



# DET NORSKE VERITAS

## TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. F-18303  
This Certificate consists of 3 pages

*This is to certify that the*  
**Class H Penetration**

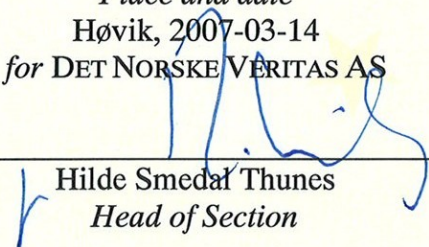
*with type designation(s)*  
**FIRETEX PIPE PENETRATION SEALING SYSTEM**

*Manufactured by*  
**MCL Unitex Ltd**  
HEANOR DE75 7SW, United Kingdom

*is found to comply with*  
Det Norske Veritas' Rules for Classification of Ships and Mobile Offshore Units

*Application*  
Approved for use as pipe penetration system in class H decks.


*Place and date*  
Høvik, 2007-03-14  
for DET NORSKE VERITAS AS

  
Hilde Smedal Thunes  
Head of Section



*Local Office*  
DNV Sheffield

*This Certificate is valid until*  
2011-06-30

  
Håkon Laskemoen  
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.



Cert. No.: F-18303  
File No.: 471.78  
Case No.: 262.1-002938-1

## Product description

### “Firetex Pipe Penetration Sealing System”

penetration system for min. Ø33 mm steel pipe through Ø89 mm steel sleeve to max. Ø273 mm steel pipe through Ø324 mm steel sleeve. The sleeves are welded to the deck such that a coaming 140 mm deep is formed around the aperture on the lower surface of the deck. Firetex seal to be wrapped around sleeve and pipe on lower side of deck and the overlapping ends of the seal to be bonded together with contact adhesive. Stainless steel clips are used to clamp the seal around pipe and sleeve. Sleeve and pipe (including lower end of seal) to be insulated with ceramic insulation of density min. 128 kg/m<sup>3</sup> according to approved manufacturers drawings listed in type approval documentation.

## Applications/Limitations

Penetration system approved for steel pipes with diameters of 33mm to 273mm.

The system is approved for use in H-0 to H-120 decks for pipes with diameter 33mm.

For larger pipes the system is approved for use in H-0 to H-60 decks.

Penetrations used in H-0/H-60 decks are to be insulated on exposed side locally as H-120 and at least 200 mm around the penetration system.

Each product is to be supplied with its manual for installation and maintenance.

## Type Approval documentation

Certification in accordance with Certification Note No. 1.2, Type Approval, December 1996.

Test Report No. 89544 dated 6 November 1997 from LPC, Hertfordshire, UK.

Certificate Retention Survey No. SHF07/5440 dated 20 February 2007 from DNV Sheffield.

Drawings Nos:

MCLT 1008, Rev. D and MCLT 1009, Rev. D both drawings dated 23 October 1997 from the manufacturer.

Tested according to IMO FTPC Part 3 (IMO Res. A.754(18))with HC temperature curve.





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### Marking of product

The product or packing is to be marked with name of manufacturer, type designation and fire-technical rating.

### Certificate retention survey

Det Norske Veritas' surveyor is to be given permission to perform Certification Retention Surveys at any time during the validity period of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in item 4.3, Certification Note No. 1.2.

END OF CERTIFICATE

