

# NIPPON KAIJI KYOKAI

## TYPE APPROVAL CERTIFICATE

Certificate No. TA11092M

This is to certify that the undernoted product(s) has/have been approved in accordance with the relevant requirements of "Rules for the Survey and Construction of Steel Ships" and "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use".

This certificate is issued to

Manufacturer:

DK TECH Corporation, Korea

Product description:

Compression Couplings

Type designation(s):

Dk-Lok, Bite-Type

Approval No.:

06FV101B

Valid until:

20 February 2016

This certificate is subject to the conditions specified in the attached sheet(s).

Issued at Tokyo on 5 April 2011.

T. Narisawa General Manager Machinery Department

#### 1. Particulars and conditions:

1.1 Swage type

Type

: Dk-Lok

Construction

: Body, Nut, Back Ferrule, Front Ferrule

Material

: Stainless Steel (SUS316), Brass\* (C3604, C3771)

Nominal Diameter

: 1/16 inches to 2 inches, 2mm to 38mm

Design Pressure:

Stainless Steel

: 67MPa to 31MPa depending on sizes

Brass

: 23MPa to 10.9MPa depending on sizes

\* Joints made of Brass not to be used in the line with a design temperature over 210°C.

### 1.2 Bite type

Type

: Bite Type

Construction

: Body, Sleeve, Nut

Material

: Stainless Steel (SUS316-304), Carbon Steel (S10C-S48C),

Brass\* (C3604, C3771)

Nominal Diameter

: 6mm to 42mm, 1/8 inches to 1-1/2 inches

Design Pressure:

Brass

Stainless Steel

: 49MPa to 20.6MPa depending on sizes

Carbon Steel

: 49MPa to 20.6MPa depending on sizes : 24.5MPa to 11.7MPa depending on sizes

\* Joints made of Brass not to be used in the line with a design temperature over  $210^{\circ}$ C.

#### 2. Application:

— The joints can be used for the piping lines in accordance with table D12.8, Part D of the Rules in easily visible and accessible positions.

#### 3. Type approval tests carried out:

Tightness test, Vibration test, Pressure pulsation test, Burst pressure test, Pull-out test, and Repeated assembly test

#### 4. Production test:

The pipe joints used for piping belonging to Group I or II defined by the requirements 12.1.3, Chapt.12, Part D of the Rules are to be subjected to hydraulic test in the presence of the Society's surveyor in accordance with the requirements 12.6.1, Chapt.12, Part D of the Rules.

#### Notice:

Any significant changes in design or construction of the above items may render this certificate invalid.

- The End -