totally self-contained, and at all times fits within a working envelope specified |  |
| Project Spec. | 4.4 | Check that no proprietary, pre-programmed control units are being used – Foundation challenge only |  |
| Project Spec. | 4.9 | Check that no remote control is installed |  |

Academic Advisor declaration:

I have thoroughly reviewed the team’s device ahead of the Regional/National Finals event and hereby declare that:

* The device is deemed safe to operate in a lecture theatre or sports hall environment
* The device meets all of the above Scrutineering checks

Signed Print

Date