



Certificate No:
TAS00003R8

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Crane Pedestal

with type designation(s)
Hinged Cursor Right V2.0

Issued to

Uptime International AS
Avaldsnes, Norway

is found to comply with

DNV standard DNV-ST-0358 – Offshore gangways

DNV standard DNV-ST-0378 – Offshore and platform lifting appliances

Application :

Support structure for offshore gangway

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2023-01-09**

This Certificate is valid until **2028-01-08**.

DNV local unit: **West Norway CMC**

for **DNV**

Approval Engineer: **Florian Teica**

Per Esvall
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.

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 300,000 USD.



Product description

Equipment type: Hinged Cursor Right V2.0

Equipment use:

- Height adjustable support structure for offshore gangway pedestal
- The Main hinge is attached to the Cursor through a pinned connection
- The Main hinge represents a pedestal for the offshore gangway and allows it to rotate in the horizontal plane (slewing)
- The rotation of the Main hinge is enabled by a hydraulic cylinder

Application/Limitation

Self-weight: as per 21216-CS-012 *Hinged Cursor 2.0 Weight*

- Hinged cursor, including drives and bogies: 28.77 tonnes
- Offshore gangway: 29.0 tonnes (offshore gangway above the pedestal slewing bearing)

Operational limitations

Operating condition		Operational	Transit/parked
Working parameters (at gangway slewing bearing)**	Axial force	29.0 tonnes*	29.0 tonnes
	Radial force (including wind)	Up to 175 kN*	484 kN
	Overturning moment	Up to 4530 kN x m*	859 kN x m
	Slewing moment	1694 kN x m*	219 kN x m
Gangway operating angle (relative to cursor centreline)		-120 to +120 deg	+122.5 deg
Hinged cursor angle (relative to cursor centreline)		0 deg	27.5 deg
Vessel accelerations***	Vertical (in addition to gravity)	±0.3g	±0.54g
	Longitudinal	0.3g	0.74g
	Transverse	0.3g	1.2g
Wind speed (at gangway location)		25 m/s	51.5 m/s

*) When a dual-purpose equipment is used (i.e. capable of performing both gangway and offshore crane functions), the above defined values are the maximum allowed operational values, for either walk-2-work or offshore lifting operations. The offshore safety factor SF1 = 1.3 shall be considered in addition when/if the crane will be operated from a control station located above the slewing bearing.

**) as per 2010009-UI-4020-N-RA-002-0022 Rev 01 Appendix A

***) relative to the vessel axis

Service life: 20 years

Utilization: as per 2010009-UI-4020-N-RA-002-0022 Rev 01 Sec 6

Design temperature: -20°C

The operational limitations defined above have been provided by Uptime, 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 Type Approval is not covering the following components:

- The slewing system (slewing bearing and drives)
- The height adjustment system (drives and pinions)
- The control system
- The hydraulic cylinder

For certification requirements for components see DNV-ST-0358 Section 2 and below:

- The drives (all) shall be delivered with DNV design/type approval and Manufacturer PC
- The control system shall be delivered with DNV design/type approval
- The slewing bearing shall be delivered with DNV PC
- The hydraulic cylinder shall be delivered with DNV PC

Approval conditions

1. During transit, the Hinged cursor will be vertically supported in a parking support.
2. Height adjustment and cursor slewing cannot be performed simultaneously.
3. Height adjustment and/or cursor slewing shall be performed with the gangway at minimum length (telescoping segment fully retracted), with the gangway (and cursor) aligned at 0 deg in horizontal direction, relative to the cursor centre line. Personnel is not allowed on the gangway during these operations.
4. The Main hinge transition from operational to parked position shall be performed in the following order. Transition from parked to operational positions shall be performed in reverse order.
 - The gangway is minimum length (telescoping segment fully retracted) with the gangway (and cursor) aligned at 0 deg in horizontal direction
 - Hinged cursor is at lowest elevation
 - Main hinge is slewed in parked position (i.e. 27.5 deg relative to centreline) and the hydraulic cylinder is hydraulically locked (i.e. ports closed @ working pressure)
 - Gangway is lowered into boom rest
 - Hinged cursor is lowered onto the parking supports

Type Approval documentation

Certification

This Type Approval covers design(s) only, i.e. the Type Approval is not valid for the final product, but may be used as basis for obtaining a product certificate.

If a DNV Product Certificate is required, the following shall apply:

- The manufacturing survey shall be followed-up by a DNV Surveyor
- Each Hinged Cursor V2.0 assembly shall be tested as per DNV-ST-0358 Sec 7 and DNV approved test procedures in the presence of a DNV Surveyor.

Marking of product

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

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

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

End of certificate