

Standard Container Specification



Gentec is leading the power generation marketplace with Packaged Generator Sets engineered to deliver unmatched flexibility, expandability, reliability and cost-effectiveness

STANDARD FEATURES

Container

- Robustly constructed walk in enclosure designed to provide the necessary weather protection, sound attenuation and ventilation for the generator and switchgear.
- Five standard ISO shipping container sizes are available dependant on size of generator and options selected.
 - 20' x 8' x 8'6"
 - 30' x 8' x 8'6"
 - 30' x 8' x 9'6" (High Cube)
 - 40' x 8' x 8'6"
 - 40' x 8' x 9'6" (High Cube)
- All containers are designed and constructed in accordance with ISO668 Series 1 freight containers - classification, dimensions and ratings.
- Corner fittings to ISO1161, providing four point lifting capability for full wet weight.
- A minimum of two personnel access doors (1 per side) complete with internal panic release buttons. Black powder coated 'Slam' type door handles, self-closing hinges and leather check strap fitted to each door.
- External emergency stop buttons located at each container side.
- Internal lighting - One emergency DC 'bulkhead' light complete with push type timer switch located at personnel door.
- All external fixings in stainless steel.
- Minimum 500 litre capacity fuel tank complete with contents gauge, vent and manual fuel fill point.
- Power cable exit via a non-ferrous gland plate in container wall.
- Internally mounted exhaust silencers available dependant on size of generator and options selected.

Options

- CSC container plating in accordance with ISO1496-4 Series 1 freight containers - Specification and testing.
- Bulk fuel tank providing enough fuel for 8 hours continuous operation.
- Bunding of bulk fuel tank. Bund sized to contain 110% of engine fuel and is designed in accordance with Control of Pollution (Oil Storage) (England) Regulations 2001.
- Fully sealed container floor for spill containment of engine oil and coolant.
- Additional AC & DC bulkhead lights.
- Lube oil top up system providing extended engine running hours.
- External service connections for lube oil and coolant drains terminated at the side of the container.
- Remote fuel systems.
- External Fuel supply and return connections to engine via 3-way valves piped to container sidewall.
- Three levels of sound attenuation are available for each container depending on size of generator and options selected, weatherproof options may also be available.
 - 75 dBA at 1m
 - 80 dBA at 1m
 - 85 dBA at 1m
- All noise levels are determined by testing in accordance with ISO 3744.
- Where required, containers will be certified and labelled with LWA level in accordance with EC Directive 2000/14/EC.

CONTAINER CONSTRUCTION

The container is generally constructed from structural mild steel to BS4360:43A and Electro-Zinc coated steel sheet to BSEN10152: 1994; DC01 +ZE25/25:A-C. All structural steel is shot blasted to SAE 2.5 and pre primed with zinc phosphate primer to a dry film thickness of 25 microns.

All welding is carried out in accordance with Lloyds approved procedures for MIG and MMA. MMA is used for ISO corner castings and lifting lugs in conjunction with non-destructive test procedures.

Acoustic Attenuation

The acoustic attenuation comprises of rockwool for sound absorption, a resin bonded mineral fibre, which is non-hydroscopic, and non-combustible, and complies with BS476.4 standard. The density and thickness of rockwool slabs is dependant on level of sound attenuation required.

Floor

The floor comprises an appropriately sized structural steel frame manufactured from PFC and sheeted with 3mm steel plate coated with anti-slip paint. For stringent noise level applications, the floor is acoustically lined and enclosed with 1.2mm steel sheets.

Walls

The walls are constructed from RHS structural steel and 2mm corrugated steel sheets for stiffness. The walls are acoustically lined and faced with 0.7mm galvanised expanded metal sheets.

Roof

The roof is constructed from a framework of RHS structural steel, which is covered by fully welded 3mm steel sheets. The roof is acoustically lined and faced with 0.7mm galvanised expanded metal sheets.

Paint Finish/Colour

All galvanised material undergoes a degrease pre-treatment. The primer and topcoat are provided by an epoxy/acrylic paint system providing a high solid gloss finish with a dry film thickness of 125 microns. This provides a 2-pack paint system that has excellent corrosion protection, superior colour stability and a superb gloss finish.

The internal walls and underside of the container floor are painted using the same paint system as above. The floor is finished in anti-slip red marine paint.

The paint system has been specifically designed for an exposed polluted coastal environment and has passed an approved salt spray test of 700 hours with no indication of corrosion and also passes BS3900: Part F2 humidity test at over 1000 hours.

Exhaust Silencers

Depending on the noise level and size of the container, the exhaust silencers are either mounted internally or on the roof of the container and are heavily fabricated in mild steel. All external silencers and pipework are grit blasted, aluminium metal sprayed and sealed with high temperature aluminium paint. Internal exhaust pipework is lagged.

KVA - prime	500-675		650-800		910-1000				1250				1500				1700		1750-2000	
Engine	2806-E18		4006TAG		4006TAG				4012TWG				4012TAG				4016TWG		4016TWG	
Container Model No.	A4	A6	B3	B4	C1	C2	C3	C4	D6	D7	D8	D9	F6	F7	F8	F9	E2	E4	G4	
dBA @ 1 Mtrs	85dBA	75dBA	85dBA	80dBA	W/Proof	85dBA	85dBA	80dBA	W/Proof	85dBA	85dBA	80dBA	W/Proof	85dBA	85dBA	80dBA	89dBA	89dBA	85dBA	
Container Size	ISO-20'	ISO-30'	ISO-20'	ISO-30'	ISO-20'	ISO-30'	ISO-40'	ISO-40'	ISO-30'	ISO-30'	ISO-40'	ISO-40'	ISO-30'	ISO-30'	ISO-40'	ISO-40'	ISO-40'	ISO-40'	ISO-40'	
Ambient Temperature	35deg C	35deg C	45deg C	45deg C	35deg C	35deg C	35deg C	35deg C	35deg C	35deg C	35deg C	35deg C	35deg C	35deg C	35deg C	35deg C	40deg C	30deg C	30deg C	

Ambient temperature 38°C

In line with our policy of continuous product development, we reserve the right to change specification without notice