



DET NORSKE VERITAS  
CERTIFICATE FOR  
DIESEL ENGINE

Certificate No. 398030-02

ME.1

601.001.10

Manufacturer	Ulstein Bergen AS, Bergen, Norway	Works Order No.
Type Designation	Ulstein Bergen Diesel type BRM-9	Serial No. 9177
Ordered by	Ulstein Ship Technology AS, Ulsteinvik, Norway	Order No. 398030
Intended for (Yard, Ship, Rig, Installation)	Langstein Slip & Båtbyggeri AS, Tomrefjord, Norw	Yard No. or Signal letters 179

THIS IS TO CERTIFY that the Diesel Engine, described below, has been built and tested in accordance with the requirements of DNV Rules for Classification.

MAIN ENGINE <input checked="" type="checkbox"/> HSLC APPLICATION GROUP 2 <input type="checkbox"/> OR 3 <input type="checkbox"/>					AUXILIARY <input type="checkbox"/> EMERGENCY <input type="checkbox"/>	
2-stroke	4-stroke	Number of cylinders	Diameter of cylinders	Length of stroke	MAXIMUM CONTINUOUS OUTPUT 3975 kW at 750 RPM	
	<input checked="" type="checkbox"/>	9	320 mm	360 mm	High/extreme Output (group 2 or 3) kW at RPM	
MAXIMUM FIRING PRESSURE 184 BAR			MEAN PRESSURE Indicated 26,5 BAR Effective 24,4 BAR		MAIN COLUMNS Cast <input checked="" type="checkbox"/> Welded <input type="checkbox"/>	
BEDPLATE Cast <input type="checkbox"/> Welded <input checked="" type="checkbox"/>		Make	SUPERCHARGER Type		Number	
		ABB	VTR 354 P11		HT430252	
TORSIONAL VIBRATION DAMPER Make Holset 910 x 120			Type Viscous	IMPORTANT CONNECTED PUMPS Lub.oil, Nozzle oil, Fuel oil, LT cooling water, HTcooling water		

Remarks:

The engine was stamped 398030-02	The marking is placed on Engine Block manoeuvre side The following components, which must be surveyed after the installation, are not included in the certificate: Overspeed protective device to be checked onboard ship.
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Certificates and drawings with dates of approval, see page 2.	Place: Bergen
When this certificate is issued on the basis of the manufacturer's Quality System, and a Manufacturing Survey Arrangement (MSA) which gives the manufacturer permission to complete this certificate form, mark x in the corner below.	Date: 1998 .12.18
<input checked="" type="checkbox"/> If marked x, see page 2.	 Roar Fanebust Surveyor

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.

DET NORSKE VERITAS AS, VERITASVEIEN 1, N-1322 HØVIK, NORWAY, TEL INT: +47 67 57 99 00, TELEFAX: +47 67 57 99 11  
Form No.: 72.00a Issue: April 98

Marking and certificate number for the different parts

Crank Shaft Certificate No.: KO-98-437

Engine Block stamped: 206122-1 NV, TP 7 bar

Cylinder Covers stamped: 205903-2, -3, -4, -7, 205905-1, -3, -4, -6, -7 TP 7 bar

Drawings with dates of approval and / or type approval certificate number

The Crank Shaft drawing no.: 600403 approved by DNV 19. august 1997, re. letter from DNV of same date.  
Engine Type Approval Certificate no.: M-7196

Declaration by manufacturer when applicable according to the Manufacturing Survey Arrangement.

The undersigned manufacturer declares that the specified product has been built and tested in conformity with requirements stated above and the conditions referred to in:

Quality System Certificate No 95-OSL-AQ-6348

Manufacturing Survey Arrangements No. R-11720, DNV, Bergen

This PRODUCT CERTIFICATE is valid only when endorsed by a DNV Surveyor. The endorsement is a statement that the conditions stipulated in the Manufacturing Survey Arrangement for the products in question have been complied with.

Manufacturer: Ulstein Bergen AS

ULSTEIN BERGEN AS  
P.O. box 924, N-5002 Bergen

Bergen, Norway  
Place

15.12.98  
Date

  
Karly Jensen  
Name