

LR Type Approval Certificate Extension

This is to certify that Certificate No. 94/20035 (E5) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Straub Werke AG Straubstrasse 13 CH-7323 Wangs Switzerland
DESCRIPTION	Axial restraint pipe couplings for detachable sealing and anchoring plain ended metallic pipes and couplings with "dot" designation for installation without torque wrench on request.
TYPE	STRAUB-GRIP-L, -L.dot and -GRIP-LU, -LU.dot, STRAUB-GRIP-L-FLAMSTOP
APPLICATION	Marine, offshore and industrial pipe installations. The usage of these joints as the main means of pipe connection is not permitted. The restrictions for these pipe couplings are: <ol style="list-style-type: none">1. to compensate axial and lateral deformations2. Class I piping, CO₂, Starting- and Control Air System3. Inside machinery spaces of category A or accommodation spaces for: - main lines of Inert gas systems, - pipe systems for flammable liquids (Flashpoint >60°C) including corresponding vent end sounding pipes, except for cargo oil lines in pump rooms and open decks, - bilge pipes.4. Steam systems, except for pipes on weather decks of oil and chemical tanker. See also Other Conditions !5. Scuppers and discharge (overboard), Deck drains, except for pipes above freeboard deck6. Generally: pipelines in cargo holds, tanks and other spaces which are not easily accessible7. Fire main, water spray and sprinkler systems or similar which are not always filled with water8. In pump rooms and open decks for inert gas main and distribution lines

Certificate No.	94/20035 (E6)
Issue Date	01 February 2008
Expiry Date	21 March 2013
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Torsten Schröder
Hamburg Design Support Centre
Lloyd' Register EMEA

STANDARD

Lloyd's Register Rules and Regulations for the Classification of Ships,
 July 2007
 Fire Test (wet) according ISO 19921 (WTD71)
 IACS UR 2001, P2.11

RATINGS

Pipe OD (mm)	Nominal Pressures (bar)		
	L	LU	FLAMSTOP
26.9 - 139.7	16	--	(from Ø 30,0) 16
154 - 168.3	13	--	13
219.1	10	--	10
244.5 - 254	--	5.5	--
267	--	5.0	--
273 + 304	--	4.0	--
323.9	--	3.0	--
355.6	--	2.5	--
406.4	--	2.0	--

OTHER CONDITIONS

Suitable provision for expansion is to be made where necessary in each range of pipes.

For material combinations for the corresponding media the producer's recommendations and instructions to be sought.

Marking of the products to show:

Producer's name or trade mark, type designation, material combination, size, gasket material, torque and max. working pressure or pressure Class.

"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 of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. HMD 10366-03, Issue 1, dated 01 February 2008 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 94/20035 (E5) to which this extension should be attached.

Certificate No. 94/20035 (E6)
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