

Certificate No: **TAS0001K2**

TYPE APPROVAL CERTIFICATE

This is to certify:	
That the Cargo Securing	Devices
with type designation(s) Semi-Automatic Twistloo	ck BD-J1/B
	y System (China) Co., Ltd. Ith Road Hengxi, Yinzhou, Ningbo , China
is found to comply with DNV GL rules for classific	cation – Ships
Application :	
Product(s) approved by by DNV GL.	this certificate is/are accepted for installation on all vessels classed
SWL, tension (kN) 250	
SWL, shear (kN) 210 SWL, compr. (kN) -	

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.



Issued at Hamburg on 2018-08-01

DNV GL local station: Ningbo

This Certificate is valid until 2023-07-31.

Approval Engineer: Mark-Oliver Wobig

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for **DNV GL**

Andree Orth Head of Section

Job Id: **262.1-028785-1** Certificate No: **TAS00001K2**

Product description

Semi-Automatic Twistlock

Application/Limitation

<u>Load</u>	Tension [kN]	Shear[kN]
Test Load	375	315
Breaking Load	500	420

Tests to be carried out:

- Production testing: At least 2% of the items delivered are to be selected and subjected to the test load.
- Material tests are to be included energy testing at -20°C, with the impact energy requirements acc. to DNVGL-CP-0068. The material shall be according to the approved drawings. Material certificates shall be 3.1 acc. to ISO 10474:2013.

Type Approval documentation

Drawing No.	Rev.	Title
-		
BD-J1/B		Semi-Automatic Twistlock
BD-J1/B/01		Cone
BD-J1/02		Housing-L
BD-J1/03		Housing-R
BD-J1/04		Locator
BD-J1/06		Handle
BD-J1/07		Spring

Tests carried out

The prototype test was carried out in Ningbo, P.R. China, dated 2018-06-14 in accordance with the DNVGL-CP-0068.

Marking of product

Each item shall be marked by manufacturer for traceability.

Periodical Assessment

For retention of the Type Approval, a DNVGL surveyor shall perform a survey after 2 and 3.5 years, to verify that the Type Approval is complied with.

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