

Global Centre of Rail Excellence adds 'cutting-edge' Powercube to South Wales site design

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The **Global Centre of Rail Excellence** (GCRE) and **Mavin Powercube** have announced a new collaboration.

The alliance will see Mavin's containerised 'Powercube' being used at the 700-hectare GCRE rail innovation site currently being constructed in South Wales.

The Global Centre of Rail Excellence is a major new rail testing facility that is being supported by both the Welsh and UK Governments. GCRE will become Europe's premier site for rail research, testing and certification of rolling stock, infrastructure and cutting-edge new energy technologies.

The partnership with Mavin will see the build of the new GCRE facility include a custom designed and built Powercube – a multi-unit, combined, Containerised Modular Data Centre (CMDc), Signal Equipment Room (SER) and an interconnecting Access and Staging Unit, that will support the extensive testing operations that will be carried out at the GCRE site.

The multi-purpose Powercube will help GCRE support clients with high quality data analysis as they

undertake testing and research on the site's two rail tracks – one, a 7km track for rolling stock testing and a second track for infrastructure innovation.

The Powercube solution was pre-built, off-site in Neath, near the Global Centre of Rail Excellence. Mavin Powercube has been a leader in the design and build of award-winning, custom, scalable and secure, Containerised Modular Data Centres (CMDs) and Containerised Critical Infrastructure since 2005.

The Powercube has multiple applications, including Train Movement Rooms (TMR), Signal Equipment Rooms (SER), Electric Switch Rooms (ESR) and Communications Equipment Rooms (CER).

Offering a 100% custom, turnkey solution and built off-site using Modern Methods of Construction (MMC), the Powercube results in fast, flexible, scalable deployment and increased sustainability, as well as significantly reducing costs, site disruption and carbon emissions.

Chief Executive of GCRE Limited Simon Jones said: “We are delighted to agree this partnership with Mavin and to utilise their cutting edge Powercube design at the Global Centre of Rail Excellence site.

“The ambition is to establish GCRE as Europe’s premier site for rail innovation, becoming a one-stop shop for the rail sector, serving markets not just in the UK but across Europe and the Middle East. In providing world class research and testing facilities it’s important that the supporting infrastructure that we have on site is of the highest quality – and is as forward looking as the innovation we will be doing on our tracks.

“That’s what we get with the Mavin Powercube solution – an innovative, reliable and sustainable piece of technology that can help us support our clients with the rich suite of data analysis that we will be undertaking on site.

“The Powercube facility has been designed and built near to the Global Centre of Rail Excellence site in Neath, so its fantastic to be able to tell a story of how GCRE is utilising local skills and supporting jobs in the area as we develop the facility.

“The Powercube utilises cutting-edge, off-site manufacturing processes, being delivered to site ready to go and mitigating lengthy site disruption. Critically it helps us to reduce the carbon emissions of our build with less on-site traffic.

“The partnership with Mavin Powercube will further enhance the capability and range of services offered on the GCRE site. By utilising the leading-edge data centre solution Mavin brings, GCRE is putting in strong foundations for the future.”

Mavin founder and Powercube Director Russ Bartley said:

“We are extremely proud to be involved with this pivotal project from the start and are looking forward to strengthening the partnership with GCRE over the next few years, as opportunities for broader engagement with GCRE and other critical industries allow us to evolve our solutions to meet the demands of the future.

“Our build facility is based in Wales, so the positive outcomes for local people in terms of employment and opportunity are a key factor for us. This exciting project follows a successful partnership with TfL and the TIES Living Lab, where we pioneered the construction of a unique, custom, modular Signalling Equipment Room (SER).”

GCRE will help support the path to net zero and develop new rail and transport technologies that can be deployed faster, reducing carbon emissions and encouraging more people onto our railways. The Powercube’s off-site build also means significant reductions in construction vehicles on-site, therefore reducing timelines, costs and carbon emissions.

GCRE has procured the Powercube facility through a mutual partnership between Trustco PLC and Mavin Powercube, TrustMavin, enabling the Powercube solution to be reached by Government & Public Bodies via associated and appropriate frameworks, in this case the SBS Digital Workplace Solutions Framework.