MANTRA (The Manufacturing Technology Transporter) is a specially customised HGV trailer, designed to give aspiring young engineers a hands-on experience with real cutting-edge technologies.

On-board attractions include a fully operational 3D virtual reality integrated welding simulator, the latest UAV technology and a tracked 3-D virtual reality system where students can dismantle virtual jet engines.

Seven interactive screens provide customisable content focusing on two key areas: advanced machining with technologies such as tooling optimisation, damping and post machining inspection and advanced assembly including GPS, laser alignment, smart tooling, virtual assembly and robotic technologies.

The demonstrations show how such technologies have been successfully integrated, typically reducing manufacturing times by at least a factor of five.

**Specification**

- **Weight:** 34 tonnes
- **Height:** 4 metres
- **Length:** 14 metres
- **Width:** 2.6 metres extending to 7 metres

There are two pods which extend out at both sides of the transporter, taking the maximum width to seven metres. Disabled access to MANTRA is via the main entrance at the rear of the transporter.

MANTRA must be parked on stable, solid ground. A site visit to check the suitability of the desired location is always recommended. If parked overnight MANTRA must be in a secure location, if the area is not considered secure then additional security arrangements must be put in place.

**Power requirements for MANTRA**

- **Generator:** MANTRA is equipped with its own generator which powers all of the equipment and machines. The generator can only be used when the transporter is parked outdoors.
- **Mains Connection:** A 63 amp, 5 pin, 3 phase with earth and neutral cable is required. The cable plugs into the truck under the kitchen area.

**Enquiries**

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