DATA CENTRE WB E-POD

INTRODUCING THE WB E-POD, A FULLY BESPOKE, MODULAR CRITICAL POWER SOLUTION, FULLY DESIGNED TO CLIENT SPECIFICATION

Drawing on many years of experience in the critical power and the data centre industries, WB are proud to announce the launch of the WB e-Pod. The Data Centre WB e-Pod is a modular, bespoke package, fully designed in-house by WB Power Services. Packaged at our newly opened production facility, the product will offer a truly bespoke critical power solution, fully designed to client specification, using client preferred products. The WB e-Pod will provide the following:

- GENERATING SET
- FUEL SYSTEM
- SCR & EXHAUST SYSTEM
- POD
- MAINS TRANSFORMER
- HV & LV SWITCHGEAR
- BUSBAR
- COOLING
- FIRE DETECTION & SUPPRESSION
- BMS
- UPS & BATTERIES
- TRIPPING BATTERIES
- LIGHTING & SMALL POWER
- GANTRY & ACCESS SYSTEMS

The complete plug and play critical power package will be designed, procured, packaged, installed, and commissioned by our expert in-house team, so customers will have full confidence that everything will be fully tailored to their exact brief.

WBPS POWER YOU CAN TRUST

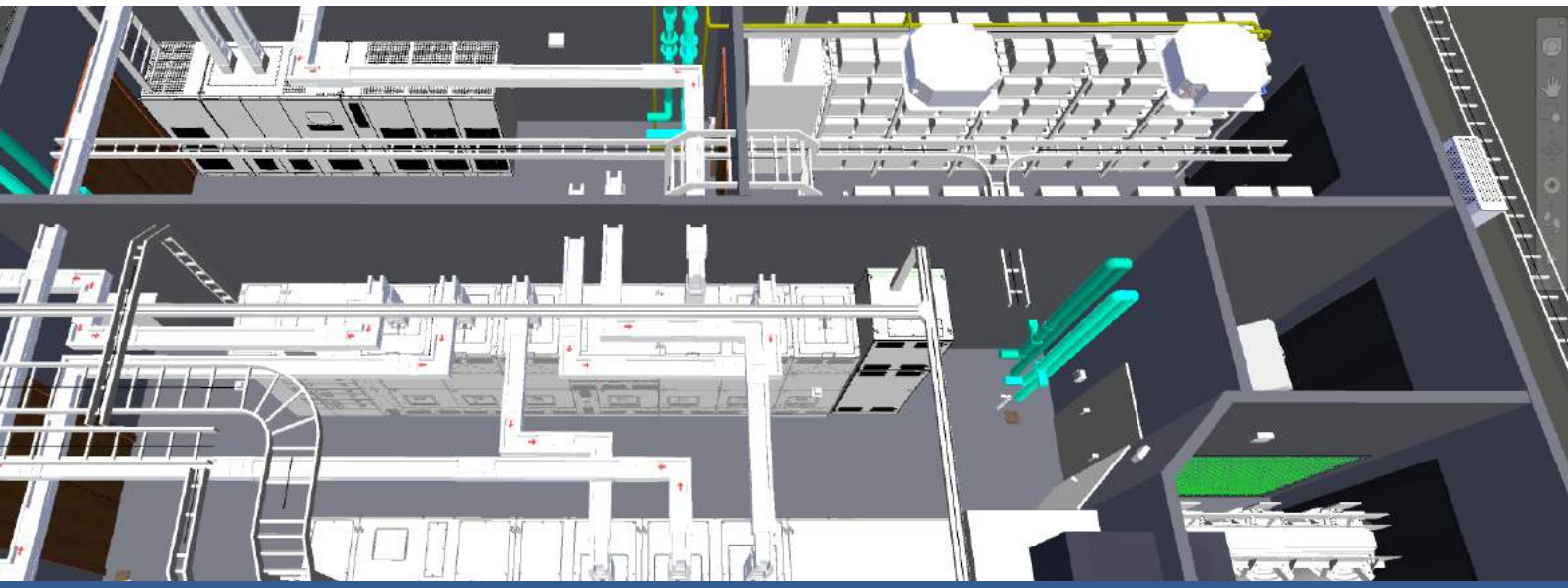
PROJECTS

OVERVIEW OF WB E-POD CONFIGURATION

GENERATOR SELECTION

This package includes a

- Kohler KD3500 3500kVA / 2800kW 400V 50Hz DCC rated generating set
- Generator housed in a 65dBA @1m FFC container complete with
  - o Selective Catalytic Reduction (SCR) system
- A 48-hour capacity Fuel System comprising
  - o 35,000l (useable) bunded structural belly tank
  - o End mounted fuel fill point cabinet
- MV/LV Power POD 14m x 4.0m x 4.0m which includes:-
  - o 11kV Ring Main Unit Riwwngmaster
  - o 11kV/415V Cast Resin Transformer
  - o Main LV Switchboard
  - o Manual Transfer Switchboards
  - o Tripping Batteries
- UPS power pod which includes
  - o 1200kW UPS and 10min (end of life) VRLA Batteries
  - o 30kVA / 15kVA Static UPS & Batteries
  - o POD CRAC Units to flange ends mounted on the POD wall
  - o Static Transfer switch for power management of internal essential services
- Power POD Busbar Trunking to cable connection boxes on the POD wall
- Electrical Fit out of the POD
- POD Fire Suppression and Fire Alarm to match site requirements
- Access steps
- Full site Installation
- Commissioning and SAT



WB Power Services Ltd, Heanor Gate Road, Heanor Gate Industrial Estate, Heanor, Derbyshire DE75 7RJ
sales@wbpsltd.co.uk | 0115 9444 422 | www.wbpsltd.co.uk

WB E-POD SYSTEM - GENERAL FEATURES

To ensure quality and consistency of production each container is constructed throughout by utilising standard rolled steel sections. Other features include:-

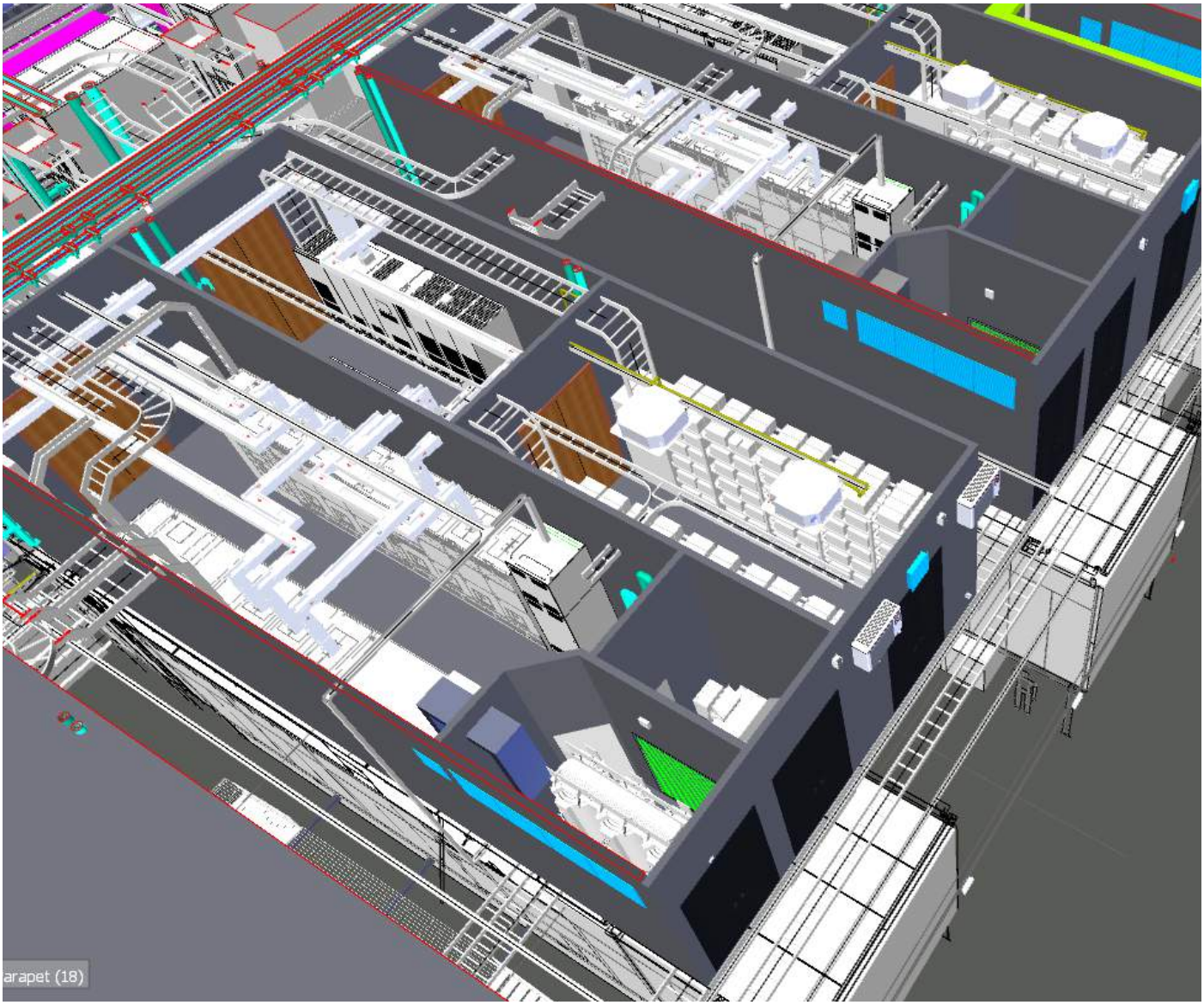
- Design and construction generally in accordance with relevant EuroCodes
- All structural member joints and abutments are fully welded.
- Structure Welds associated directly with lift points to be non-destructive tested (NDT) using a Magnetic Particle Inspection method.
- Wall construction is a rolled section structural framework made from Zintec cladded sheets with sandwiching mineral wool thermal insulation. The internal skin (1.6mm) and external skin (2mm) sheets are stitch welded and mastic sealed. This will give a nominally flat external wall appearance.
- Roof construction will comprise rolled section structural framework, with internal and external Zintec/mild steel cladding sheets sandwiched with mineral wool thermal insulation.
- Containers will have a shallow sloped roof to discourage rainwater ponding on the roof
- Internal floors to be 5-6mm thick steel plate welded to floor beams at regular intervals
- The under floor area to be under-drawn with 1.8mm Zintec steel sheet welded and sealed in position to retain the under floor mineral wool insulation. (100mm Thick)
- Each POD is split into rooms internally by 50mm thick partition wall comprising Zintec sheets, stitch welded and mastic sealed, sandwiched with mineral wool insulation
- Access doors
- All external fixings to be stainless steel and anti-vandal, e.g. snake eye screws or similar.
- Paint Finish:- Module exterior walls and roof painted in Bradgate 2 pack acrylic paint system to give a durability of high (15 years) in a C3 environment to ISO12944. External finish to a BS / RAL colour of customers choice. Internal finish is our standard white. Internal floor painted in black floor paint with the under-base painted in a bitumen based underseal.

CUSTOMISING YOUR PACKAGE

Our in-house design team provide WB with the ability to design into the WB e-Pods any specific customer needs and requirements such client preferred equipment vendors etc. Right from the time of project conception WB are happy to work with your design team, offering full electrical and mechanical design support to ensure your full range of requirements are catered for.

FACTORY ACCEPTANCE TESTING

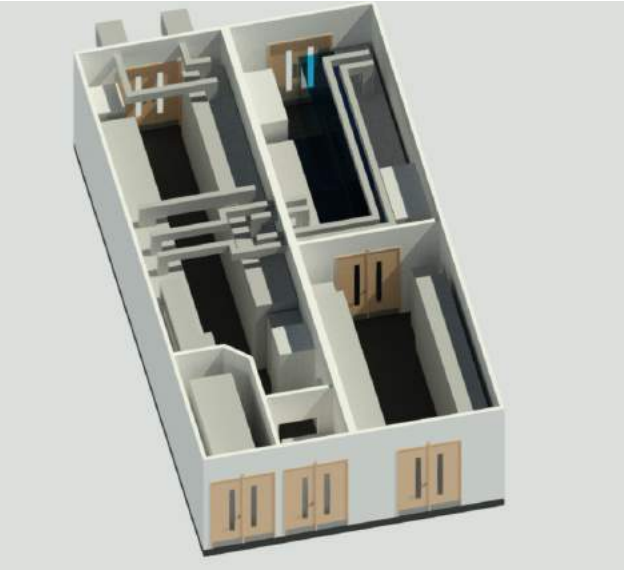
All of the equipment will be fully tested prior to leaving the manufacturers plant and pre commissioning will take place prior to despatch from our packaging facility. We are able to offer full FAT testing of each package of three pods. The scope and duration of the testing can be tailored to meet specific client specification.



SITE MANAGEMENT AND INSTALLATION

On project award we will appoint a WB Construction manager and Project manager who will coordinate with our design team and work alongside all key stakeholders on site right through until the project completion.

WBPS will undertake the installation of Preedcrete busbar within the LV POD during manufacture and complete the interconnecting elements once on-site installation. The busbar would be taken to the end of the POD and enclosed in a suitable rated enclosure external to the main POD ready for ongoing connection to the building. This is to allow the cable / busbar running into the building to be installed without entry into the main POD. The fire alarm and suppression system and fire alarm will be designed to match the site wide system and will be taken to marshalling points within the POD for connection to BMS outstations, and security system.



COMMISSIONING

During the construction and installation phases of work our project delivery team, which includes the commissioning manager, will be working together with you as the client and any nominated specialists to finalise the commissioning plan and programme. Once both the mechanical and electrical installations have been completed the commissioning manager and his team will set to work to commission and test all aspects of the installation to your satisfaction. This will culminate in a full site acceptance test (SAT) including load testing fully coordinated with all other services providers working on the project.

THROUGH LIFE MAINTENANCE

With six fully operational depots and over 80 field based engineers based throughout the UK, WB are uniquely placed to offer a full and comprehensive preventative maintenance and four hour emergency response to any client site. The WB e-Pod packages contain a wide range of electrical equipment provided by our long-standing specialist partners who we work with to provide all necessary specialist maintenance and emergency support on their unique products. WB are able to offer a seamless maintenance and support package on all equipment provided.

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Data Centre builders and operators to support them in the design, supply, installation and commissioning of a range of high quality and cost-effective standby generator packages of various ratings and configurations. Today we are one of the leading suppliers of standby power to the UK Data Centre market with an installed or in work base of over 500MW of standby generation.

Using our significant experience and market insight WB have designed and built a full plug and play standby power package for the Data Centre market; more specifically focused at the Hyperscale Data Centre builder. The offsite built and tested solution includes transformer, switchgear, generator, UPS gantry, all interconnections between containers and fully site commissioning. Making this a true plug and play solution.

The solution proposed in this document has been designed and built by WB with products and support from trusted partners but with flexibility of design to provide products rated and selected by the client to meet their specific site needs.

The equipment is packaged at our own newly equipped facilities in Leicestershire and manned by our own specialist mechanical and electrical teams all of which is over seen by a production manager.

HEAD OFFICE
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