

Mondel Engineering

General Purpose Industrial Brakes

AIST-NEMA Mill Duty Brakes

Heavy-Duty Disc Brakes

Custom Engineered Brakes



MAGNETEK
MATERIAL HANDLING

MONDEL

Distributed By

McLaughlin Hoist & Crane

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A yellow graphic of a crane beam with various components like pulleys and hooks attached to it, framing the contact information.

200S GENERAL PURPOSE INDUSTRIAL BRAKES

Magnetek's heavy-duty, cost-effective Mondel Industrial Duty/General Purpose Shoe Brakes are designed for a wide variety of industrial applications. A minimum of moving parts provides an extremely reliable range of brakes that are easy to install, adjust and maintain. The 200S Range has a compact size, with low shaft height, making it easy to retro-fit into existing installations where space is tight. Typical industrial applications include: overhead cranes, conveyors, hoists, bridges, turntables, fans and winches. Other applications include moveable bridges, lock gates and other types of rotating machinery.



200S RANGE

- 4" – 19" diameter
- 6 – 2,250 lb. ft. torque
- AC, DC, hydraulic
- Explosion proof
- Compact design
- Drop-in designs

TYPE "MSA" — DC MAGNET

- Spring-applied, electromagnetic release
- Magnet coils encapsulated in epoxy resin
- Class F insulation
- Shunt: 12V through 500V DC
- Series: 5A through 300A

"MSA" OPTIONS

- Forcing rectifiers (fast response for crane hoists, etc.)
- Constant potential rectifiers (for crane bridges, trolleys, etc.)
- Terminal box rectifiers (special applications — consult factory)
- Class H Insulation
- Hand release

TYPE "MSH" — HYDRAULIC

- Hydraulically applied by short stroke cylinder, spring release
- Pedal operation — one (1) or two (2) Brakes

"MSH" OPTIONS

- Remote bleeding

TYPE "MST" — 3 PH. AC & DC

- Fast response — standard units 2,000 cycles per hour
- Spring-applied and electrically released
- Continuously or intermittently rated service < 40°C
- Class F insulation
- AC supplies: 230-460-575/3Ph/50-60 Hz
- DC supplies: 250V

"MST" OPTIONS

- Automatic Adjustment (AA) — Automatically compensates for lining wear; eliminates time required to manually adjust linkages for brake shoe lining wear
- Automatic Equalization (AE) — Automatically equalizes and maintains running shoe clearance and maintains proper running, which provides balanced braking and equal brake pad wear
- External torque spring with calibrated indicator
- Externally adjustable, stepless time delays in both directions; set and release
- Braketronic™ Controller
- Nitride Corrosion Protection
- Latching hand release
- Stainless steel pivot pins available
- Up to 3 limit switches to indicate brake position

300M AIST-NEMA MILL DUTY BRAKES

Magnetek's AIST-NEMA rated Mondel Mill Duty Brakes are designed for heavy-duty steel mill and other harsh environments and applications. Our advanced design features, combined with fabricated steel construction, make this range of brakes suitable for applications requiring reliable braking with minimal maintenance and downtime. Applications include: steel mills, stacker reclaimers, shiploaders, port cranes, shipyard cranes, offshore drilling rigs, missile assembly cranes, incinerator cranes, and large gantry cranes.

300M RANGE

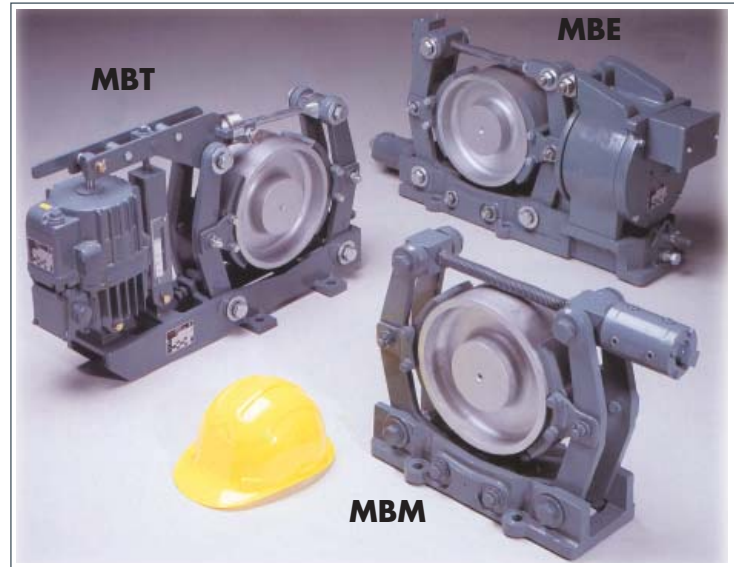
- 5" – 30" diameter
- 10 – 11,000 lb. ft. torque
- AC, DC, hydraulic
- Explosion proof
- AIST drop-in designs

TYPE "MBE" — DC MAGNET

- Spring-applied, electromagnetic release
- Replaceable magnet coils
- Class F insulation
- Shunt: 12V through 350V DC
- Series: 5A through 1400A

"MBE" OPTIONS

- Auto-adjuster for lining wear
- Forcing rectifier (fast response for crane hoists, etc.)
- Constant potential rectifiers (for crane bridges/trolleys)
- Terminal box rectifiers (special applications — consult factory)
- Class H insulation
- Nitride Corrosion Protection



TYPE "MBT" — 3 PH. AC & DC

- Fast response — standard units 2,000 cycles per hour
- Spring applied and electrically released
- Continuously or intermittently rated service < 40°C
- Class F insulation
- AC supplies: 230-460-575/3Ph/50-60 Hz
- DC supplies: 250V

"MBT" OPTIONS

- Auto-adjuster for lining wear
- Adjustable external torque spring with calibrated indicator
- Externally adjustable, stepless time delays in both directions; set and release
- Braketronic Controller
- Nitride Corrosion Protection
- Latching hand release
- Up to 3 limit switches to indicate brake position

TYPE "MBM" — HYDRAULIC

- Hydraulically-applied and spring released
- Pedal operation — one (1) or two (2) brakes

"MBM" OPTIONS

- Remote bleeding
- Nitride Corrosion Protection

400D HEAVY-DUTY DISC BRAKES

Magnetek 400D Mondel Heavy-Duty Disc Brakes are specifically designed for high speed, high performance applications. They are manufactured from materials selected to optimize performance and serviceability for the most demanding applications.

Two types are available:

- Type SDT — conform to container industry ratings and dimensions.
- Type ADT — conform to AIST ratings and dimensions.



400D RANGE

- 8" – 50" diameter
- 50 – 30,000 lb. ft. torque
- AC, DC, hydraulic
- Explosion proof
- Flexible mounting configurations
- Low inertia
- Fast response
- Automatic wear compensation
- Automatic pad clearance equalization

TYPE "D" – 3 PH. AC AND DC

- Spring-applied, electrically released
- Continuously or intermittently rated < 40°C
- Sintered metal friction pads on quick replacement liners
- Stainless steel pivot pins running in self-lubricating bushings
- AC supplies: 230-460-575/3Ph50/60 Hz
- DC supplies: 250V

ACCESSORIES

- Discs — standard/ventilated
- Discs/hubs (rigid)
- Disc/couplings (flexible)

TYPE "D" OPTIONS

- Adjustable external torque spring with calibrated indicator
- Externally adjustable, stepless time delays in both directions; set and release
- Latching manual release
- Limit switches for proving brake release
- Balanced torque to minimize shaft stresses (2 brakes on a common disc)
- Bracketronic Controller
- Nitride Corrosion Protection



BRACKETRONIC® SYSTEMS – "BRAKE BY WIRE"

Magnetek's Bracketronic Controller provides variable torque control to Mondel Thruster Operated Shoe or Disc Brakes. By means of a

Bracketronic unit, single or multiple brakes can be proportionally controlled by foot pedal, master switch, radio control, or selectively from either one. The controller can also be configured to gradually apply the brakes by pre-programmed ramping, initiated by the use of single-step control devices.

The Bracketronic Controller can replace existing hydraulic systems and provide fail-safe emergency braking. Use the Mondel Bracketronic Controller

on all types of cranes, moveable lift bridges and similar applications.

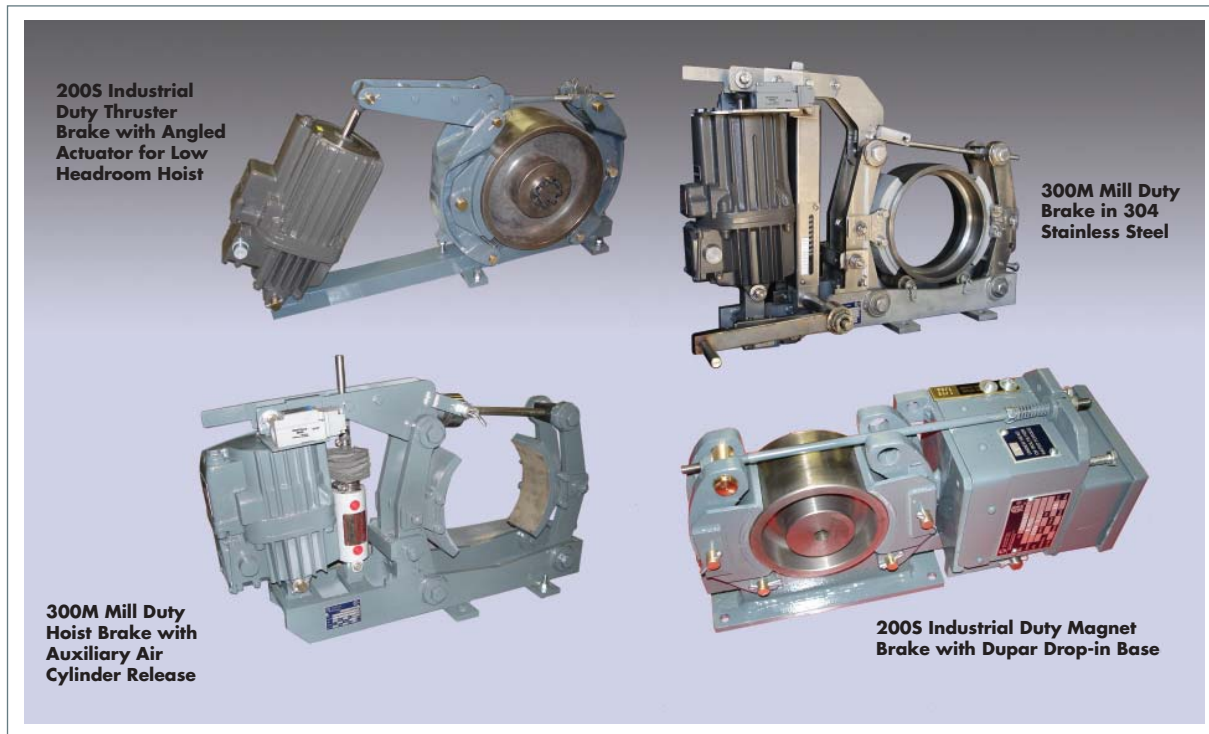
KEY FEATURES

- For new applications or to replace existing hydraulic systems
- Variable torque brake performance, controlled from foot pedal or radio control
- Pre-programmed ramping controlled by push-button
- Input voltages: 250V DC, 230/460/575V AC-3Ph, 115/230-single Ph
- Control single or multiple brakes
- Industrial or Mill Duty

OPTIONS

- Enclosure heaters for low ambient temperature applications
- Factory training

CUSTOM ENGINEERED BRAKES AVAILABLE



Magnetek can furnish custom engineered brakes to meet the unique requirements of your application. Our engineers can custom design brakes with simple manual brake and release designs, unique torque or dimensional requirements, and brakes that meet specific environmental considerations. We also boast an extensive library of brake designs developed to meet the dimensional and performance characteristics of other brake manufacturers' designs. This makes the Mondel product line one of the most comprehensive in the industry — your single source for industrial braking technology. Whatever your braking needs, Mondel Brakes are the solution.

CUSTOM ENGINEERED

- Stainless steel frame hardware & links
- Nitride® heat treat corrosion protection
- Special mountings
 - Wall
 - Ceiling
- Motor mounted brakes
- Manual brakes
- Manual release brakes
- Special coatings & finishes
- Unique torque & dimensional requirements
- "Drop-in" designs

CAPABILITIES

- Industrial cable reels
- Railroad dumper cars
- Bridges/heavy moveable structures
- Conveyors
- Turntables
- Selector/lock dam gates
- Any industrial braking application