

JOB REPORT



VSD CONTAINER FOR MONGSTAD



Completed container prior to delivery

Year : 2010
Project Name : Mongstad TCM
Operator / Client : ABB
ATC project no. : 2333

Size (L x W x H mm) : 10840 x 7100 x 4770
Weight (kg) : Total 60,000 with all equipment installed.
Materials : 4 mm Mild Steel, painted to NORSOK M-501
Classification : A0 comfort insulated.

Project Description / Challenges:

The challenge was to provide a fully self contained room, with Air lock, to accommodate a 6 kv switchboard, 2 VSD's, a transformer, 400 V switchboard and 230V UPS with 30 mins battery capacity.

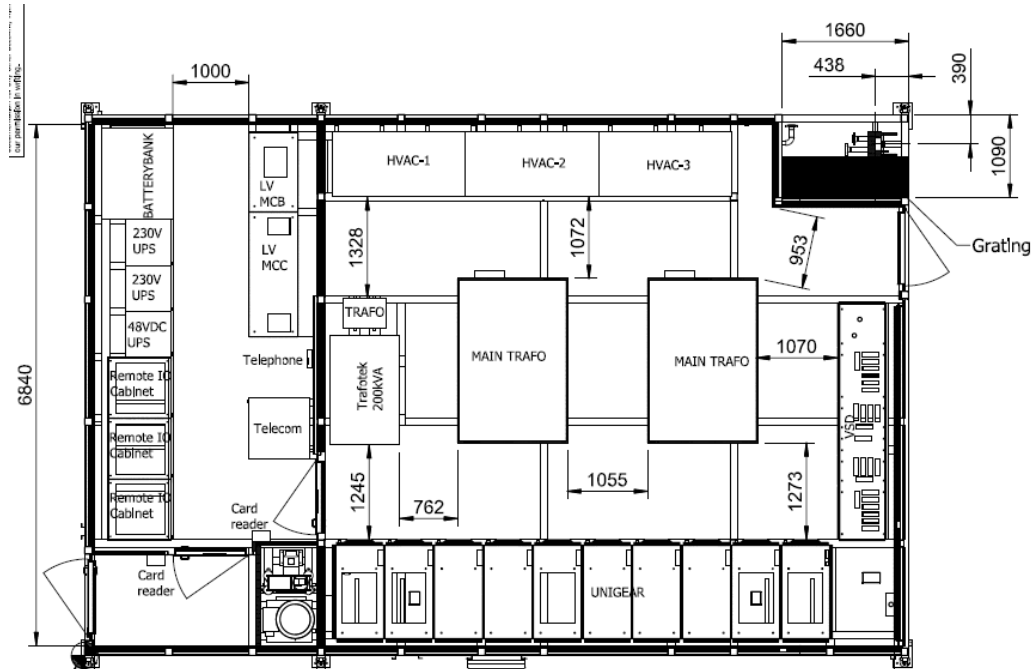
The container required a 3 x 50% HVAC system with a stand alone control system with interface to the main SAS, in order to maintain the indoor temperature between 20 – 25 deg C.

The container was provided with a false floor, for bottom entry of main cables.

JOB REPORT



Scope of Work:



ATC's scope included detailed design, fabrication and outfitting and testing of the complete container, including electrical (all equipment zone 1), Instrumentation, Telecom, HVAC and controls.

Due to the size and weight, the structural calculations involved analysis of stress levels at key areas of the construction.

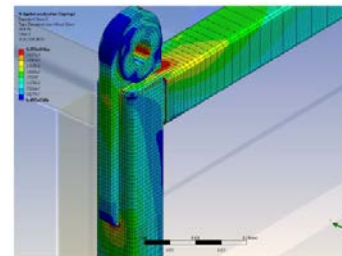


Figure 4-1: Stress levels in the corner posts, topside

Instrumentation and Telecom, included smoke and gas detectors, pressure differential and temperature transmitters, telephones, UHF radio desktop and UPS for telecom system with 8 hr battery capacity.

HVAC, included High efficiency louvers, fire dampers, filters, supply fans, water/air cooling coil with heat exchanger, attenuators and internal ductwork.



Inside the container during installation