



Industrial Clutch Parts

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ICP Disc Braking Solutions

- Modern demand on a brake is to give safety for people and avoid damage to the machine
- Sizing and choice of the brake is therefore always a question of safety
- The range of ICP industrial high integrity brakes offers a system meeting the highest requirements for safety and reliability for small and large braking applications and multifunction service and emergency braking



Contact ICP Now For Your FREE Quotation!



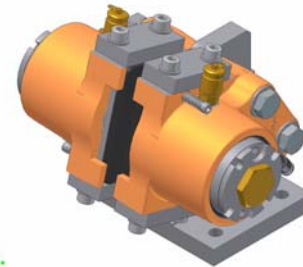
ICP Disc Braking Product Range



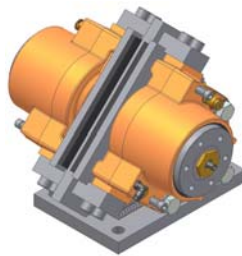
PA-090



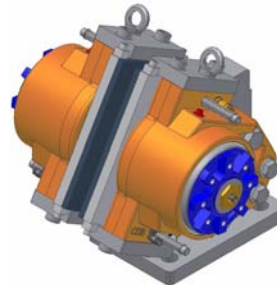
PA-120



CSB-200



CSB-300



CSB-3000

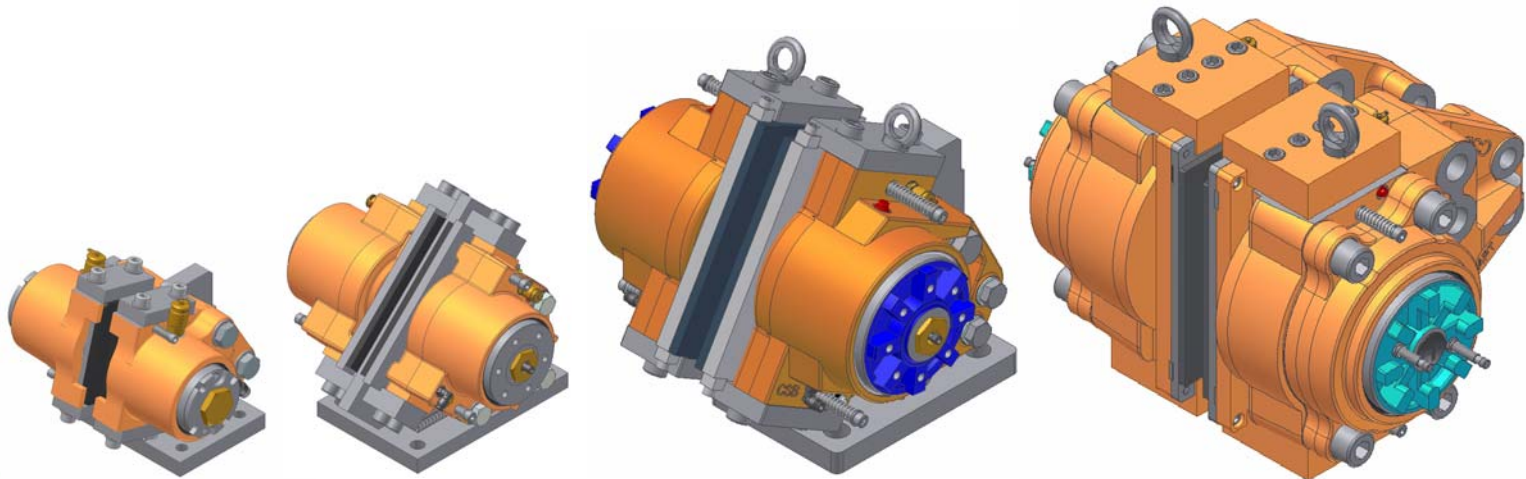


CSB-5000



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CSB Disk Braking Series



CSB 200

CSB 300

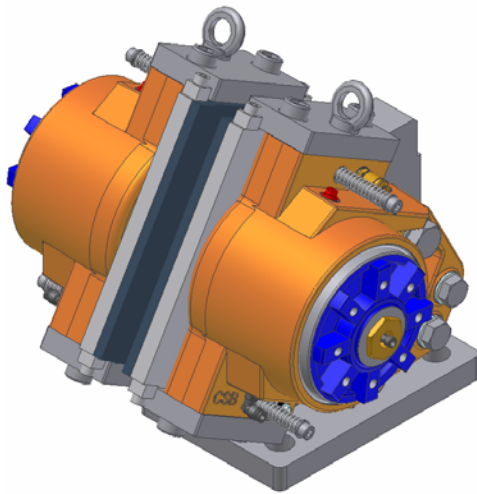
CSB 3000

CSB 5000

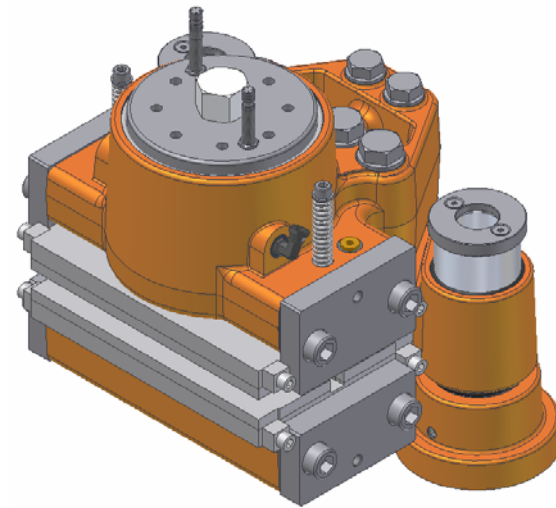


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CSB 3000 Disk Braking Series



CSB-3000-SA



CSB-3000-MS



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Applications

- High Integrity Applications
- Mining
- Wind Generation
- Pulp and Paper
- Marine and Off-shore
- Materials Handling
- Steelworks



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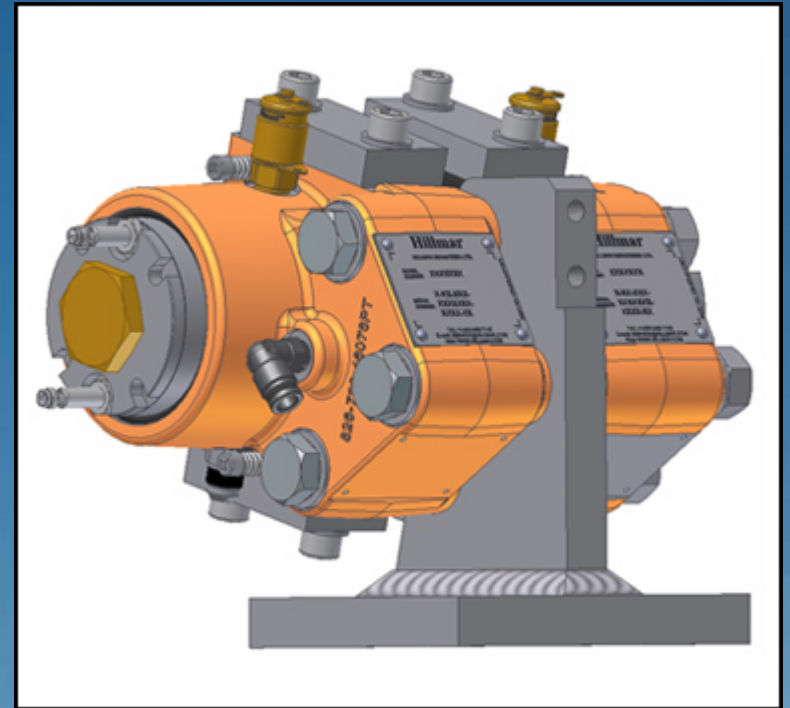


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Design Highlight Options

- Available with Mounting Frame standard
- Standard ICP Power Unit for Hydraulic Brake release, customised to customer's specification
- Hose & Fitting package available in stainless steel option, it provides complete solution to customer's braking requirements.



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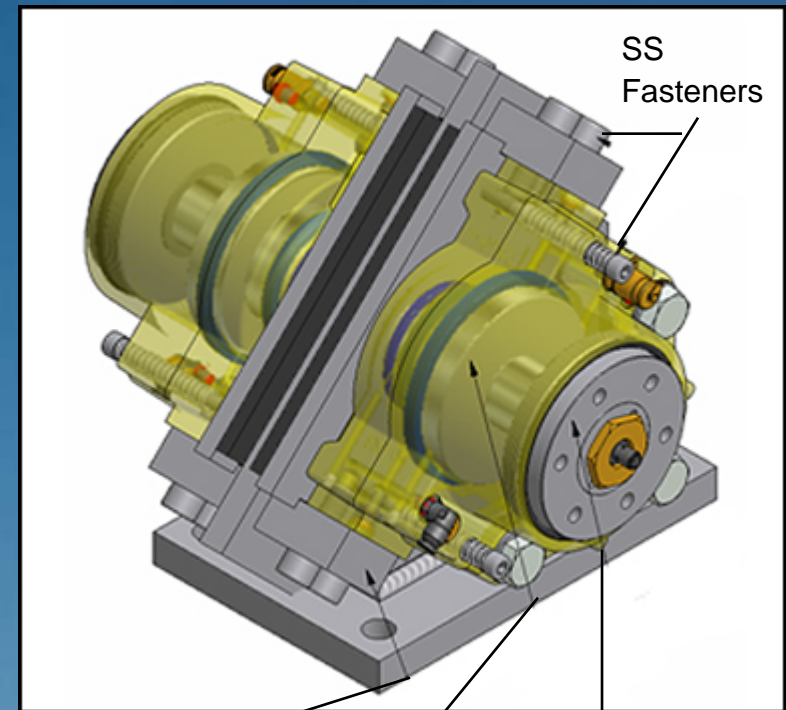


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Design Highlight – Corrosive Protection

- Designed to the Off-Shore Corrosion Protection Standard
- Stainless Steel Piston
- Stainless Steel Pad Retainer
- Stainless Steel Adjusting Screw
- Off-Shore Paint System:
Zinc Rich Primer & Tiger Drylac Super Durable Powder Coated Final Layer



SS
Pad Retainers

SS
Piston

SS
Adjuster Screw

SS
Fasteners



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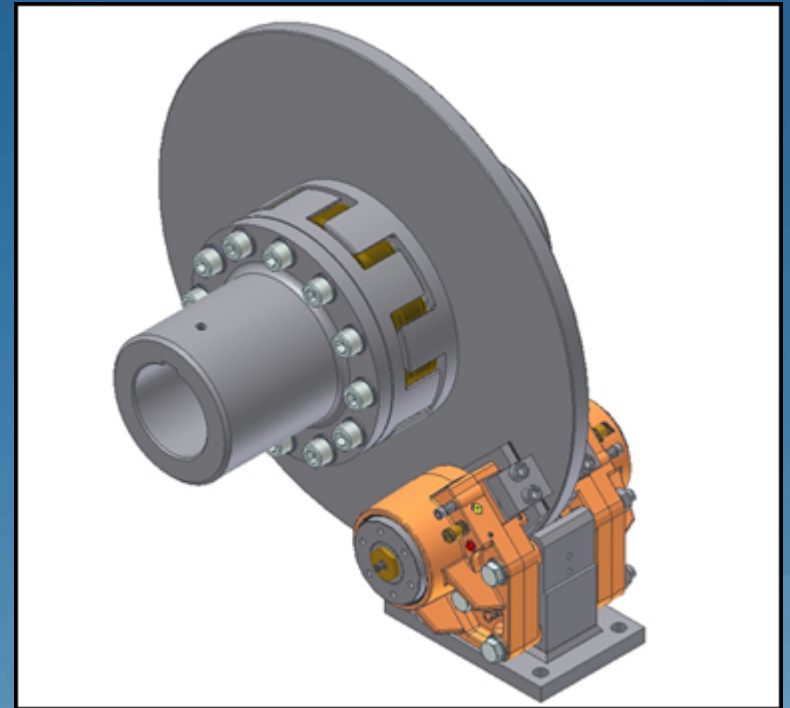
CSB Industrial Braking Solutions

SA	Spring Applied
SAFM	Spring Applied and Foot Mounted (c/w bracket)
SAFM-PU	Spring Applied, Foot Mounted and c/w Power Unit
SAMS	Spring Applied – Mono Spring
PA	Pressure Actuated
PA-PU	Pressure Actuated, Foot Mounted and c/w Power Unit



CSB – Principal of Operation

- The Caliper Brake of ICP Disc Brakes are Symmetrical
- The Thrust Springs, contained in the Calipers, Force the Brake Pads against the Disc
- The Brake is Released by Applying Hydraulic Pressure Against the Piston



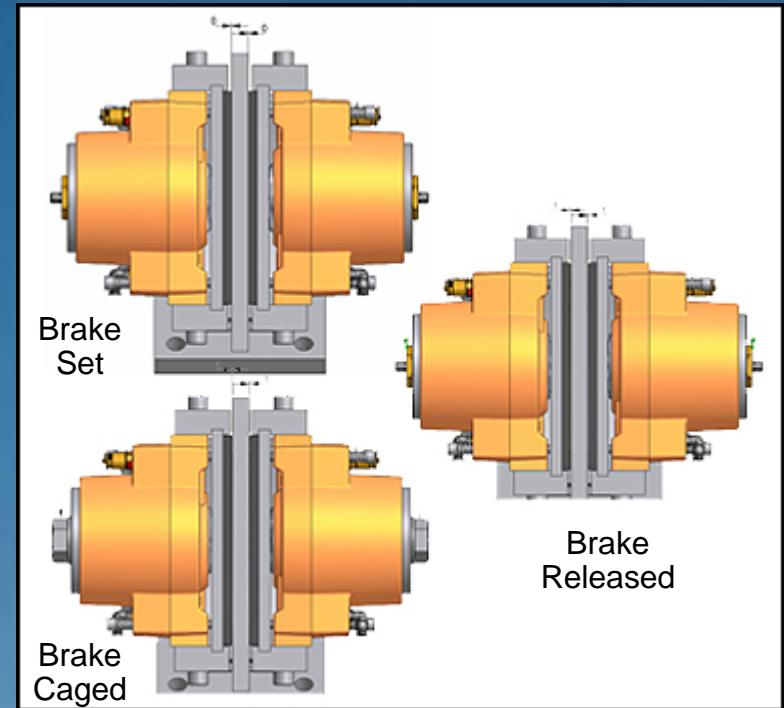


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CSB – Principal of Operation

- Spring Force Pushes Down
- Direct Acting Mechanism Pushes the Piston Against the Brake Pad
- Brake Lining Applies on the Disc
- Caliper Brake Consists of Two Caliper Halves

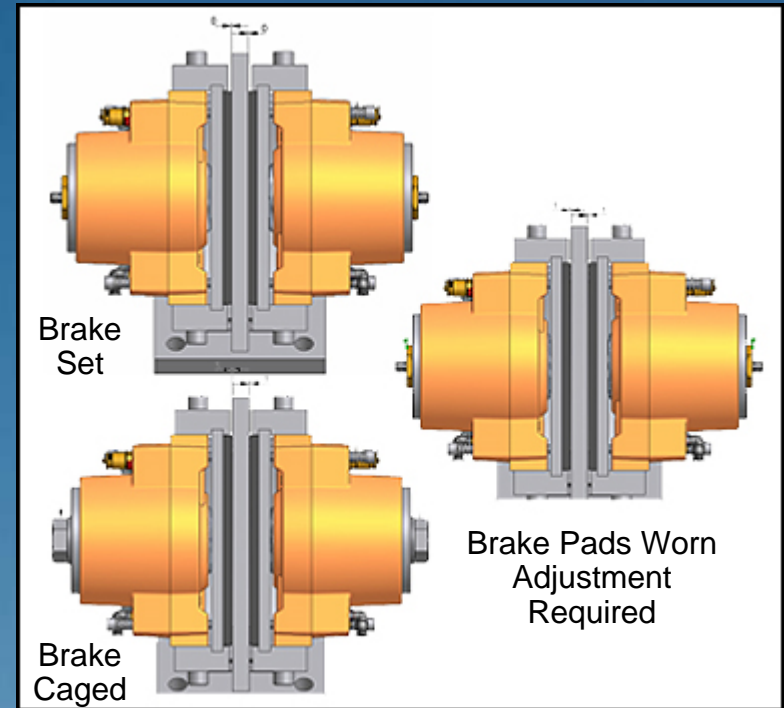


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CSB – Principal of Operation

- Pads Are Worn
- Gap Increased to 3mm (2mm Pad Wear)
- Brake Lining Applies on the Disc
- Brake Pad to Disc Clearance Must Be Adjusted

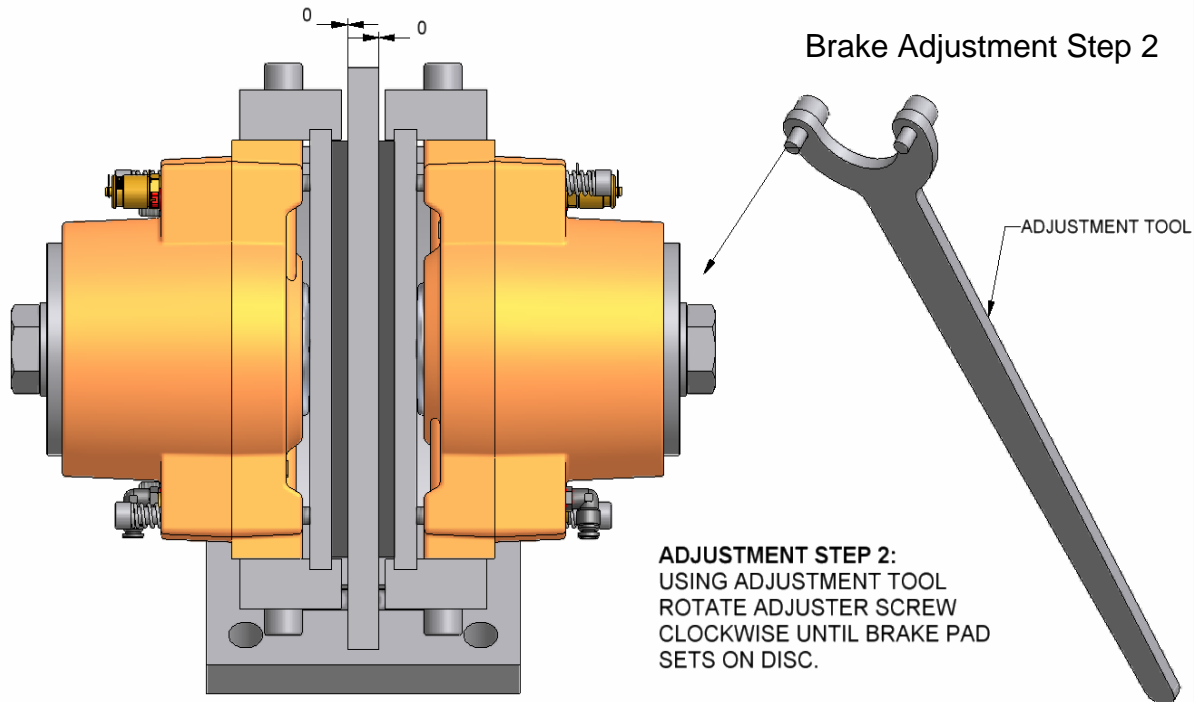


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CSB – Principal of Operation

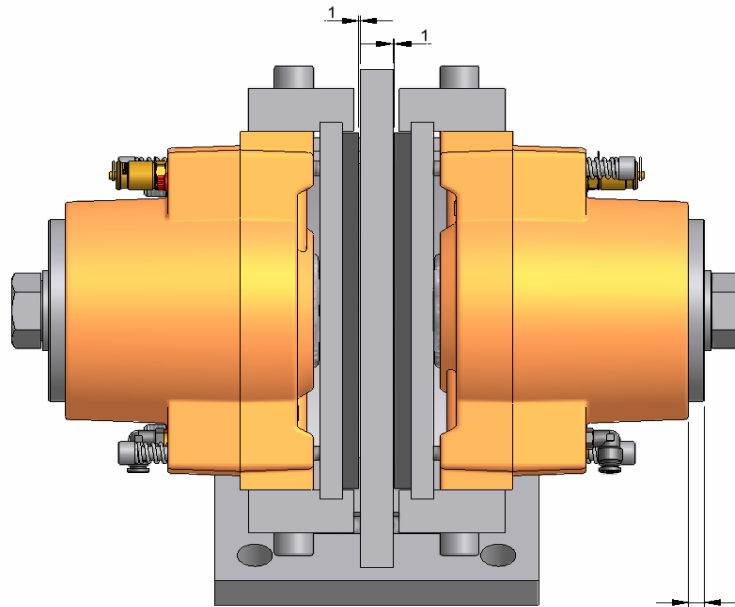
- Brake Adjustment is Accomplished By Using Brake Tool Adjustment Tool





CSB – Principal of Operation

- Brake Pad to Disc Clearance Returned To Specifications
ie. 1mm



Brake Adjustment Completed

ADJUSTMENT STEP 3:
CSB-300 / 3000 / 5000
TURN ADJUSTER SCREW
COUNTERCLOCKWISE 120° (1/3 OF
A TURN).
CSB-200
TURN ADJUSTER SCREW
COUNTERCLOCKWISE 180° (1/2 OF
A TURN).
APPLY HYDRAULIC PRESSURE.
REMOVE CAGING BOLT.
RETURN CUP C/W/IT PROXY
SWITCH TO ORIGINAL POSITION.

"X" - 2
(AFTER ADJUSTMENT)



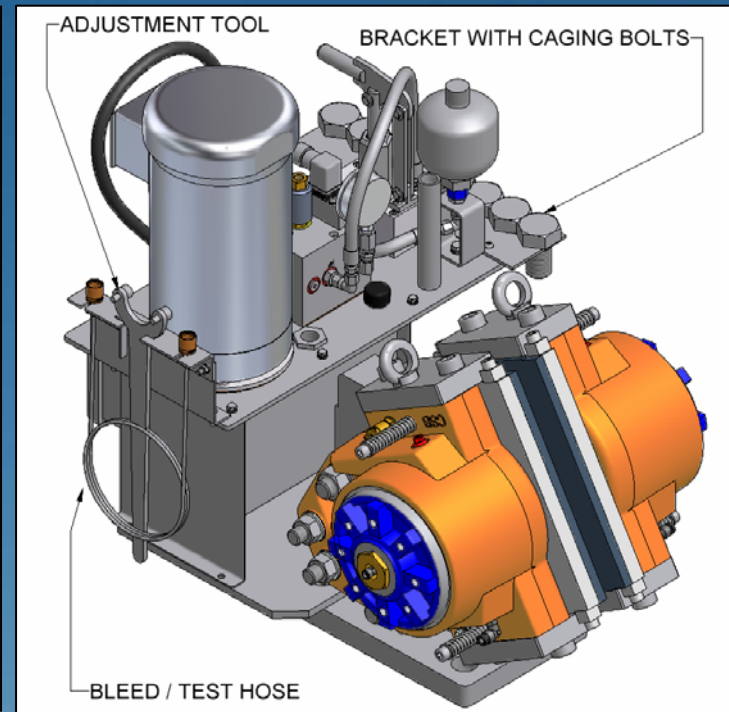
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CSB Series Brakes – Overview

Brake with Hydraulic Power Unit
Note Brackets For:

- Mounting Caging Bolts
- Adjustment Tool
- Brake Bleed / Test Hose



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