

P-22072

IP-CCV

Web version manual

For complete version contact Bygging-Uddemann: info@bygging-uddemann.se

No: W0014





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1. GENERAL DESCRIPTION

An Individual Pushing Caisson Carrier Vehicle (IP-CCV) can support and carry a heavy structure. Each IP-CCV can lift 250 tons and carry its load along a therefore designed transfer lane.

The IP-CCV was originally developed for the purpose of moving large concrete caissons weighing up to 7000 tons, but IP-CCVs may be combined in different configurations for other heavy loads, such as bridge sections etc.

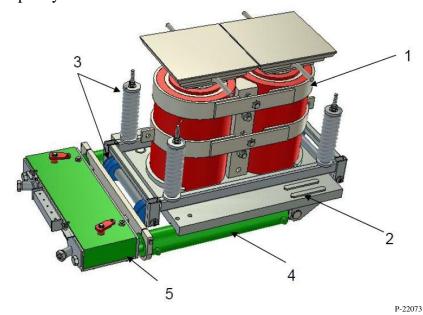
Lifting power is provided by two lifting jacks (1) sitting on a base plate (sliding foot). The base plate (2) has low friction pads attached underneath for sliding on the transfer lane's steel track. When not under load the IP-CCV rests on four spring loaded wheels (3) for easy relocation along the transfer lane.

The pushing jack has two 12,5 ton cylinders (4). A grip head (5) has jaws gripping on a steel track mounted on the transfer lane.

Length: 1215mm (+ 500 mm at full stroke) Height: 595mm with pyramid (+ 5 mm when unloaded,

+150 mm at full stroke)

Width: 630mm
Weight: 830kg
Lifting capacity: 250 ton
Pushing capacity: 25 ton







2. LIFTING

The 250 ton lifting capacity is provided by two hydraulic jacks with a capacity of 125 ton each. The IP-CCV's two lifting jacks communicate in a common hydraulic system for load equalization.

The top of each jack has a ball and socket to allow slight angle deviation from uneven underside of load. A pyramid also sits on top of each jack to reduce the pressure on the bottom of the lifted object.

Lifting capacity: 250 ton

Stroke: 150 mm

A(+) / B(-)

Max work pressure: 300 / 100 bar

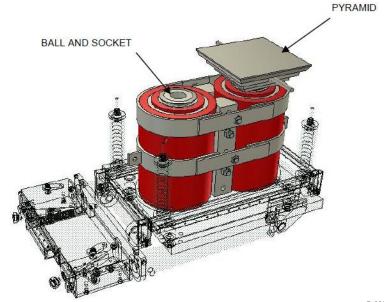
Nominal work pressure: 300 / 100 bar

Max static test pressure: 350 / 150 bar (time 5 min)

Pressure media: Mineral oil

Work temperature min/max: -25 / +100 °C

Surface treatment: Black Nite



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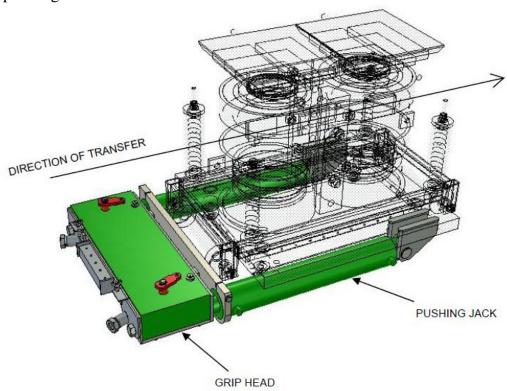


3. PUSHING

The twin-cylinder pushing jack has a grip head with wedge shaped grip jaws gripping on the sides of the sliding steel track. The jack pushes the IP-CCV forward (only) with a stroke of 500 mm and a total capacity of 25 ton.

The grip head and jaws are designed for a steel track 300 mm wide and 30 mm thick. It may be a reinforced wide flange steel beam or a steel strip anchored in concrete. Joints in steel track are to be welded and grinded flat.

For caisson transfer the average speed is estimated to 12 m per hour, with a maximum of approximately 25 m/hour. For other applications the speed is depending on pump capacity (litre/minute) and number of IP-CCV units operating.



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