

Type Approval Certificate Extension

This is to certify that Certificate No. 98/00132(E2) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Chibro SpA Via Roscio 19 22100 Como Italy																						
PLACE OF PRODUCTION	Raccorderie Lariano S.R.L. Via Caronti 8 22026 Maslianico (CO) Italy																						
DESCRIPTION	90/10 Cupronickel Piping System with NBR 'O' rings																						
TYPE	Cunipress																						
SPECIFIED STANDARDS	Lloyd's Register's Rules and Regulations for the Classification of Ships, Part 5, Chapter 12.																						
RATINGS	<p>Nominal outside diameter (mm): 15, 18, 22, 28, 35, 42, 54, 76.1, 88.9, 108</p> <p>Maximum working pressure (bar): 16</p> <p>Maximum temperature (°C): 95</p> <p>Maximum insertion lengths (mm):</p> <table border="0"> <tr> <td>Pipe diameter (mm)</td> <td>15</td> <td>18</td> <td>22</td> <td>28</td> <td>35</td> <td>42</td> <td>54</td> <td>76.1</td> <td>88.9</td> <td>108</td> </tr> <tr> <td>Insertion length (mm)</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> <td>28</td> <td>32</td> <td>36</td> <td>58</td> <td>62</td> <td>78</td> </tr> </table>	Pipe diameter (mm)	15	18	22	28	35	42	54	76.1	88.9	108	Insertion length (mm)	21	22	23	24	28	32	36	58	62	78
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Certificate No.	98/00132(E3)																						
Issue Date	22 December 2009																						
Expiry Date	12 November 2013																						
Sheet	1 of 2																						



P.A. Stanney
London Design Support Services
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

APPLICATION

Subject to the conditions stated below, Cunipress pipe fittings may be accepted for use in the following piping systems on ships classed or intended to be classed by Lloyd's Register:

1. Fresh and sea water cooling for machinery
2. Fire main and deck washing on ships where LR is authorised to act on behalf of the Flag Administration
3. Sprinkler systems (with the same limitation as 2 above)
4. Bilge and Ballast systems, other than in passenger ships
5. Sanitary grey water and black water drainage
6. Domestic hot and cold fresh and sea water systems
7. Refrigeration Brine systems
8. Non-essential oily bilge systems

OTHER CONDITIONS


1. Where couplings are to be installed on ships classed by Lloyd's Register, the position is to be indicated on the relevant diagrammatic plans
2. Piping is to be installed in accordance with Cunipress Installation Instructions, in positions which are readily accessible at all times and where there is sufficient working area to utilise the pressing tool
3. After installation, the pipe system and fittings are to be hydraulically tested to 1.5 times the design pressure of the system but at not less than 7 bar
4. The type approval is subject to the piping system not being subjected to internal pulsation pressure shocks
5. In all cases, the pipes are to be suitably supported and anchored

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. 98/00132(E3) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 98/00132(E2) to which this extension should be attached.

Certificate No.	98/00132(E3)
Issue Date	22 December 2009
Expiry Date	12 November 2013
Sheet	2 of 2


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DESIGN APPRAISAL DOCUMENT

Date 22 December 2009	Quote this reference on all future communications LDSS/TA/ENG/W01973148/PAS/O-102774
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LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.**Issued to: CHIBRO SPA****for: CUNIPRESS 90/10 CUPRONICKEL PIPING SYSTEM WITH NBR 'O' RINGS
TYPE APPROVAL CERTIFICATE No. 98/00132(E3)**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Request for Type Approval	27 Nov 2008
Design Appraisal Document ENG25990	29 July 2003
Documents as listed in Design Appraisal Document 98/00132(E1)	14-Jan-2000
Vibration and shock testing report 014/SP/08/pd	06 March 2008
LR Milan Inspection of production facilities report MLN 0900268	24-April -2009

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.



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