DNV·GL

Certificate No:
TAM0000106

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Toothed Coupling

with type designation(s)
MSV, MSEV type A & B, MSEB, MSE

Issued to
Kyushu Hasec Co., Ltd.
Nogata City, Fukuoka Pref., Japan

is found to comply with
DNV GL rules for classification – Ships

Application :

Products approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Type	Nominal torque
MSV	**see page 2**
MSEV type A & B	**see page 2**
MSEB	**see page 2**
MSE	**see page 2**

Issued at **Høvik** on **2018-11-05**
This Certificate is valid until **2023-12-31**.
DNV GL local station: **Hiroshima**

Approval Engineer: **Dag Harald Williksen**

for **DNV GL**

Oddvar Deinboll
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.

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Job Id: **262.1-000864-4**
Certificate No: **TAM0000106**

Product description

Crowned tooth gear couplings, vertical and horizontal.

Application/Limitation

Approved nominal torques:

Type					Max. cont. torque [Nm]
MSE-127					1254
	MSEB-167				4929
	MSEB-187				6967
	MSEB-204	MSEV-A-204	MSEV-B-204	MSV-204	9192
	MSEB-230	MSEV-A-230	MSEV-B-230	MSV-230	12710
		MSEV-A-256	MSEV-B-256	MSV-256	19990
		MSEV-A-287	MSEV-B-287	MSV-287	26060
		MSEV-A-325	MSEV-B-325	MSV-325	37583
		MSEV-A-362	MSEV-B-362	MSV-362	51048

The approval is valid for unidirectional load with a maximum application factor of 1.35.

Marking of product

The product is to be marked with manufacturer’s name and trademark and type number identification.

Periodical assessment

For retention of the type approval, a DNV GL surveyor shall perform an assessment after 2 years and after 3.5 years to verify that the conditions of the type approval are complied with. A renewal assessment will be performed at renewal of the certificate.

In cases where the type approved product is manufactured at other companies, the periodical assessment shall verify that the type approval applicant has a quality control system for consistent production at their licensees/subcontractors. Furthermore, periodical assessment shall be carried out randomly at these companies.

Other conditions

Connections to adjacent shafts are to be approved case-by-case for each delivery.

END OF CERTIFICATE