



Innovation-Inclined

Hi-Perfomance Hydraulic Drives







Maha Hydraulics Private Limited, a leading engineering organisation manufacturing multi cam type Low Speed High Torque Hydraulic Drives and Systems for the past two decades having full fledged manufacturing facility at SIPCOT Industrial Area, Irungattukottai, Sriperumbudur near Chennai and branded as **MASCOT DRIVES**.

MASCOT DRIVES is the brand of Maha Hydraulics Private Limited, Trademarked with intellectual property, Government of India. Maha Hydraulics manufacture the hydraulic drives and systems for various Industries like Power, Steel, Cement, Mining, Marine, Sugar, Pulp & Paper and other process industries.

Customer base is very wide and all blue chip companies like L&T, Thyssenkrupp, NTPC, NLC, NMDC, SAIL, NALCO, ADANI, Vedanta, AMNS, JSW JSPL to name a few are associated with us.

Design and upgradation of drives and systems is a standard part of our policy that provides our customer latest technology, energy efficient hydraulic drives. Regular upgradation in design, manufacturing process, assembling up to testing of hydraulic drives and systems is making the organisation to export these hydraulic drives to USA, Australia, Indonesia, China, Africa and Vietnam.



100 Series Hydraulic Motors

100 Series hydraulic motors are robust in design and specially designed to cater Mining and material Handling machineries. By seeing the performance of these motors in Mining and Material Handling machineries, Maha Hydraulics interested to market these motors for other applications like Sugar Mills, Process Industries, Marine Equipment, Pulp and Paper, Rubber & Plastics etc.,

This is multi lobe cam type hydraulic motors with roller beam technology. Cylindrical Roller Bearings rolls on the cam by roller beam (cross head). Oil comes from the distributor port pushes Pistons in the cylinder block. Piston pushes roller beam towards the cam profile. Roller bearings roll on the cam profile and make cylinder block to rotate.





MASCOT LD Series

MASCOT LD Series are lower displacement hydraulic motors developed for high-speed applications and to perform in extreme conditions. Displacement of these motors varies from 1200 cc/rev to 13500 cc/rev. Motors develops torque between 50 Nm/bar to 240 Nm/bar. These Motors find use mainly in Belt Crushers, Conveyors, Paddle Feeders, Plastic Injection Moulding machines, Winch drives, Slew Drives, Dredger Mooring winches, Cutter Motors, Rubber Mixing, Presses Stacker reclaimer slew drives, Side arm charges to name a few. The compact size, lightweight, and ease of installation make these motors highly suited for mobile applications. Several mounting options are available for high radial load applications. The axial load capacity of our LD Series motors is high. This makes them very suitable for high axial load applications. The parking brake at the front of the motor ensures high holding torque which is equal to the hydraulic motor torque.







MD Series

MASCOT MD Series Hydraulic Motors are designed for high power and high speed applications. These motors are commonly used in Wagon Tipplers, Wagon Pusher and Pullers, Shredders, Crushers, Feeder Breaker, Ball Mills and Bowl Mills. Optionally, a brake can be fitted in the front end of the motor.

The motor displacements available range from 12 lit/rev. to 18 lit/rev. They aim to provide a wide variety of precise hydraulic motor and pump combinations. These motors can take heavy shock loads due to the incorporation of a robust front bearing support.





MASCOT 820 Series

MASCOT 820 Series Hydraulic Motors aim to provide high torque with medium speed applications. These motors are designed where high power is required. It is robust in design and weight of this motor is little high comparing with MD Series. These motors incorporate with "colossal" distribution system and are extensively used for Wagon tippler and high inclination conveyors where high brake torque is required. Hydraulic brake (static) up to 100000 Nm can accommodate as a integral part that made these motors an ideal choice for high static braking torque application.

The motor displacements available range from 9 lit/rev. to 18 lit/rev. It can take heavy shock load due to the robust front bearing arrangement.







HD Series

MASCOT HD Series Motors Varies from 50 lit/rev to 180 lit/rev. The Maximum Output torque of HD series motors are 3000Nm/bar.

HD series motors are High displacement heavy duty hydraulic motors starts from 36 lit/rev. to 180 lit/rev. These hydraulic motors are robust in design and work in extreme environmental conditions like Stacker Reclaimer Bucket Wheel, Apron Feeders, Conveyors, Belt Feeders, Dredging Cutter Drives, Pulp & Paper Dewatering drum drives etc., Multi disc dry Static Brake can be provided on request. The performance of these hydraulic motors are good even at low speed.

These motors are designed to continuous operation with high torque and speed with high efficiency and the power output from the motor is as high as 1000 KW. The **MASCOT** HD Series motors ensure trouble free operation even in dusty environmental conditions.





500 Series Hydraulic Motors

MASCOT DRIVES introduced 500 Series next generation hydraulic drives. These drives are designed and tested with stringent process stimulation. Weight of these 500 series hydraulic drives is 30% lesser than our old robust design. Power and life of 500 series drives are multiple due to change in rotary components design of the motor.

500 Series hydraulic drives are very compact and designed to take radial and axial load. Speed of these drives are almost double comparing with LD, MD and HD series hydraulic drives. This is based on piston and roller technology with roller guide plates. Main shaft is an integral part of the cylinder block and supported with dual distributor plates on front and rear, with this the complete axial load is nullified. Rear End Housing cum distributor is also integral component and the ports of oil flow passages are designed in large diameter to handle high flow / velocity without back pressure and recession.

500 Series motors are divided into three families. TCL, TCM & TCH. TCL Series hydraulic motors are very compact and displacement varies from 1200 cc/rev to 13200 cc/rev.





CR Series

MASCOT CR Series motors are designed for special applications where housing in rotation and shaft is stationary. Application like Marine winches, conveyors, Manlift chair cars in Underground mines, Dewatering wheels in Steel Plants to name a few.

These motors can work in dusty atmospheric conditions. Special seal protection will make these motors even submerged atmosphere, continuous duty cycle with high efficiency and various load conditions. They can be installed inside winch / pulley / sheeve / wheel drums and form an integral part of the machine, enhancing the compactness of the entire system.

The displacement varies from 4 lit/rev to 40 lit/rev. Our Case Rotation motors have a significantly enhanced and enlarged internal front bearing assembly to improve load bearing ability and with an improved oil distribution system, can withstand greater bedframe misalignments, frequently experienced on marine applications.



Hydraulic Motor Mounting Options

- Customized shaft
- Integral multi-disc brake
- High speed versions

- Custom Finish
- Deep water Submersible
- Torque Arm Flange mounting

Features

- Cong life
- High mechanical efficiency
- Constant torque output
- Smooth low speed performance
- Double shaft sealing

- Shrink disc coupling
- Shaft or flange mounting
- Shock resistance
- Low noise.





Hydraulic Power Pack

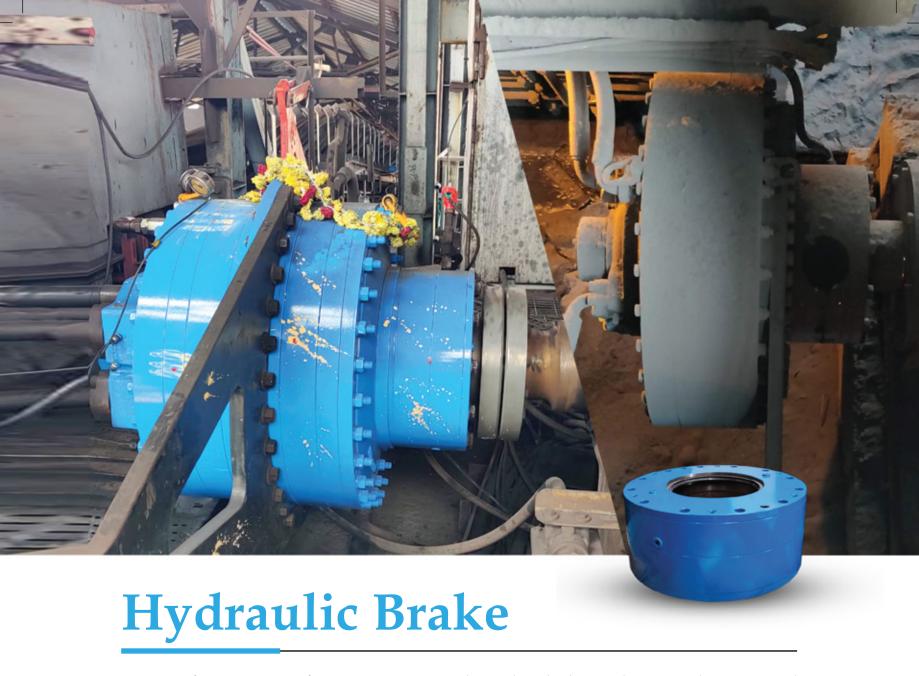
MASCOT DRIVES consist of a complete Hydraulic Drive System and the Power unit with electric motor, pump, hydraulic reservoir, the control system, the hydraulic motor and the piping system. The power unit type HPU (Horizontal Power Unit) uses a closed loop hydraulic system to provide a highly dynamic drive system. We have the expertise to custom build hydraulic power units.

Our hydraulic reservoir is a unique design. Fully sealed Stainless Steel Hydraulic reservoir is mandatory for all our hydraulic systems manufactured and assembled at our works. Sockets for return line connections are welded above the surface of the tank to eliminate the possibility of water or dust entry during cleaning.

Filters used in our systems are rated for higher capacity ensuring the thorough filtration of hydraulic oil before it enters the hydraulic reservoir, irrespective of the variations in the flow. The tank mounted design allows for easy maintenance and elimination of hydraulic fluid wastage during maintenance / replacement.

Hydraulic Power units consists of latest instruments. Safety accessories such as oil level indicators cum sensors, temperature sensors, pressure switches, pressure transducers and shut off valve limit switches are compactly built without compromising on quality.





Our manufacturing ranges from 300 Kgm to 15000 kgm. These brakes can be mounted as an integral part of our hydraulic motor or separately to the holding shaft. Hydraulic brakes design by us used in critical application like Wagon Tippler, Pusher & Puller Cars, Bucket Wheel Drives, Slew drives, Inclined Conveyor drives, Winch drives etc., Hydraulic brake is one of the highly successful products for us. Our design of multi discs dry static brakes are used to hold wagon tippler from falling down during any mechanical or hydraulic components failure.

Health Monitoring System

Our PLC controlled monitoring system is user-friendly, unlike other micro controlled monitoring system. The settings can be modified without stopping the systems, thereby enabling flexibility in operations. Touch Screen HMI provides all operations handy, and capable to store two years operation data. The design of our control system is very compatible and versatile to communicate with customer's machine PLC System with smart IO solutions. With the support of data transfer and remote configuration programs, our systems can be remotely monitored and diagnosing during breakdown is ease at fingertip. Customer can communicate, operate, diagnose, monitor and program our system without reaching our power pack panels. This is the unique feature available with our control systems.













































































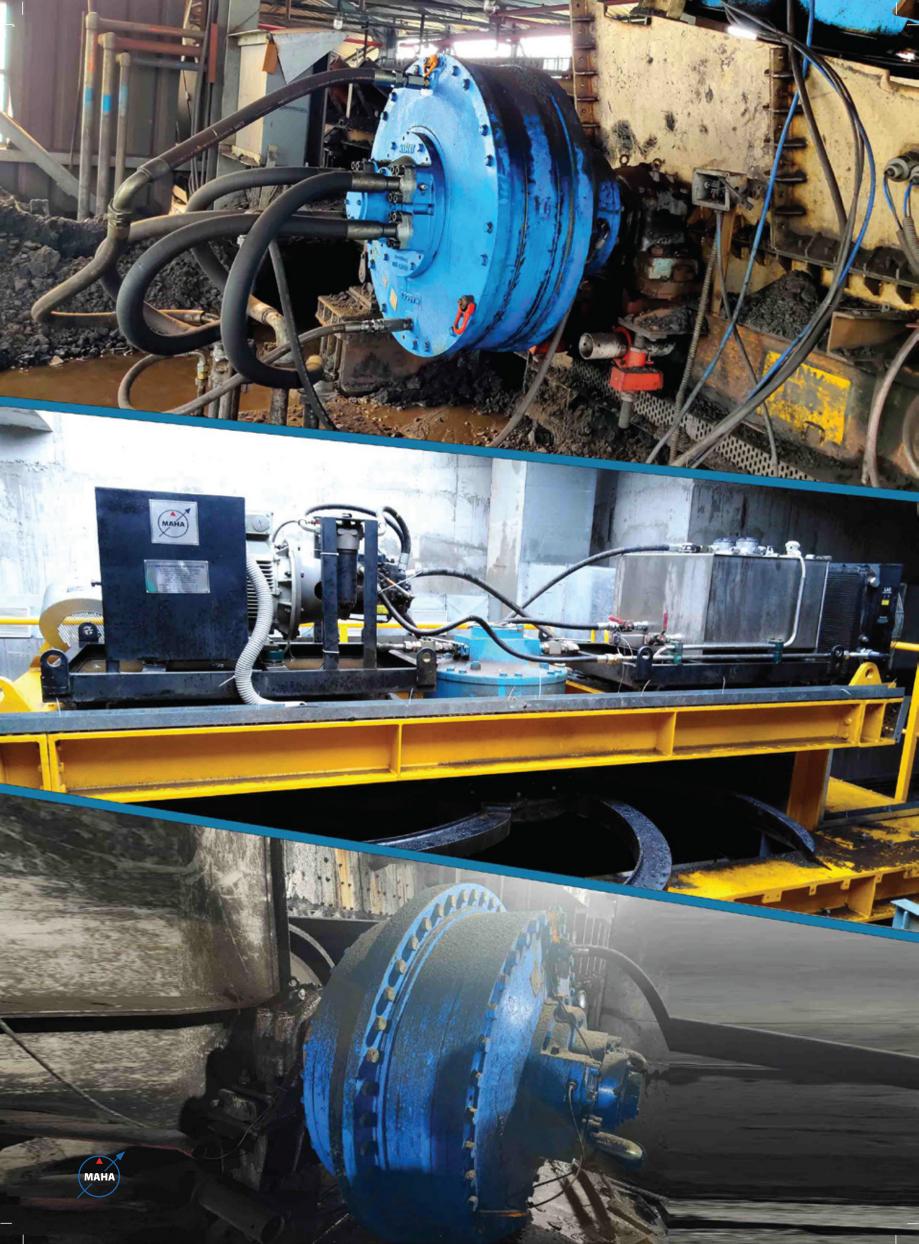




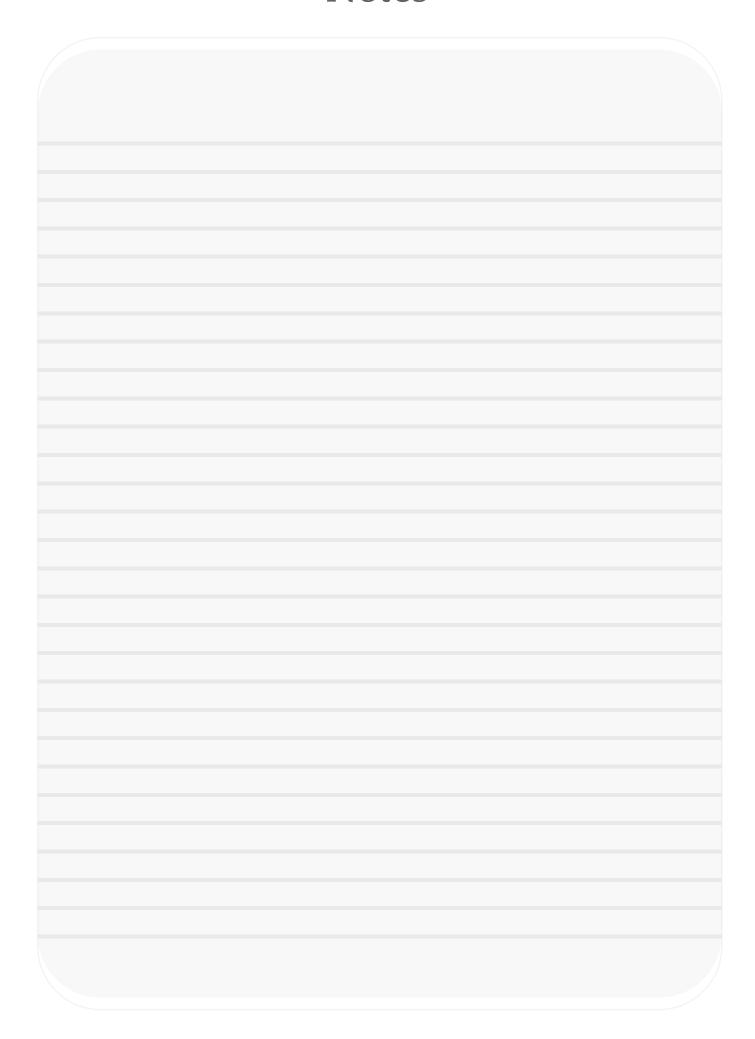








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Maha Hydraulics Private Limited

- Plot No F62, SIPCOT Industrial Complex, Irungattukottai, Sriperumbudur Taluk, Kanchipuram District 602 117, Tamil Nadu, INDIA.
- **5** +91 044 47193080 / 81 / 82
- sales@mahahydraulics.com
- www.mahahydraulics.com



