



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. K-3167
This Certificate consists of 4 pages

This is to certify that the
Plastic Pipes, Fibre Reinforced Thermosetting


with type designation(s)
Fiberdur VE 10 and VE 16 bar series
Fiberdur VE 16 bar collapse resistant series

Manufactured by
TPR Fiberdur GmbH & Co. KG
ALDENHOVEN, Germany

is found to comply with
Det Norske Veritas' Rules for Classification of Ships
Det Norske Veritas' Type Approval Programme 1-501.1, 1999, Fibre Reinforced
Thermosetting Plastic Pipes
IMO Resolution A.753(18), Guidelines for the Application of Plastic Pipes on Ships

Application
For install. acc. to DNV Rules and Manufacturer's Spec. Piping system is non-conductive,
not for installation in gas hazardous areas. Piping system is approved to Fire Endurance L3
acc. to IMO A.753(18) and Low Flame Spread acc. to ASTM D635-06.

Place and date
Høvik, 2007-10-09
for DET NORSKE VERITAS AS


Hanne Anita Hjerpetjønn
Head of Section



Local Office
DNV Essen

This Certificate is valid until
2011-12-31


Gisle Hersvik
Surveyor

Notice: This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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.