Certificate no.:
TAS0000519

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Slewing Bearing

with type designation(s)
V82-3418-000-COMM

issued to
Galperti Tech Forged Products S.p.A.
Colico LC, **Italy**

is found to comply with
DNV standard DNV-ST-0378 – Offshore and platform lifting appliances

Application:

See next page

Issued at **Høvik** on **2025-10-14**
This Certificate is valid until **2030-10-12**.
DNV local unit: **Italy/Malta CMC**

for **DNV**

Approval Engineer: **Peder Bendik Møll**

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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description
Two row ball Slewing bearing for offshore gangway

Application/Limitation
Minimum design temperature: -20°C
Slewing bearing is approved for the loads specified below which are to including all dynamic factors and additional offshore safety factors SF1 as specified in DNV-ST-0378 Sec.8 if applicable.

Rolling elements:

	Time	Speed	Axial Force	Radial Force	Tilting Moment
	%	rpm	kN	kN	kNm
LC1	5	0.3	1070	160	9270
LC2	45	0.3	1000	100	6090
LC3	40	0.3	1000	0	6040
LC4	10	0.3	930	0	3460
LC5	-	Static	1950	550	22800
LC6	-	Static	1900	650	17300

Calculated lifetime for rolling elements: 5420 hours

Slewing gears:

	Time	Speed	Slewing Moment*
	%	rpm	kNm
LC1	10	0.3	1590
LC2	90	0.3	770
LC3	-	Static	4950

*) Total slewing moment on slewing bearing, to be divided equally on 4 pinions

Lifetime for geared teeth: 5000hours

Number of teeth in slewing bearing -162
Module 18

1. Flanges and adjacent structure have not been evaluated nor covered by this approval.
2. Slewing Bearing Mounting bolts M30 to be class 10.9 in both inner and outer ring.
3. Slewing Bearing Mounting bolts shall be permanently pretensioned to 80% of yield strength.
4. The slewing ring and slewing ring fastener material needs to be delivered with 3.2 material certificate, documenting compliance with DNV material requirements.

Type Approval documentation

Marking of product
Each slewing bearing is to be marked according to DNV-ST-0378 Sec.14.5

Periodical assessment
For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNV-CP-0338.

Manufactured by:
Galperti Tech Forged Products S.p.A.
Via Ombriano 14
23823 Colico