

Type Approval Certificate Extension

This is to certify that Certificate No. 01/10047 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER DK Tech Corporation

PLACE OF PRODUCTION 826, Naesam-ri, Juchon-myeon, Gimhae-city, Gyeongsangnam-do, 621-841 Korea

DESCRIPTION Stainless steel double ferrule compression type tube fittings, inch and metric sizes

TYPE DK-LOK Tube Fitting

APPLICATION High pressure tube connections for use in marine, offshore and industrial piping systems with hydraulic system fluids, fuel oil, lubricating oil, fresh water, salt water, sanitary, gas, steam and condensate.

DESIGN CODE Lloyd's Register's Rules and Regulations for the Classification of Ships, Part 5, Chapter 12 - July 2006
JIS B 2351 - 1990: 25 MPa bite tube fittings for hydraulic use

RATINGS

Imperial Tubing:-

Tube O.D. (inch)

1/8"
3/16"
1/4"
5/16"
3/8"
1/2"
5/8"
3/4"
7/8"
1"
1-1/4"
1-1/2"
2"

Nominal pressure ratings (psi)

8,500 to 10,900
5,400 to 10,200
4,000 to 10,200
4,000 to 8,000
3,300 to 6,500
2,400 to 6,200
2,900 to 6,000
2,400 to 5,800
2,000 to 4,700
2,400 to 4,700
2,400 to 4,900
2,400 to 4,900
2,000 to 3,600

Certificate No. 01/10047(E1)

Issue Date 28 June 2006

Expiry Date 27 June 2011

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N. Terashita
Yokohama Design Support
& Plan Approval Department
Lloyd's Register Asia

Lloyd's Register Asia, registered office:
71 Fenchurch Street, London EC3M 4BS

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RATINGS
(Continued)

Metric Tubing:-

Tube O.D(mm)

Nominal pressure ratings (psi)

3	10,800 to 15,300
4	7,900 to 14,400
6	5,000 to 12,700
8	4,700 to 9,300
10	3,700 to 7,300
12	3,000 to 7,300
16	2,500 to 6,800
18	2,800 to 6,700
20	2,500 to 6,000
22	2,300 to 5,400
25	2,000 to 5,200
28	2,600 to 4,800
32	2,300 to 4,800
38	2,000 to 4,500

Pressure-temperature ratings : see the producer's catalogue

OTHER
CONDITIONS

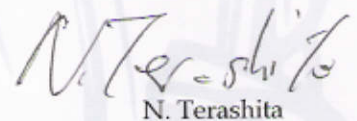
- 1) The fittings are to be installed in accordance with the manufacturer's instructions.
- 2) Attention is drawn to Section 3.6 of IMO MSC/Circular.851 - Guidelines on Engine-Room Oil Fuel Systems which describes that compression couplings require careful attention to tightening procedures and torques to avoid leaks or damage to the pipe when subjected to overtightening and they should not be used in the fuel supply line of the (oil engine) injection pumps and spill system.
- 3) The fittings are to be used for permanent pipe connection only.

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

The attached Design Appraisal Document No. 01/10047(E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 01/10047 to which this extension should be attached.

Certificate No. 01/10047(E1)
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