

1. GENERAL

General description of the FINETEC insulation system for below LNG cargo tanks

Type of tank : IMO type B of Prismatic shape

Number of tank : ___ tanks (not determined)

Volume of cargo : ___m³ (not determined)

2. DESIGN CONDITION

Criteria			Remark
Temperatures	Ambient temperature	Max.45°C	Or as builder's spec.
	Sea water	Max.32 °C	Or as builder's spec.
	Minimum cargo tank temperature	-163°C	Cargo : LNG
Heat transfer coefficient		To be announced	W/m ² K
Tank	Number	Not determined	Or as builder's spec.
	Type	Independent IMO type B	Prismatic tank
	Capacity (total)	Not determined	Or as builder's spec.
	Material	Not determined	Or as builder's spec.
Insulation System	Insulation type	Combination	PU Panel + PU Spray
	Material	Ff140 + Fp140-40	HCFC free
	Fire resistance	B2	DIN 4102, part 1
	Overall insulation thickness	About 300mm	Panel 50mm & Spray foam 250mm
	Thermal conductivity at 20°C	Ff140 ≤ 0.023 Fp140-40 ≤ 0.021 Fp140-60 ≤ 0.022	W/m K (Fresh)
	Surface protection	Mechanical protective coating ^{*1} Top ≥ Aver. 3mm Elsewhere ≥ Aver. 1mm	Fire resistance DIN 4102 part 1, B2

*Ff140, Fp140-40, Fp140-60 : DSFTC's brand name, which is insulation material base on polyurethane.

See below overview of design criteria, and corresponding system specifics necessary to meet them, or according to contract.