



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. P-13206
This Certificate consists of 3 pages

This is to certify that the
Pipe System with Couplings
with type designation(s)
Cunipress

Manufactured by
CHIBRO SPA
MONTANO LUCINO, ITALY

is found to comply with
Det Norske Veritas' Rules for Classification of Ships
Det Norske Veritas' Standards for Certification 2.9 No. 5-792.20

Application
See certificate.

Temperature range:	-20 to 90°C
Max. pressure:	16 bar
Design:	Pipes and pressfitting system

Place and date
Høvik, 2009-07-09
for DET NORSKE VERITAS AS

Helge Drange
Head of Section



Local Office
DNV Milan

This Certificate is valid until
2013-06-30

Oyvind Skåra
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.: P-13206
File No.: 791.10
Job No.: 262.1-006743-1

Product description

Pipes and pressfittings couplings with o-ring seal

Size range:

Diameter 15 mm to 108 mm

Material:

Couplings and Pipes : Copper Nickel UNS C 70600 acc. ASTM B111
O-ring : NBR

Application/Limitation

The fittings are only to be used together with "CUNIPRESS" pipes.

The couplings may be used for the following piping systems: Fire Main and Deck Wash, Sprinkler, Ballast, Domestic Fresh- and Potable Water and Brine systems, fresh- and seawater cooling systems not related to propulsion or power generation.

Pipe penetrations through watertight bulkheads or fire bulkheads or decks shall be approved in each separate case.

The components are to be mounted according to manufacturer's instructions.

Sizes from 22mm to 108 are of fire resistant types.

Type Approval documentation

- Manufacturers Catalogue "CUNIPRESS" CH4200 April 2003
- Manufacturers test report dated March 6, 1998
- Cunipress Installation Instructions edition 1997
- DNV Retention Survey report GEN 03-0632 dated 2003-12-15
- DNV Retention Survey report dated 2007-06-28
- Manufacturer's pressure test report, witnessed by DNV 2007-06-28
- Manufacturer's pull-out test report, witnessed by DNV 2008-02-27
- DNV Retention Survey report dated 2009-06-05

Tests carried out

Leakage (with and without o-ring), burst, vibration, vacuum and fire tests



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Marking of product

For traceability with this type approval, each fitting is at least to be marked with:

- Manufacturers name or trademark
- Type designation and size

Certificate retention survey

For retention of the Type Approval, a DNV Surveyor shall perform a survey - every second year and before the expiry date of this certificate - to verify that the conditions for the type approval are complied with and to witness burst testing on samples of fittings selected at random from stock or from the running production.

END OF CERTIFICATE

Alpha



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