

# PRODUCT DIRECTORY CLUTCH & BRAKE SYSTEMS



# Product Directory

## Clutch & Brake Systems



### Oil States Clutch & Brake Systems

*A tradition of excellence for demanding applications.*

Oil States is a global supplier of trusted clutch and brake solutions for industrial, oilfield, mining and forestry applications and more. Engineered and tested to the highest standards of performance and reliability, Oil States brake and clutch solutions offer a full range of performance and configurations for virtually any environment.

Our line of pneumatic/hydraulic actuated clutches and brakes includes constricting (tube expands inward) and expanding (tube expands outward) designs in a variety of configurations to suit your application needs. All are designed around our fabric-reinforced inflatable elastomeric tube technology.

#### DRUM STYLE

- Elasta-Flex® VC Series
- Elasta-Flex® HVC Hydraulic Series
- Elasta-Flex® CB Series
- Elasta-Flex® CM Series

#### DISK STYLE

- CoolForce™ Water Cooled Brakes
- Hydraulic and Pneumatic Calipers

#### EXPANDING CLUTCH ACTUATORS

- Elasta-Flex® E Series
- Elasta-Flex® VE Series
- Elasta-Flex® Expander Tubes

### Clutch and brake configurations for a wide range of applications

- Agricultural
- Brewing
- Canning
- Chemical manufacturing
- Amusement rides
- Mining
- Draglines
- Grinding mills
- Lumber and woodworking
- Marine equipment
- Metal fabricating and processing
- Materials handling
- Paper
- Petroleum
- Steel milling
- Turbines

### ELASTA-FLEX® VC Series

Ideal for severe high torque applications, the ELASTA-FLEXVC brake is a durable, high thermal capacity drum clutch or brake. The unique design of the ventilated friction shoe assembly allows for a high volume of air flow across the entire shoe length, enhancing heat dissipation, preserving the elastomeric actuator tube and extending overall clutch life. Virtually all components used in the VC design are replaceable.



### ELASTA-FLEX® HVC Hydraulic Series

Ideal for large-scale industrial equipment, Oil States HVC clutches and brakes offer high-torque and exceptional reliability in a hydraulic configuration. With a high-pressure hydraulic tube, rim and friction shoe assembly, HVC solutions provide high torque in a smaller hydraulic package, delivering significant cost savings over pneumatic alternatives.

### ELASTA-FLEX® CB Series

Reliability, low inertia and simplicity of design make the ELASTA-FLEX CB an excellent choice for high-speed, cyclical clutch operations and low-to-medium torque systems.

Its integral rim/tube construction makes this a highly adaptable solution, and the tube's design compensates for imperfect alignment in the driving system while delivering a smooth transfer of power.



*Please contact us for individual product catalogues and/or application assistance.*

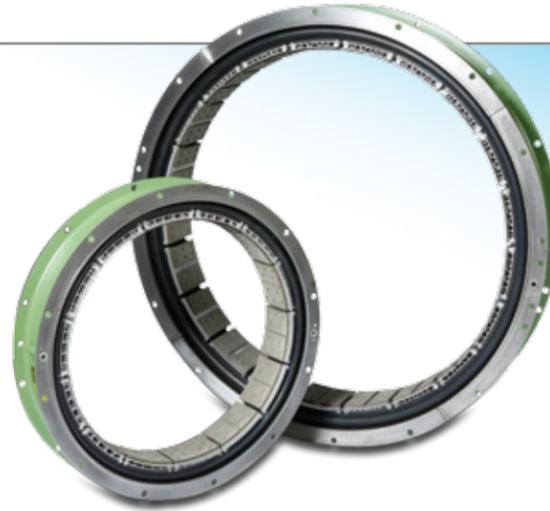
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### ELASTA-FLEX® CM Series

Oil States CM clutch technology is the preferred choice for the marine industry. The CM is a ventilated version of our CB solution, providing greater heat dissipation through the ventilated friction shoe assembly. The CM design permits clutch slippage during vessel maneuvering and cycling engagement.

CM technology is offered both new and remanufactured for efficiency and economy. A new elastomeric element can be molded into the existing rim and new friction shoe assemblies installed.



### ELASTA-FLEX® ER Series

ER clutches and brakes feature a centrifugal expander tube that provides shock absorption and transmits the entire torque load, providing long life in high duty cycle environments. ER clutches and brakes are designed for commercial laundry, tire builders, paper converters and other textile-related machinery. The ER element can be used as a shaft coupling, light slip clutch, or tension/holding brake.

### CoolForce™ Water Cooled Brakes

Oil States CoolForce™ series of water-cooled brakes provides a rugged, versatile solution for high-horsepower applications demanding high-torque absorption and rapid heat dissipation.

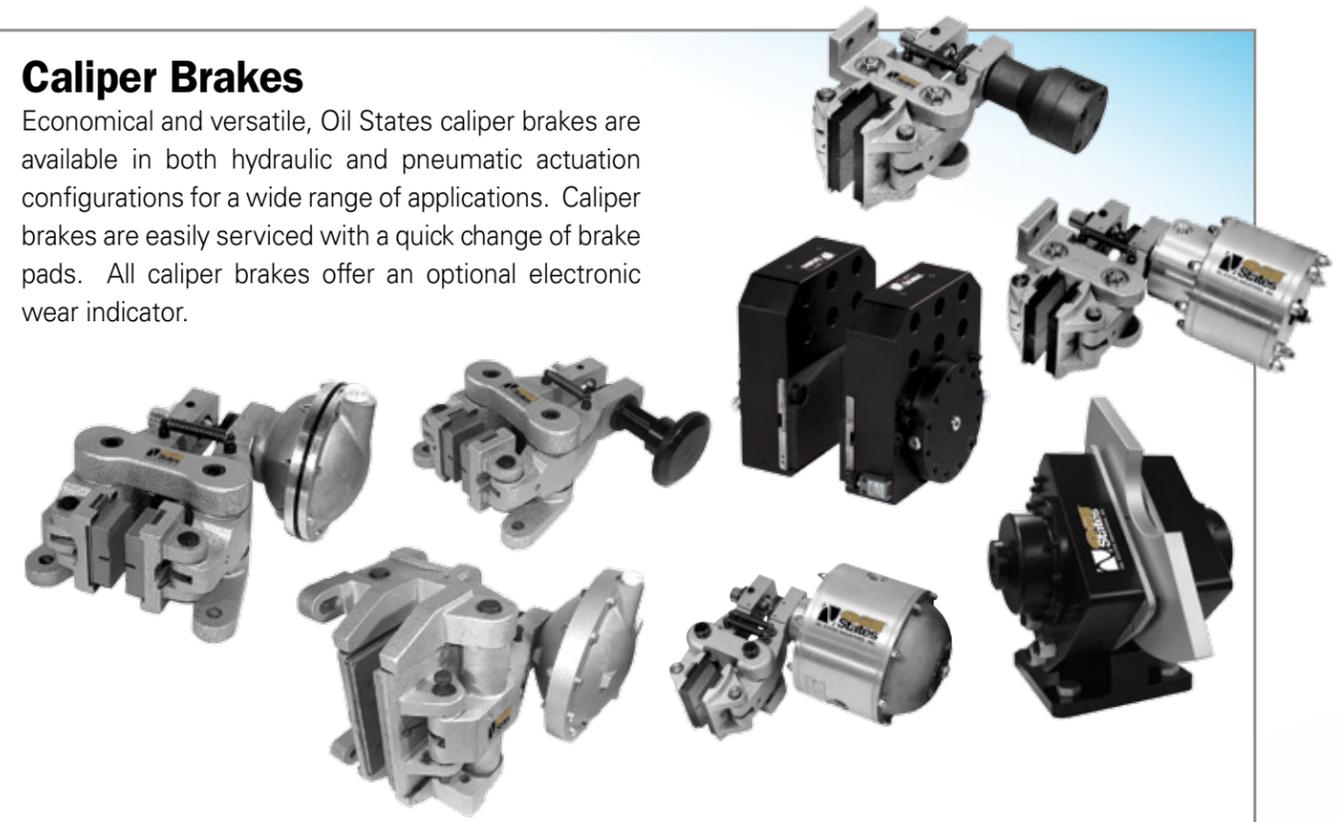
CoolForce water cooled brakes are designed for constant tension applications and are exceptionally well suited for high-inertia stopping. They permit mid-shaft or end-shaft mounting, and their durable construction ensures long, trouble-free service.

Only the Oil States CoolForce brake offers a removable composite water jacket insert to reduce lifecycle costs by simplifying field maintenance and rebuilds. Worn inserts are simply removed and replaced.



### Caliper Brakes

Economical and versatile, Oil States caliper brakes are available in both hydraulic and pneumatic actuation configurations for a wide range of applications. Caliper brakes are easily serviced with a quick change of brake pads. All caliper brakes offer an optional electronic wear indicator.



### ELASTA-FLEX® E, VE & Expander Tubes

Oil States offers a complete line of expander tube sizes and replacement components including springs, shields and friction shoe assemblies. Our tubes are designed for the rigors of high-pressure, high-temperature hydraulic applications up to 700psi.

In addition to standard sizes, we offer specialty tubes for unique applications such as vintage aircraft brakes.

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## Clutch & Brake Systems



### Parts, Accessories & Rebuild Kits

To complement our clutch and brake technology, we sell a broad selection of accessory components as well as rebuild kits to extend the life of your equipment. We offer long-wearing drums, hubs, and spiders; rotary couplings; pneumatic quick release valves and a variety of hardware components to tailor each solution to your specific application.



### Global Distribution & Support

Around the world, our Oil States® distributor network offers the inventory and short lead times you demand to keep your production on track and minimize downtime in the field. We offer full engineering support worldwide to help you quickly and confidently solve your toughest design challenges.



## Applications

Industry	Machine Function	Oil States Products	Industry	Machine Function	Oil States Products
Agricultural	Grain Elevator	VE	Metalworking (continued)	Expanders	CB, VC, Calipers
	Irrigation	CB		Presses (Brake, Forging)	CB, VC, Calipers
Breweries	Sugar Refining	CB, VC		Presses (Forming, Stamping & Punching)	CB, Calipers
	Bottle Cleaning	CB, Calipers		Presses (Geared, Non-Geared)	CB, VC
	Conveyor Systems	CB, Calipers		Forging Machine & Upsetter	CB, Calipers
Canning	Labeling	CB, Calipers		Fly Wheel Brake	Calipers
	Packaging	CB, Calipers		Roll Forming	Calipers, WCB
	Body Maker	CB, VC, Calipers		Roll Forming	CB
	Copper	CB, VC, Calipers		Rolling Mill	CB, VC
	End Press	CB, Calipers		Shears (Alligator, Plate)	CB, VC, Calipers
	Lining Machine	CB, Calipers	Shears (Rebar)	CB, Calipers	
Entertainment	Pull Tab Press	CB, Calipers	Seamer	CB, VC, Calipers	
	Strip Feed Press	CB, VC, Calipers	Slitter	CB, VC, Calipers	
	Tab Press	CB, Calipers	Spring Coil	Calipers	
Ceramic & Building Materials	Any amusement ride drives	CB, VC, Calipers	Unwind Stand	WCB	
	Block & Splitter	CB, Calipers	Wire Cage	CB	
	Brick Press	CB, VC, Calipers	Rolling Mill	CB, VC	
	Clay Cutter	CB	Shears (Alligator, Plate)	CB, VC, Calipers	
Chemical Plants	Extruder	CB, VC, Calipers	Shears (Rebar)	CB, Calipers	
	Kiln	CB, VC	Seamer	CB, VC, Calipers	
	Oven	CB, VC	Slitter	CB, VC, Calipers	
	Pug Mill	CB, VC	Spring Coil	Calipers	
	Compressors	CB, VC, Calipers	Unwind Stand	WCB	
	Hammer Mill	CB, VC, Calipers	Wire Cage	CB	
Construction	Kilns	CB, VC	Vertical Poller Mill	VC	
	Mixers	CB, VC, Calipers	Kilns	CB, VC, Calipers	
	Pumps	CB, VC, Calipers	Locomotive	WCB, Calipers	
	Air Compressors	CB	Pulverizers	CB, VC	
	Capstans	CB, VC, VE, Calipers	Shovels	Calipers	
	Conveyors	CB, VC, ER	Ventilating Fans	VC	
	Engines	CB, VC	Calendar	CB, VC	
	Excavating	CB, VC	Chipper	Caliper	
	Hoists	CB, VC, Calipers	Converters	WCB, Calipers	
	Hydraulic Pump Drives	CB	Conveyors	CB, VC, Calipers	
Dynamometer	Insulation Shear	CB, VC, Calipers	Couch	CB, VC, ER	
	Overhead Crane	CB, VC, VE, Calipers	Debarker	CB, VC	
	Pumps	CB, VC, Calipers	Dryer	CB, VC	
	Tunnel Boring	VC	Press Section (Breaking, Plain, Size, Suction, Smoothing)	CB, VC, Calipers	
	Winches	CB, VC, VE, Calipers, WCB	Pulpers	CB, VC, Calipers	
	Torque Converter/Absorber	WCB, Calipers	Reel	CB	
Engines	Holding Brake	CB, VC	Slitter	CB	
	Power Take-Off	CB, VC	Unwind Stand	WCB	
Glass	Edging Decks	CB	Woodyard Machine	CB, VC, Calipers	
	Glass Sand mill	VC	Yankee Dryer	CB, VC	
	Molding	CB, Calipers	Calendars	CB, VC, Calipers	
Laundry	Shears	Calipers	Mills Drive	CB, VC	
	Bar Soap Extruders	CB, Calipers	Mixer	CB, VC	
Logging	Extractors	CB, ER, VC	Tire Builder	CB, VC, ER, Calipers	
	Commercial Washers	CB, ER	Centrifuge	VC	
Lumber	Skidders	Calipers	Sugar & Starch	Intercarriage	CB
	Yarders	VE, WCB		Sugar Mill	CB, VC, Calipers
	Band Saw	Calipers	Accumulator	CB, Calipers	
	Breakdown Hoist	CB, VC, Calipers	Conveyors	CB, VC, Calipers	
	Conveyors	CB, VC, Calipers	Furnace	CB, Calipers	
	Carriage Drive	WCB	Rewind Stands	CB, WCB	
	Lathe	CB, VC, Calipers	Rolling & Tube Mills	CB, VC, Calipers	
	Plywood Stacker	CB, Calipers	Rollover	VC	
	Sawmill Carriage	VC, Calipers	Sand Mixers	CB, VC, Calipers	
	Stackers	CB, Calipers	Unwind Stand	WCB, Calipers	
Marine	Veneer Trays & Clipper	CB	Wire Drawing	Calipers	
	Anchor Winch	WCB, Calipers	Drive & Starter	CB, Calipers	
	Auxiliary Engine	CB	Drive & Water	VC, Calipers	
	Bow Thruster	CM, VC	Drive & Wind	VC, Calipers	
	Deck Machinery	CB, VC, VE, WCB, Calipers	Car, Tractor, Truck Dynamometer	VC, WCB	
	Dredges	CB, VC, WCB	Dynamometer	CB, WCB	
	Drive Gears	CM	Engines	CB, VC	
	Generators	CB, VC	Gear Box	WCB	
	Pipe Laying Equipment	VC, WCB	Auxiliary Drives	CB	
	Power Take-Off	CB, VC	Cat Head	CB, VC	
Metalworking	Propulsion	CB, CM, VC	Compound	CB	
	Propeller Shaft Brake	VC, Calipers	Construction Barge	WCB	
	Pumps	CB, VC	Draw Works	CB, VC, WCB	
	Liftboats	HVC	Engines	CB	
	Bender & Formers	CB, VC, Calipers	Hoist Drum	CB	
	Bridle Rolls	VC	Inertia Brake	CB, VC, Calipers	
	Car Shredders	CB, CM	Offshore pipe Laying	WCB	
	Coiler	WCB	Power Take -Off	CB	
	Coin Press	CB, Calipers	Pumps	CB	
	Cut-Off Machine	CB, Calipers	Rotary	CB, VC, Calipers	
Draw Bench (High Speed Shaft)	VC, Calipers	Sand Reel	CB, VC, Calipers		
Draw Bench (Low Speed Shaft)	CB, VC, Calipers	Slush Pump	CB		
			Mooring Winches	VC, WCB, Calipers	

Please contact us for individual product catalogues and/or application assistance.

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*Contact your local Oil States representative to learn more about our full clutch and brake product line.*



**OIL STATES INDUSTRIES, INC.**

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