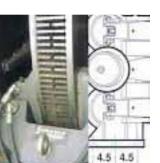
# **SYSTEMS • PARTS • ENGINEERING • SERVICE**





# YOUR BRAKE AND CLUTCH SPECIALIST FOR OIL/GAS DRILLING









Kor-Pak offers premier high energy braking systems for drilling and service rigs

# OIL RIG CALIPER DISC **KE SYSTEMS**

Kor-Pak offers customized braking solutions for all service and drilling rig applications including

SERVICE BRAKES PARKING BRAKES

**EMERGENCY BRAKES DVERWINDING PROTECTION** 

Kor-Pak has broad experience in the Oil/ Petroleum industry. Our specific field of expertise lies on our ability to furnish our clients with innovative and robust braking systems and friction materials.

Kor-Pak offers the best in oil rig caliper disc brakes. Featuring extreme duty and high torque industrial braking systems, power units, controls, and ventilated discs for Drilling and Service Rigs.

# **KEY FEATURES:**

MECHANISMS: Spring, hydraulic, or air applied. Free Floating and Self-Centering.

Spring-set and hydraulic or air released braking systems to accommodate extremely high torque requirements. Hydraulic or air applied, spring-released brakes are also available.

MOUNTING: foot mounted or side mounted.

FRICTION LININGS: nonasbestos and organic rigid, semimetallic, or sintered linings available which are easily replaceable. Our linings contain a large surface area and thickness which yields optimal friction coefficient and wear life.

**DISCS:** Our selection of discs include Ventilated Discs made from special material which possess outstanding heat dissipation characteristics which is often a required necessity in service and drilling rig applications.

**ENGINEERING AND** 

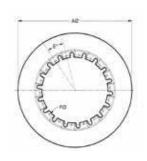
**SUPPORT:** Kor-Pak offers application, selection, and design engineering services. 24 hour support also available. At Kor-Pak we understand the sense of urgency that comes with the oil/gas industry and the negative consequences that arise from downtime. Kor-Pak will strive to diligently keep your drilling and service rig disc brakes working at optimal efficiency.

**CONSTRUCTION:** high quality steels and cast alloys used in the manufacture of our brakes, and all pins are made using stainless steel.

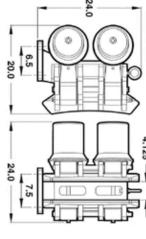
**ENGINEERING:** allow Kor-Pak to provide you with engineering and selection assistance for designing your new braking system or upgrading/retrofitting an existing system.

Custom brakes and ventilated discs can be designed to suit your requirements









Kor-Pak's has the ability to machine and fabricate custom products.

Kor-Pak also has diverse and dynamic manufacturing capabilities.









# YOUR BRAKE AND CLUTCH SPECIALIST FOR OIL/GAS DRILLING

## **BRAKES AND CLUTCHES**

Heavy Duty High Energy Disc Brakes for Drilling and Service

Dual Operation Service and Parking Caliper Disc Brakes Available with self-adjusting option

Air, Hydraulic, or Electric Actuation Available

Organic or Sintered Friction Linings

Ventilated or Water Cooled Discs Available for greater heat dissipation

Overrunning Clutches

Pneumatic or Hydraulic Actuated Clutches with torque capacities ranging from 55,000 to 1,275,000 pound-inches

Standard Clutches and Water Cooled Brakes/Clutches

**Power Units and Controls** 

Repair and Retrofit

OEM and Aftermarket for most major brands. Custom brakes available for unique applications

Pneumatic Or Hydraulic Actuation

Water Cooled Brakes/Clutches

Standard Vent Clutches

Air Power Take-Offs

**Overrunning Clutches** 

Our selection of discs include Ventilated Discs made from special material which possess outstanding heat dissipation characteristics which is often a required necessity in service and drilling rig applications.

# **OEM & AFTER MARKET**

We realize that OEM parts can be expensive and carry long lead times. Allow Kor-Pak's aftermarket parts division to assist you with reducing costs and lead time without compromising quality. Offering OEM and AM parts such as:

BRAKE PADS & PINS

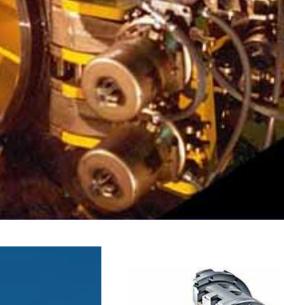
CTUATORS

**CLEVISES** 

**IALVES** 

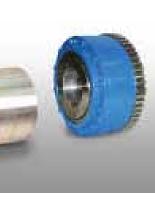
Kor-Pak's rebuild services can accommodate most major brake lines. Our repairs are warranted and include a detailed analysis of the repairable unit and a comprehensive repair process that includes testing, painting, and all new parts.

Kor-Pak is devoted to product development and custom solutions to help meet customer demand. Kor-Pak will collaborate with you to retrofit, design, and reverse engineer your hard to find parts with new robust products.













# **POWER UNITS AND CONTROLS**





- AC/DC voltages
- quick apply and/or release systems
- RC time delay control
- full proportional control
- ramped control on release and/or apply
- fail safe ramp control
- PLC controlled systems
- any combination of the above

## **AIR POWER UNITS**

Kor-Pak provides air power units with a variety of receiver sizes and delivery capabilities. They can incorporate a number of different AC or DC electric motor and compressor combinations, depending on your requirements. APU features and options include control valves, filters, regulators, lubricators, quick set valves and auto drain valves.

# **HYDRAULIC POWER UNITS**

A range of hydraulic power units are available with various pressure ratings and flow capacities. Reservoir size varies depending on the system, with either horizontal or vertical mounted AC or DC motors. Both integral and modular designs are available. Options include vented, lockable enclosures in painted, galvanized or stainless steel, and a hand pump for manual release.

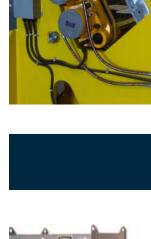
# PLC PROPORTIONAL CONTROL

Proportional Control Hydraulic power units allow for complete braking control. The hydraulic system monitors signals from the master PLC and determines the braking mode from this data. The onboard integral PLC system constantly scans the brake system data and tests various logic conditions to determine that the system is operating within specified parameters. Proportional control hydraulic power units also include manual control and over-ride, while interposing relays provide for bypass of the integral PLC system by the Master PLC. A highly reliable proportional control valve is used for precise brake control and gradual soft stopping, regardless of load conditions. All filters in the system are oversized to extend replacement life and the hydraulic system utilizes a flow through design which continuously cleans the system oil every brake cycle.

# STANDARD FEATURES FOR POWER UNITS • Quality design and construction

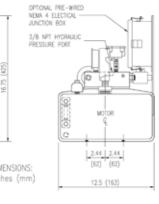
- Durabilty
- Rugged Construction
- Open Design
- Built to last
- Can control single or multiple brakes
- Pressure gauges are easily visible at front panel
- High efficiency pressure filters
- Sealed Reservoir
- Manual Control Valves are accessible on front panel

- External pump and motor for maintenance ease
- Backup hand pump system for power failures
- Internal tank heaters installed as per location
- Oil temperature and level indication at





# DIMENSIONS:



# VARIABLE FREQUENCY DRIVES Kor-Pak offers a complete line of AC Variable Frequency Drives to bring optimal

performance and operational efficiency to your AC Crane. Kor-Pak can design and engineer drives tailor-made to your specific application. Supplemental equipment is also available such as resistors, dynamic braking modules, and airconditioning units to mitigate against high heat exposure.



# **WE ARE THE** "FRICTION MATERIALS EXPERTS"

THE REPORT





# FRICTION MATER

Kor-Pak offers a substantive product mix of Oilfield Friction Materials. Kor-Pak offers the following:

BRAKE BANDS individual components and complete assemblies including hardware.

**DISC PADS** 

GEAR TOOTH CLUTCH FACING

**CUSTOM FRICTION MATERIALS** 

RELINING SERVICES allow us to bond, rivet, or bond & rivet new friction material to your existing brake bands or pads. We can also furnish you with new pads or band assemblies and reverse engineer existing ones to help you achieve a reduction in price and delivery.

**IOLIC BEARINGS** our phenolic bearings possess unique characteristics such as self-lubricating properties which make them ideal alternatives to metal. Phenolic wear materials can resist high temperatures and endure harsh industrial environments, making them ideal for your industrial application.

# "A BLOCK" BRAKE BLOCKS & DRAW-WORKS SETS

The new "A-Block" by Scan-Pac is the only premium non-asbestos woven material that reduces downtime and repair. It has been developed specifically for the oil field for use on draw-works and well servicing rigs. Extensive field evaluations confirm that this product provides outstanding performance in this demanding application area. The "A-Block" exhibits smooth, long-lasting trouble-free service with excellent seatin. Further enhancements have been introduced which significantly reduce abrasion on rims and flanges. The resulting "A-Block" provides the oil field with an upgrade product with premium performance.

- The tightly woven and dense construction provides premium life characteristics
- Specifically designed for holding and stopping with the least amount of abrasion
- Very low abrasive fibers for very long life and inserted wire construction for superior strength
- Provides a constant friction level with excellent fade resistance
- The lining is unaffected by oil, grease
- Proven reliability and fastest delivery in the industry including hardware and plugs
- Eliminates the liability associated with Asbestos containing products



Main Drum, Sand Line, Neutral (Special combinations and/or applications available)

Eaton Airflex, National, Continental, PneuGrip

## **ISULATOR PLATE**

Twin Disc, National Oilwell, National

Anchor Winch Blocks, Pump Jack blocks and lining, Grooved/Keylocks

### **GEAR TOOTH CLUTCH FACINGS**

Twin Disc. Wichita, Rockford

## PLAIN RINGS/CATHEADS

Foster, DyaFlex, Emsco

## **DISC PADS**

Kobelt, Johnson

### HARDWARE

brass screws for block sets, brass keepers and t-head bolts, cad plated keplock nuts, nylock nuts, woven plugs

### **WOVEN BRAKE LININ**

1/8" thru 1-1/4", 3/4" thru 27" widths, (All rolls are 25' unless special request) 1/4", 3/4" thru 27" widths (All rolls are 25' unless special request)











# OILFIELD EQUIPMENT



# **MUD PUMPS**

**BEARINGS** 

**SHEAVES** 

COUPLINGS

/GASKET

# HYDRAULIC

Houses, tubing, valves, cylinders

# **GEARS & GEARBOXES**

Available in ratings up to 40,000 HP and output speeds of up to 20,000 RPM or higher in ratios as high as 9:1

## **ROPE DRUMS**

Kor-Pak offers a full range of rope drum material and heat treatments and our TSP carburized rope drums virtually eliminate maintenance on the drum and significantly improve the performance of your wire rope.

- Carburized and hardened to 60-65 Rockwell C
- Virtually eliminate crushing and corrugation of the rope groove surface
- Extend the life of your wire rope

# VARIABLE FREQUENCY DRIVES Kor-Pak offers a complete line of AC Variable Frequency Drives to bring optimal

performance and operational efficiency to your AC Crane. Kor-Pak can design and engineer drives tailor-made to your specific application. Supplemental equipment is also available such as resistors, dynamic braking modules, and air-conditioning units to mitigate against high heat exposure.

## **MOTORS**

Kor-Pak provides both new and surplus AC and DC motors with varying horsepower ranges to accommodate most industrial applications for all industries. We also specialize in rebuilding surplus mill motors and providing 1:1 exchange programs which help our customers reduce costs and downtime. For both new motors as well as those hard to find surplus ones, Kor-Pak is your all-inclusive resource for your material handling needs.









## **SPECIALIZING IN**

**EXPERTISE OPTIONS SAFETY ONE STOP SOLUTIONS EASY FULFILLMENT** 

# SERVICE AND ENGINEERING











We deliver standard OEM parts, but as a progressive market leader, we also reverse engineer, and customize parts-including those that are obsolete and "hard to find"—to meet your specifications.

## REVERSE ENGINEERIN

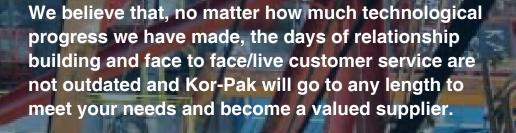
Kor-Pak possesses the capabilities of reverse engineering and supplying aftermarket brake band assemblies, brake pads, brake block sets, and various other products. Whether it be sourcing a hard-to-find or obsolete part, costreduction initiatives, or re-engineering a product for enhanced performance and reliability, Kor-Pak's manufacturing and engineering capabilities will create a robust product.

Kor-Pak can repair and reline your industrial braking equipment. Whether it be relining a clutch facing, brake pad, or brake band, or rebuilding a brake or actuator, Kor-Pak can furnish you with a "like new" product at a competitive price.

# PRODUCT SELECTION

High Quality, Made in the USA

Kor-Pak's oilfield friction products are manufactured and assembled in the United States of America and we use high quality raw materials to provide lasting and durable wear products and supporting accessories. In the industrial world, compromising quality is a dubious luxury for few suppliers and Kor-Pak believes that providing a robust brake requires high-quality materials, no questions asked. Therefore, you will not be disappointed next time you put a Kor-Pak Oilfield Brake/Friction Product into service and we stand behind our products 100% with complete warranty and guarantee.



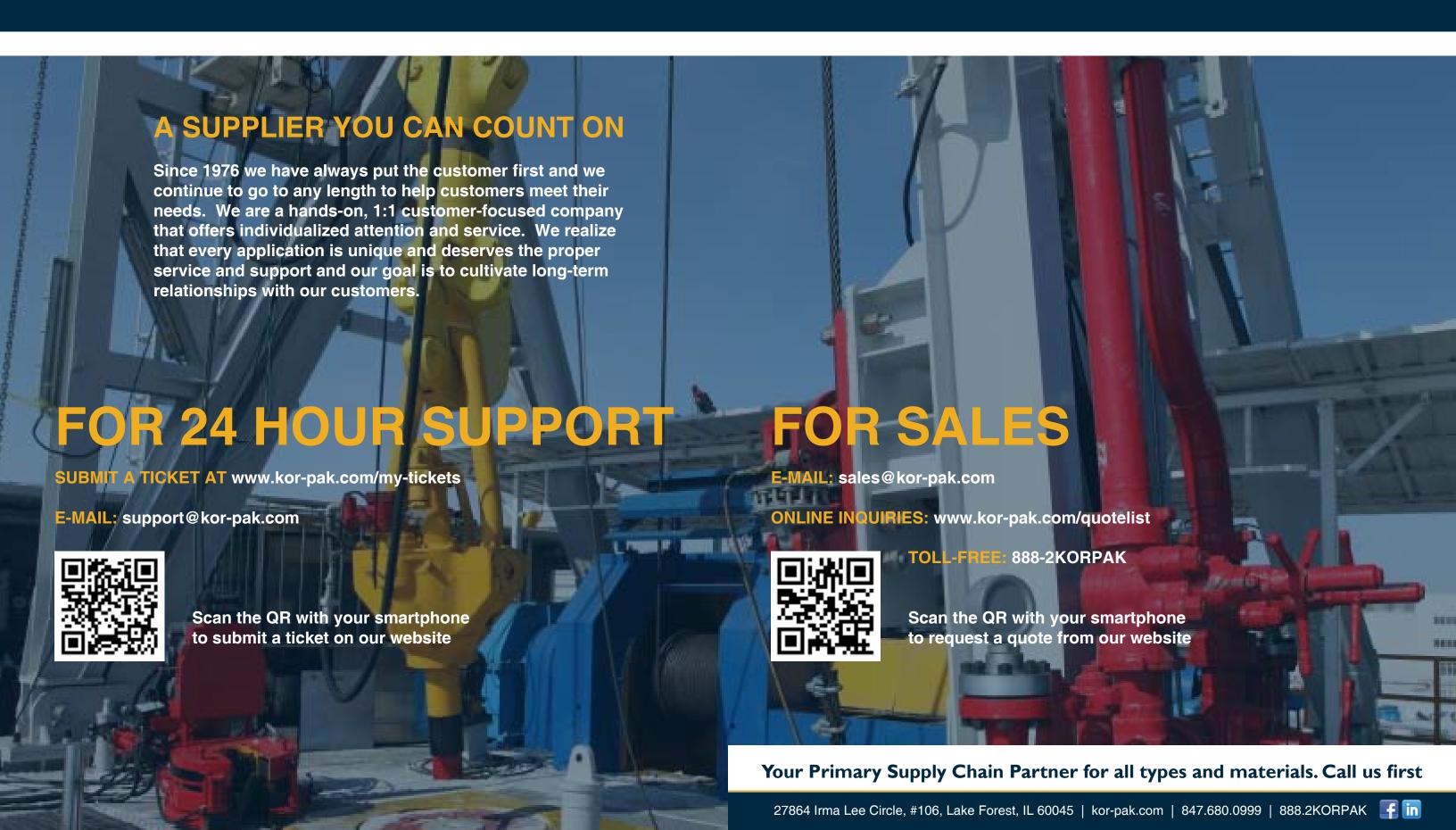
# OMER SERV

Kor-Pak has both remote service such as customer support via phone and website and also live customer support.





# **CUSTOMER SERVICE IS OUR #I PRIORITY**





# WE WORK WITH SEVERAL REPUTABLE COMPANIES AND PROVIDE OEM & AFTERMARKET PRODUCTS FOR THE FOLLOWING



























## **CONTACT US**

27864 Irma Lee Circle, #106, Lake Forest, IL 60045 *kor-pak.com*Tel: 847.680.0999 | 888.2KORPAK

Fax: (847) 680-0283

Email: sales@kor-pak.com

We are dedicated to serving our customers and international markets.

Kor-Pak is available 24/7



