

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Cargo Securing Devices

with type designation(s)

8-003 Master link type MF, 8-003F - Master link with flat type MFF

Issued to

**Yoke Industrial Corp.
Taichung, Taiwan**

is found to comply with

DNV GL standard DNVGL-ST-0377 – Standard for shipboard lifting appliances

DNV GL standard DNVGL-ST-0378 – Standard for offshore and platform lifting appliances

DNV GL class programme DNVGL-CP-0068 – General – Certification of container securing devices

**EN 1677-1 Components for slings – Safety – Part 1: Forged steel components, Grade 8
IMO Res. A.581(14) - Guidelines for Securing Arrangements for the Transport of Road Vehicles on Ro-Ro ships.**

Application :

Grade 8 links used as Cargo Securing Devices below weather deck and as Loose Lifting Gear.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Type	SWL, tension (kN)	SWL, shear (kN)	SWL, compr. (kN)
8-003 Master link type MF	See page 2		
8-003F - Master link with flat type MFF	See page 2		

Issued at **Hamburg** on **2019-07-25**

This Certificate is valid until **2024-07-24**.

DNV GL local station: **Kaohsiung**

for **DNV GL**

Approval Engineer: **Stefan Heuer**

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Jörg Kallies
Head of Section

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.



Product description

This Type Approval Certificate replaces Type Approval Certificate S-8557.

8-003 - Master link type MF

8-003F - Master link, with flat, type MFF

Application/Limitation

Cargo Securing Device: Use below weather deck

Loose lifting gear: Design temperature $T_d = -20^{\circ}\text{C}$

Hoist load coefficient: max. 1.33

Type	Dia. [mm]	MSL/ SWL/WLL* [t]	Safety factor	BL [kN]
8-003-06	11	1,25	4	49,0
8-003-0806	14	2,5	4	98,1
8-003-1008	17	4	4	159,9
8-003-13	19	5,4	4	211,8
8-003-1310	22	7,5	4	294,2
8-003-16 **	25	10	4	392,3
8-003-1613 **	28	10	4	392,3
8-003-19 **	30	12	4	470,7
8-003-2216 **	34	17,0	4	666,8
8-003-26 **	38	25	4	980,7
8-003-2619 **	40	28	4	1098,3
8-003-3222 **	45	37	4	1451,4
8-003F-1008	17	4	4	156,9
8-003F-1310	22	7,5	4	294,2
8-003F-1613 **	28	10	4	392,3

*) MSL (Maximum Securing Load) for cargo securing device is identical to SWL (Safe Working Load)/WLL (Working Load Limit) for loose lifting gear.

**) Complying with IMO Res. A.581(14) – Guidelines for Securing Arrangements for the Transport of Road Vehicles on Ro-Ro Ships.

Tests to be carried out:

- Production testing: According to RR-C-271F Federal Specification – chains and attachments, carbon and alloy steel section 3.4.3.
- Material tests are to include impact testing at 0°C , with the impact energy requirements according to DNVGL-CP-0068 Sec. 3, 5.4.
- Materials should be according to approved drawings or equivalent, and to be delivered with material certificates 3.1 (EN 10204/ ISO 10474).

Products manufactured according to this TA shall be inspected by a DNV GL surveyor and in addition the DNV GL surveyor shall witness the production testing and issue DNV GL product certificates. For Cargo Securing Device the product certificate should be according to DNVGL-CP-0068 and include the text for use below weather deck only. To obtain a DNVGL Lifting Gear Product Certificate, each item shall be load tested.

Type Approval documentation

Tests carried out

Prototype tested to breaking load in tension; fatigue and impact energy test in accordance with the Rules.

Marking of product



Job Id: **262.1-001615-5**
Certificate No: **TAS0000240**

Each item to be marked according to EN 1677-1, "Components for slings - Safety - Part 1: Forged steel components, Grade 8".

Periodical assessment

For retention of the Type Approval, a DNV GL Surveyor shall perform a periodical assessment after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE