Certificate no.:
TAK00002MJ

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Mechanical fastener

with type designation(s)
C-Claw S300™, bonded mechanical fastener

issued to
COLD PAD SAS
Paris, **France**

is found to comply with
DNV standard DNV-ST-C501 – Composite components, March 2022

Application:

The C-Claw S300 is a non-intrusive fastener for steel structures used in industrial, maritime, and offshore environments, as an alternative to conventional assembly methods such as welding, drilling, or magnets. It is engineered to withstand design tensile and shear loads of up to 3.0kN.
The C-Claw S300 relies on a controlled and repeatable bonding installation process performed with a proprietary installation tool and completed in less than two minutes.
It is designed for harsh conditions, including shipbuilding and fixed or floating offshore structures, and provides a durable and reliable solution for permanent/long-term installations.
Its installation is non-intrusive and requires no hot work or modification of the steel substrate.

Issued at **Høvik** on **2025-12-19**
This Certificate is valid until **2030-12-18**.
DNV local unit: **Oslo Materials Technology**

Approval Engineer: **Philippe Noury**

for **DNV**

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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

C-Claw S300™ is a non-intrusive mechanical fastener with enhanced reliability and high durability, bonded onto the steel structure through a process-controlled installation.

C-Claw S300 is designed by COLD PAD and is composed of:

- a threaded rod: minimum M8x1,25 - A4-70
- a metallic dish: diameter 70mm, Stainless Steel 316L
- a nut: M8 - A4
- a washer: M8 - A4
- seal: uncrosslinked butyl sealant
- adhesive: Methacrylate bi-component adhesive

C-Claw S300 is to be installed by the use of two tools:

- C-Hawk L (V2.3), or
- C-Hawk S (Pro-E)

Application/Limitation

For designs, components, equipment, systems or products which are subject to classification by DNV, the use of C-Claw S300 requires a case-by-case approval by DNV.

C-Claw S300 may be used for fastening of tertiary structures such as platforms, stairs, ladders, ladders lateral support such as in wind towers, and systems such as cable trays, pipe supports, lightings & electrical equipment.

The approval of the product is valid for use in enclosed space, such as inside a wind turbine tower structure.

The approval of the product excludes permanent immersion in water at this stage. Severe exposure such as permanent exposure to highly saturated atmosphere requires case-by-case approval by DNV.

Performance:

- The C-Claw S300 has a minimum regulatory strength of 3.0kN (300 kg) in tension and in shear, applied independently or simultaneously. This regulatory strength encompasses various safety factors grounded in the DNV-ST-C501 Composite Components. The framework of these certified values is detailed below:
  - The base material, also called substrate, shall be made of steel
  - The service temperature range is [-20°C; +100°C]; outside this range, regulatory strength might be reduced – see here below
  - The substrate thickness shall be greater than 5mm; otherwise, regulatory strength might be reduced – see here below
  - The substrate surface shall be a flat or curved surface with a minimum diameter of 2.60 meters, concave & convex. For a lower diameter, the regulatory strength might be reduced
  - C-Claw S300 can withstand long-term sustained loads of 3.0kN for a minimum duration of 35 years

Within the temperature range of [-40 °C to +100 °C], the minimum ultimate strength recorded during the test campaign (i.e. excluding safety factors) was 6.6kN.

Outside the above range, specific resistance values can be provided by COLD PAD.

Fire resistance is not covered by this certificate. However, in the event of fire, the amount of smoke and toxic gases released would have a negligible contribution both to health hazards and fire safety.

Production survey requirements

- The products are to be supplied by COLD PAD in compliance with the type described in this certificate and in compliance with the requirements stated on the front page of this certificate.
- C-Claw S300 is to be installed by qualified personnel.
- After installation and depending on the criticality of the application, a defined percentage of the number of the C-Claw S300 fastener installed shall be tested by applying a force of 5kN with the tool Hydrajaws Model 2000.
- For information, COLD PAD has declared the following production site:
  Cold Pad @ Paris Boucicaut innovation
  130, rue de Lourmel
  75015 PARIS – France

Marking of product

None.

Periodical assessment

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