TYPE APPROVAL CERTIFICATE

Certificate no.:
TAM0000140
Revision No:
1

This is to certify:

that the Machining Tools

with type designation(s)
Engine Turning Mechanism X-300-39-63; X500-40-80; X-800-62-125

issued to
GALI-Deutschland Gesellschaft mit beschränkter Haftung
Bingen am Rhein, Rheinland-Pfalz, Germany

is found to comply with
DNV rules for classification – Ships

Application:

The turning gear mechanism are approved for the use as internal combustion engine alignment tool for service operation with application data as given in the certificate.

Issued at **Hamburg** on **2025-02-10**

This Certificate is valid until **2030-02-09**.
DNV local unit: **Essen**

Approval Engineer: **Andreas Wolf**

for **DNV**

Digitally signed by Sell, Jan

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
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

Turning gear level 1	Turning gear level 2	Gear level 3	Gear level 4	Drive level 3	Drive level 4
X-300-39-63	7-300-39-63E 8-300-39-63E 9-300-39-63	**X-300-40XX**	7-300-4000 7-300-4050 7-300-4050.49302 7-300-4055 8-300-4050 9-300-4000 9-300-4050 10-300-4050 11-300-4000 15-300-4000	**X-300-510XX**	7-300-51006 8-300-51007 10-300-51006 12-300-51006
	Max. output torque	**Transmiss. ratio**	**Centre distance**	**Connection**	
	300 Nm	39	63mm	SAE2, SAE3 Flange or bracket mounting	
X-500-40-80	7-500-40-80 7-500-40-80E 9-500-40-80 9-500-40-80E 9-500-40-80K 10-500-40-80E 11-500-40-80E	**X-500-40XX**	7-500-4000 8-500-4000 8-500-4050 8-500-4055 10-500-4000 10-500-4001 10-500-4050 11-500-4000 13-500-4000	**X-500-510XX**	7-500-51006 7-500-51008 7-500-51009 7-500-51016 8-500-51006 9-500-51007 9-500-51017 10-500-51006 10-500-51006.1 10-500-51007 10-500-51008 11-500-51007 20-500-51006 20-500-51016 22-500-51006 24-500-51006 25-500-51006
	Max. output torque	**Transmiss. ratio**	**Centre distance**	**Connection**	
	500 Nm	40	80mm	SAE2, SAE3 Flange or bracket mounting	
X-800-62-125	7-800-62-125E 30-800-62-125 ATEX 50-800-62-125E 55-800-62-125E	**X-800-40XX**	7-800-4000 7-800-4050 7-800-4055 8-800-4000 8-800-4050 9-800-4000 10-800-4000 10-800-4050 11-800-4050 12-800-4050 50-800-4000	**X-800-510XX**	7-800-50000 7-800-51000 7-800-51008 7-800-51018 7-800-51019 7-800-51025 8-800-51008 8-800-51009 8-800-51110 10-500-51006 10-800-51008 10-800-51008.03 10-800-51008P 12-800-51008 12-800-51008V 12-800-51018V 13-800-51008 13-800-51018 15-800-51008 15-800-51008V
	Max. output torque	**Transmiss. ratio**	**Centre distance**	**Connection**	
	800 Nm	62	125 mm	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

Drw No	**Rev**	**Title**
7-300-39-63 E	f	300 Nm, Engine turn mechanism
7-300-4000	RA	300 Nm, Turning gear
7-300-4050		300 Nm, Engine turn mechanism without worm gear box
7-300-4050.49302	RB	300 Nm, Turn mechanism
7-300-4055		300 Nm, Turning gear with lever
7-300-51006	RB	300 Nm, Worm box turn
8-300-39-63 E	d	300 Nm, Engine turn mechanism
8-300-4050		300 Nm, Engine turn mechanism
8-300-51007	RC	300 Nm, Pneumatic drive set
9-300-39-63	d	300 Nm, Engine turning mechanism
9-300-4000	RA	300 Nm, Turning gear
9-300-4050	RB	300 Nm, Turning gear with lever
10-300-4050		300 Nm, Turning gear with lever
10-300-51006	RB	300 Nm, Electrical drive set EAG 16
11-300-4000		500 Nm, Engine turn mechanism without worm gear box
12-300-51006		300 Nm, Electrical drive set
15-300-4000		300 Nm, Turning gear
7-500-40-80	b	500 Nm, Engine turning mechanism
7-500-40-80 E	b	500 Nm, Engine turning mechanism
7-500-4000	RA	500 Nm, Turning gear
7-500-51008		500 Nm, Worm box
7-500-51009		500 Nm; Worm box for pneumatical drive
7-500-51016	RA	500 Nm, Electrical drive set
8-500-4000	RE	500 Nm, Engine turn mechanism without worm box
8-500-4050	RE	500 Nm, Engine turn mechanism
8-500-4055	RE	500 Nm, Engine turn mechanism
8-500-51006	RB	500 Nm, Worm box
9-500-40-80 K	g	500 Nm, Engine turning mechanism
9-500-51007		500 Nm, Worm box with pneumatic drive

9-500-51017	RB	500 Nm, Pneumatic worm gear PA6
10-500-4000	RH	500 Nm, Turning gear
10-500-4001		500 Nm, Turning gear
10-500-4050		500 Nm, Turning device PA6
10-500-51006	RB	500 Nm, Electrical drive set
10-500-51006.1		500 Nm, Electrical drive set
10-500-51007		500 Nm, Electrical drive set
10-500-51008	b	500 Nm, Electrical drive set
11-500-4000		500 Nm, Engine turn mechanism without worm gear box
11-500-51007	RA	500 Nm, Electrical drive set
13-500-4000		500 Nm, Engine turn mechanism without worm gear box
20-500-51006		500 Nm, Electrical drive set EAG20
20-500-51016		500 Nm, Electrical drive set 110V
22-500-51006	RC	500 Nm, Electrical drive set EGA20
24-500-51006	RC	500 Nm, Electrical drive set 200V
25-500-51006		500 Nm, Electrical drive set EGA20
7-800-62-125 E	e	800 Nm, Engine turn mechanism
7-800-4000	RA	800 Nm, Turning gear
7-800-4050	RC	800 Nm, Turning gear quick clamping device
7-800-4055	RB	800 Nm, Turning gear lever
7-800-50000		800 Nm, Worm box
7-800-51000		800 Nm, Worm box
7-800-51008	f	800 Nm, Electrical drive set
7-800-51018	b	800 Nm, Electrical drive set
7-800-51019		800 Nm, Electrical drive set
7-800-51025	a	800 Nm, Electrical drive set
8-800-4000	RB	800 Nm, Turning gear
8-800-4050		800 Nm, Turning gear lever
8-800-51008	c	800 Nm, Electrical drive set
8-800-51009		800 Nm, Electrical drive set
8-800-51110		800 Nm, Electrical drive set 110 V
10-800-4000	RA	800 Nm, Turning gear
10-800-51008	b	800 Nm, Worm box with air drive without control unit
10-800-51008.03		800 Nm, Pneumatic drive set
11-800-4050	RB	800 Nm, Turning gear with attachment

12-800-4050	RA	800 Nm, Turning device
12-800-51008	RB	800 Nm, Electrical drive set 2.5 kW
12-800-51008 V	RC	800 Nm, Electrical drive set 2.5 kW
12-800-51008V /018V		800 Nm, Electrical drive set 2.5 kW
13-800-5108		800 Nm, Electrical drive set
15-800-51008		800 Nm, Electrical drive set 2.5 kW
15-800-51008 V	RB	800 Nm, Electrical drive set 2.5 kW / 110 kW
30-800-62-125		800 Nm, ATEX Turning mechanism
50-800-62-125E		800 Nm, Engine turning device
50-800-4000	RB	800 Nm, Engine turn mechanism without worm gear box
55-800-62-125E		800 Nm, Engine turning device
17 pages		Calculations for the 800 motorized turning device
2018	Version 1.0	Operation manual

Tests carried out
GALI test protocol turning device, Type 8-500-4055, Ser.no. 4055-1224
Date: 2024-03-14.

Marking of product
The product to be marked with manufacturer's name plate as follows with at least the following data.

Scope	Example
Manufacturer short sign	Gali
Type	8-500-4055
Ser.No.:	4055-1224
Year built	2024

Periodical assessment
For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment to verify that the conditions for the Type Approval are complied with. Refer to the Class Programme DNV-CP-0338, Sec.4.

To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com

End of certificate