

# Welding & Fabrication Customer Containment Rig

TS Metals deliver fully modified, weatherproof shipping container to securely hold satellite, transformer, and rectifier unit, ensuring safe, mobile deployment across multiple sites under a tight deadline.

VITAL GROUP | POWER ENGINEERING | COVENTRY

## Our Customer's Challenge

Vital Group required a secure, transportable solution to house a satellite, transformer, and rectifier unit for heavy and sensitive equipment, within a modified shipping container that could be safely moved between sites and withstand outdoor conditions. The container was for Evyve, which operates electric vehicle charging stations at retail and leisure outlets and was part of Project JOLT, a UK trial program for heavy goods electric vehicles (eHGVs) led by The Centre for Sustainable Road Freight, where Evyve provided the charging infrastructure and software for the trial fleet. With a tight timeline, electricians already scheduled, and only a rough concept sketch at the outset, close collaboration was essential. Vital turned to TS Metals to develop their concept into a robust, weatherproof, and fully engineered container, ready for rapid deployment.

## The Quartzelec Solution

TS Metals worked closely with Vital Group from the initial concept stage, taking a basic sketch and developing it into a fully engineered, transportable, and weatherproof container solution. The primary requirement was to safely house a satellite, transformer, and rectifier unit within a 10ft<sup>2</sup> shipping container, while allowing for safe relocation between sites and seamless electrical integration.

The team began by stripping and reworking the container structure, including removing both the front and rear faces to improve access and layout flexibility. The original flooring was replaced with a heavy-duty 8mm thick mild steel chequer plate, supported by fabricated cross members beneath. This created the strength and rigidity required to support the heavy equipment and provided secure mounting points for cabinets.

Additional bracing was added to the container corners and upper sections to ensure structural integrity during lifting and transport. A bespoke frame was fabricated to house the Powerlock cabinet, and Unistrut and DIN rail systems were installed to manage and safely conceal all wiring routes. To ensure the unit could perform reliably outdoors and across various sites, a high-quality Acrolon top coat was applied, matched to the client's specified colour, providing durable, long-term weather protection and a professional finish.



## The Quartzelec **Solution** (cont'd)

TS Metals committed substantial resources to meet critical project milestones, including working extended hours and weekends. Despite ongoing design refinements and adjustments to accommodate equipment variations, the team ensured all structural and internal works were completed in time to allow the client's electrical team to begin their installations as planned.

A key challenge was accommodating evolving design inputs mid-project, which TS Metals addressed through proactive communication and flexibility. Engineers from Vital attended the facility to inspect the equipment and collaborate on layout decisions, allowing real-time design enhancements that aligned with their operational needs.

The final product was delivered as a robust, fully tailored, right-first-time solution—designed for repeated transport, outdoor use, and long-term durability. The container met all performance, safety, and aesthetic expectations, and was delivered ready for immediate integration by the client's on-site team.



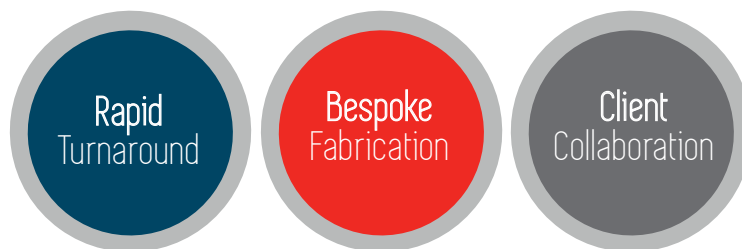
## Key Benefits

- **Right-first-time delivery:** Fully customised solution built to exact requirements with no delays.
- **Structural safety:** Reinforced floor, bracing, and secure mounting for heavy equipment.
- **Fast and flexible turnaround:** Adapted quickly to changes while meeting critical deadlines.
- **Weatherproof and mobile:** Durable finish and design suitable for outdoor, multi-site use.



*TS Metals delivered a highly customised container solution on a tight timeline, demonstrating excellent communication, flexibility, and quality workmanship. Their proactive approach ensured our project stayed on track and met all our requirements*

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