

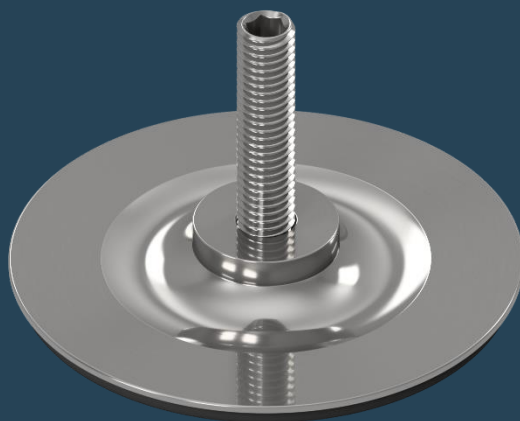


# TECHNICAL DATA SHEET

## C-CLAW S-300

Non-intrusive fastener for shipping industry

A revolutionary alternative to welding, drilling and magnets

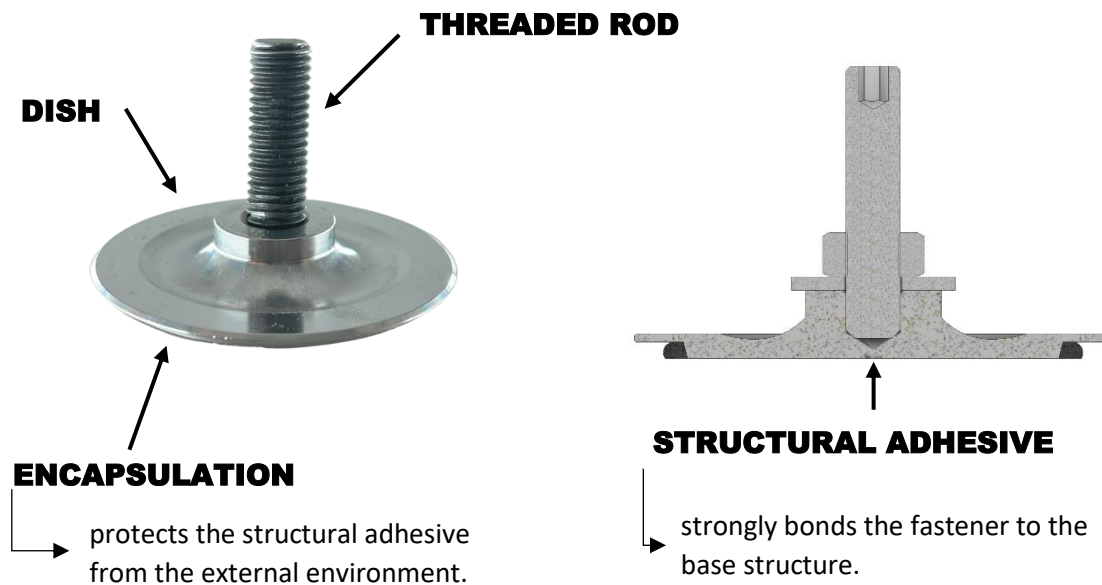


## C-CLAW S-300 BONDED FASTENER

COLD PAD has developed C-CLAW S-300, an industrial fastener with a process-controlled installation.

C-CLAW S-300 is non-intrusive, reliable, safe and durable. It is a real alternative to welding, drilling and magnets.

C-CLAW S-300 is specially designed for harsh environments, which makes it suitable for ship construction such as yachts, cruise and commercial ships, where conventional assembly methods generate a considerable number of associated constraints, costs and risks.



## REGULATORY CAPACITY

Use case	Load type	Regulatory capacity <sup>1</sup>
Standard <sup>2</sup>	Tension and Shear, simultaneous or not	<b>3.0 kN (300 kg)</b>

<sup>1</sup> For further information, see page 4.

<sup>2</sup> For further information, see page 4.

## TYPICAL APPLICATIONS

For further information regarding C-CLAW applications, visit [COLD PAD's YouTube channel](#)



**CABLE TRAYS 1**



**CROSS OVER 2**



**SMALL PIPE SUPPORT 3**



**ELECTRICAL CABINET 4**












**LADDERS & SCAFFHOLDING 5**



**SAFETY EQUIPMENTS 6**

## STANDARD SERVICE CONDITIONS<sup>3</sup>

Specifications	C-CLAW S-300
 Adhesive	Use only the reference qualified by COLD PAD
 Intended design life	35 years
 INSTALLATION temperature	[0°C; +40°C]
 SERVICE temperature	[-20°C; +70°C]
 Base metal thickness	[10mm or above]
 Surface preparation	See Note <sup>4</sup>
 Load type	Tension or Shear, simultaneous or not
 Environment	Can be exposed to marine environment <sup>5</sup>
 Regulatory capacities <sup>6</sup>	<b>3.0 kN (300kg)</b>

## SPECIAL SERVICE CONDITIONS

SERVICE temperature	Base metal thickness	Load type	Regulatory capacities
[+70°C; +100°C]	[10mm or above]	Tension	<b>2.5kN (250kg)</b>
		Shear	<b>1.5kN (150kg)</b>
[-20°C; +70°C]	[5mm; 10mm]	Tension	<b>2.5kN (250kg)</b>
		Shear	<b>1.5kN (150kg)</b>

<sup>3</sup> For any deviation from the standard framework presented in this table, refer to the SPECIAL SERVICE CONDITIONS table or contact COLD PAD

<sup>4</sup> Surface preparation shall follow 010\_PT\_M\_001 [1]. COLD PAD recommends the following devices : Needle Scaler, Bristle Blaster or grit blasting device.

<sup>5</sup> Relative humidity up to 100%, sun, seawater with non-permanent immersion

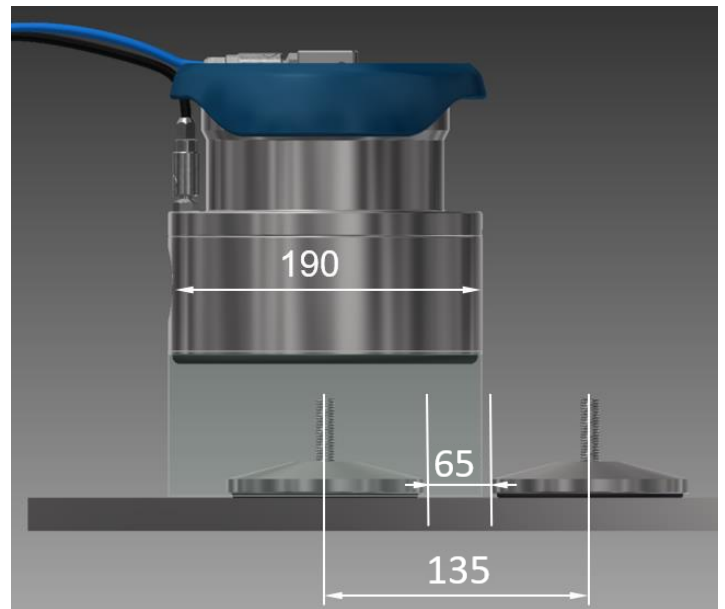
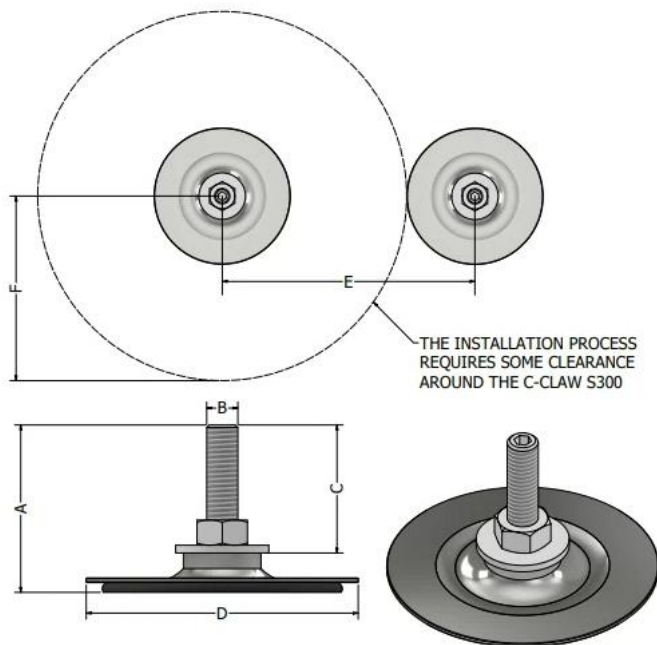
<sup>6</sup> The above capacities can be used for both approaches: LRFD and ASD/WSD. For LRFD approach (e.g., Eurocodes), an increasing factor of 1.50 may be applied to the above capacities. For further information, please refer to 010\_RE\_E\_008, *last revision*

## C-CLAW S-300 PARTS AND MATERIALS

Item	Material
Threaded rod	SS* A4-70 (DIN 913)
Nut	SS A4 (DIN 934)
Washer	SS A4 (DIN 9021)
Dish	SS316L (1.4404)
Base structure	Structural steel or other metals

\*SS: Stainless Steel

## C-CLAW S-300 CHARACTERISTICS



Term	Feature	Value	Other specifications	Value
A	Height of C-CLAW S300	42 mm	Weight	80g
B	Rod diameter	M8X1.25		
C	Rod length	32 mm <sup>7</sup>		
D	C-CLAW diameter	70 mm		
E	Min. distance between 2 C-CLAW S-300	135 mm <sup>8</sup>		
F	Radial clearance	100mm <sup>9</sup>		
	Minimum thickness of base metal	5 mm		

<sup>7</sup> Standard length can be removable or customized upon request.

<sup>8</sup> Measured axis to axis. This value will progressively be reduced to 80mm.

<sup>9</sup> The intended position of C-CLAW S-300's rod should be at least 100mm away from any interference (wall, base plate...) or from the edge of the plate, as per figure above. This value will progressively be reduced to 50mm

## C-CLAW S-300 INSTALLATION

### INSTALLATION EQUIPMENT: A PROCESS-CONTROLLED TOOL

Adhesive bonding operations require a good control of the whole bonding procedure (control of atmospheric conditions, surface preparation, adhesive preparation and application, polymerization...).

C-Hawk proprietary tool offers an easy, quick and perfect control of the bonding operations in exposed outdoor environment by creating optimum atmospheric conditions locally, for repeatable performance, even for marine applications.

C-Hawk is a low-power tool and can be used in multiple areas (including potentially explosive atmosphere).

C-Hawk allows a simple and quick installation (less than 5 minutes for a full cycle including surface preparation).

C-Hawk is compatible with rope access.





## INSTALLATION SEQUENCE



Optional coating removal with Needle Gun

**1**



Simple cleaning with wipes

**2**



Dispensing adhesive

**3**



C-Claw installation with C-Hawk

**4**



Proof load testing

**5**



Removal when necessary

**6**

## ADDITIONAL INFORMATION

<b>Additional information</b>	<b>Detail</b>
Earthing	Earthing may not be ensured
Coating	Paint touch-up is not required <sup>10</sup>
Base metal radius curvature	Flat or above 1.3m <sup>1010</sup>
Training	1 day
Traceability & inspection	Batch identification number
Safety, health and environment	Low impact for low safety class application
Shelf life (storage and transportation)	2 years

<sup>10</sup> Please contact COLD PAD for more information  
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