



Main engine

Engine type	1 x Wärtsilä 9L20
Maximum continuous rating (MCR)	1665 kW _m
Engine speed	900 rpm
Fuel type HFO	380.0 cSt (50°C)

Scope of Supply per Shipset

Description	Qty
1 Propulsion machinery	
1.1 Main Engine(s)	
1.1.1 Wärtsilä 9L20	1
1.2 Fuel oil system	
1.2.1 Separator unit (HFO)	1
1.2.2 Feeder/Booster unit	1
1.2.3 Pressure control valve (HFO)	1
1.2.4 Safety filter (HFO)	1
1.2.5 Circulation pump (MDF)	1
1.3 Lubricating oil system	
1.3.1 Separator unit	1
1.4 Compressed air systems	
1.4.1 Starting air vessel	2
1.4.2 Starting air compressor unit	1
1.4.3 Air filter (starting air inlet)	1
1.5 Cooling water systems	
1.5.1 Central cooler	1
1.5.2 Preheating unit	1
1.6 Combustion air and exhaust gas systems	
1.6.1 Turbocharger cleaning device	1
1.6.2 Connection piece	1
1.6.3 Exhaust gas bellows	1
1.6.4 Exhaust gas silencer with spark arrestor	1
1.7 Control and monitoring systems	
1.7.1 Power Unit	1
1.7.2 Speed indicator for engine (ECR)	1
1.7.3 Speed indicator for engine (Bridge)	1
1.8 Electric motor starters	
1.8.1 Starter for engine pre lubricating oil pump	1
1.8.2 Starter for HFO/MDF circulating pump	1
1.9 Foundation	
1.9.1 Flexible pipe connections spare set	1
1.9.2 Common base frame	1
1.9.3 Flexible pipe connections	1
1.10 Power transmission	
1.10.1 Flexible coupling (flywheel)	1
1.10.2 Flexible coupling fitting materials	1
1.10.3 Generator	1

Description	Qty
1.11 Tools and spare parts	
1.11.1 Tools (engine)	1
1.11.2 Spare parts (engine)	1
1.12 Packing and transportation	
1.12.1 VCI-coating	1
1.12.2 Tarpaulin	1
1.12.3 Transport foundation	1
1.13 Technical documentation	
1.13.1 Engine manuals	1
1.13.2 ELDOC	1
1.13.3 Inventory of Hazardous Materials (IHM)	1
1.13.4 Online Services	1
1.14 Commissioning	
1.14.1 Commissioning planning and verification	1
1.14.2 Engine first start-up support	1
1.14.3 Engine performance and sea trial participation	1

Warranty

The warranty period starts at delivery and ends maximum of i) twelve (12) months after the date on which the vessel or other construction is handed over to Customer's buyer or taken into use or ii) eighteen (18) months after delivery, whichever occurs earlier. The warranty provisions of the General Terms and Conditions of Contract Wärtsilä Marine (2018) apply.

Supply Contract and General Terms and Conditions

In case this offer leads to an order with respect to the equipment offered herein, a written Supply Contract shall be made including scope of supply and document delivery schedule and signed by both parties. This Offer and any supply contract shall in all respects be exclusively subject to General Terms and Conditions of Contract Wärtsilä Marine (2018). Wärtsilä does not accept the incorporation of Customer's or third parties' standard term contracts or conditions into the supply contract concluded when this Offer is accepted. Origin of the equipment will be at Wärtsilä's discretion.

Confidentiality and Assignment

This Offer contains technical and commercial information of confidential nature that is sensitive in respect of Supplier's business ("Confidential Information"). Customer is prohibited to disclose or disseminate Confidential Information to any third parties. Any entitlement to accept this Offer or arising out of the acceptance of this Offer cannot be assigned / transferred to or relied on by any third party, including successors in title of the Customer without Supplier's written consent.