

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Machining Tools**

with type designation(s)

Engine Turning Mechanism X-150-61-63; X-300-39-63; X-300-62-80; X500-40-80; X-800-62-125

Issued to

GALI-Deutschland GmbH
Bingen am Rhein, Rheinland-Pfalz, Germany

is found to comply with

DNV GL rules for classification – Ships**Application :****Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.**Issued at **Hamburg** on **2019-08-14**This Certificate is valid until **2024-08-13**.DNV GL local station: **Essen**for **DNV GL**Approval Engineer: **Christian Kaemmer**

Olaf Drews
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.



Job Id: **262.1-031543-1**
Certificate No: **TAM0000140**

Product description

The engine turning mechanism is type approved for the use as engine alignment tool for service operation. The device is optional equipped with manual, pneumatic or electric drive.

Technical data:

Type	X-150-61-63	X-300-39-63	X-300-62-80	X-500-40-80	X-800-62-125
Max. output torque [Nm]	150	300	300	500	800
Transmission ratio	61	39	62	40	62
Centre distance	63	63	80	80	125
Connection	SAE2, SAE3 Flange or bracket mounting				

Application/Limitation

Inadvertent starting of the diesel engine is prevented by an integrated electric/ pneumatic safeguard system. The gear is equipped with a self-blocking device.

The selection of the engine turning mechanism and the right installation are to be in accordance with the instructions of the manufacturer.

Type Approval documentation

Tests carried out

Marking of product

- Manufacturer's Name and Model-no.

Periodical assessment

For retention of the Type Approval, a DNV GL Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the Type Approval are complied with. Refer to the Class Programme DNVGL-CP-0338, Sec.4.