DNV·GL

Certificate No:
TAS00002B9

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Crane Pedestal

with type designation(s)
Trolley, Rotating pedestal

Issued to
SMST Designers & Constructors B.V.
Drachten, Netherlands

is found to comply with
DNV GL standard DNVGL-ST-0358 – Certification of offshore gangways for personnel transfer

Application :

Support structure for offshore gangway

Issued at **Høvik** on **2019-12-18**
This Certificate is valid until **2024-12-17**.
DNV GL local station: **Netherlands CMC**

Approval Engineer: **Florian Teica**

for **DNV GL**

Aldo Matteucci
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: **262.1-032653-1**
Certificate No: **TAS00002B9**

Product description

Equipment type: Trolley
Equipment use: Height adjustable support structure for offshore gangway pedestal

Equipment type: Rotating pedestal
Equipment use:
- Pedestal for offshore gangway that allows rotation in the horizontal plane.
- It is attached to the trolley by means through a pinned connection
- Rotation is enabled by hydraulic cylinders (not part of the type approval)

Application/Limitation

Self-weight: as per 1700217-C-02-02 rev A *Weight overview*

Operational limitations

Operating condition		Operational	Transit/parked
Live Load (LL) trolley (at gangway waiting platform)		3.0 tonnes	-
Load due to lift door frame		1.0 tonne	-
Working parameters (at gangway slewing bearing)	Axial force	16 tonnes	16 tonnes
	Radial force (including wind)	95kN	226kN
	Overturning moment	1400 kN x m	1500 kN x m
	Slewing moment	500 kN x m	0 kN x m
Rotating pedestal angle relative to the vessel's longitudinal axis*		-60deg, 0 deg or +60deg ref. 1700215-C-07-03 rev A figure 3	
Gangway operating angle		ref. 1700215-C-07-03 rev A figure 3	
Vessel accelerations**	Vertical	±3,5m/s^2	±10m/s^2
	Longitudinal	±3,5m/s^2	±10m/s^2
	Transverse	±3,5m/s^2	±10m/s^2
Wind speed (at gangway location)		25 m/s	63 m/s

Design temperature: -20°C

*) see approval conditions below
**) relative to the vessel axis

The operational limitations defined above have been provided by SMST, data and procedures adopted for estimating which have not formed part of this review. It is the end user's responsibility to ensure that these are never exceeded during service.

The control system drawings and documents are Type approved, ref. TAS00001UG.

The Type Approval is not covering the following components:
- Drives
- Hydraulic cylinders
- Slewing system (slewing bearing and drives)

For certification requirements for components see DNVGL-ST-0358 Section 2 and below:
- Drives: DNVGL PC
- Hydraulic cylinders: DNVGL PC

Approval conditions

1. The rotating pedestal is slewed in operating position (-62.5deg, 0 deg or +62.5deg relative to the vessel's longitudinal axis, ref 1700215-C-07-01 rev A figure 2) and locked (rotating cylinders ports closed @ working pressure <= 300bar) prior to gangway deployment and commencement of personnel transfers. Retreival operations are performed in reverse order.
2. Trolley height adjustment and rotating pedestal slewing cannot be performed simultaneously.

Type Approval documentation

Tests to be carried out

For certification, each trolley and rotating pedestal shall be tested as per DNVGL-ST-0358 Sec 7, TAS00001UG and as per above approved test procedures in the presence of a DNVGL Surveyor.

Marking of product

Marking shall be in accordance with DNVGL-ST-0358 Section 7.4.

Periodical assessment

For retention of the Type Approval, a DNV GL surveyor shall perform a survey every second year and before expiry date of this certificate in order to verify that the conditions of the type approval are complied with.

End of certificate