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
- Nitriding heat treat corrosion protection
- Special mountings — Wall, Ceiling
- Stainless steel brake links & hardware
- Selectable brake shoe materials
- Any industrial braking application

CAPABILITIES
- Greater brake life
- Industrial cable reels
- Railroad dumper cars
- Bridges/heavy moveable structures
- Conveyors
- Industrial cable reels
- Motor mounted brakes
- Industrial cable reels
- Railroad dumper cars
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 brake that is easy to install, adjust and maintain. The 200 range has a compact size, with low shaft height, making it easy to retrofit on existing installations where space is tight. Typical industrial applications include: overhead cranes, conveyors, hoists, bridges, turntables, fans and winches. Other applications include movable bridges, lift gates and other types of cranking machinery.

### 200S RANGE
- **4” – 19” diameter**
- **6 – 2,250 lb. ft. torque**
- **AC, DC, hydraulic**
- **Explosion proof**
- **Compact design**
- **Drop-in design**

### 200D RANGE
- **8” – 50” diameter**
- **10 – 11,000 lb. ft. torque**
- **AC, DC, hydraulic**
- **Explosion proof**
- **Remote bleeding**
- **Magnet coils encapsulated in epoxy resin**
- **Class F insulation**

### 300M AIST-NEMA MILL DUTY BRAKES
- **MBM** OPTIONS
  - Spring-applied, electromagnetic release
  - Magnet coils encapsulated in epoxy resin
  - Class F insulation
  - Class 127 through 350 DC
  - Class 3A through 300A

### 300M RANGE
- **5” – 30” diameter**
- **10 – 11,000 lb. ft. torque**
- **AC, DC, hydraulic**
- **Explosion proof**
- **Max design diameter**

### 400D RANGE
- **30 – 20,000 lb. ft. torque**
- **AC, DC, hydraulic**
- **Explosion proof**
- **Sprung-applied, electrically released**
- **Continuously or intermittently rated service < 40°C**
- **AC supplies: 230-460-575/3Ph/50-60 Hz**
- **DC supplies: 250V**

### TYPE “MBT” — 3 PH. AC & DC
- **Spring-applied and electrically released**
- **Hydraulically applied by short stroke cylinder, spring release**
- **Detachable exhaust**
- **Pedal operation — one (1) or two (2) Brakes**

### TYPE “MBE” — DC MAGNET
- **Spring-applied and electromagnetic release**
- **Magnet coils encapsulated in epoxy resin**
- **Class F insulation**
- **Class 127 through 300A DC**
- **Class 3A through 1000A DC**

### TYPE “MBS” — HYDRAULIC
- **Hydraulically applied by short stroke cylinder, spring release**
- **Pedal operation — one (1) or two (2) Brakes**

### TYPE “MST” OPTIONS
- **Remote bleeding**
- **External drip-proof explosion proof**

### TYPE “MST” — 3 PH. AC & DC
- **Fast response — standard units: 2,000 cycles per hour**
- **Spring-applied and electrically released**
- **Continuous or intermittently rated service < 40°C**
- **Class F insulation**
- **AC supplies: 230-460-575/3Ph/50-60 Hz**
- **DC supplies: 250V**

### TYPE “MBH” — HYDRAULIC
- **Spring-applied, electromagnetic release**
- **Replaceable magnet coils**
- **Class F insulation**
- **Class 127 through 350 DC**
- **Class 3A through 1000A DC**

### OPTIONS
- **Spring-applied and electromagnetic release**
- **Magnet coils encapsulated in epoxy resin**
- **Class F insulation**
- **Class 127 through 300A DC**
- **Class 3A through 1000A DC**
2005 GENERAL PURPOSE INDUSTRIAL BRAKES

Magnetek’s heavy-duty, cost-effective 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.

300M AIST-NEMA MILL DUTY BRAKES

Magnetek’s AIST-NEMA rated Mondel Mill Duty Brakes are designed for heavy-duty steel mills 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, stopped cranes, offloading dock, assembly cranes, incrementator, and large gantry cranes.

300D  HEAVY-DUTY DISC BRAKES

Magnetek’s 300D 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.

300M RANGE
- 5” – 30” diameter
- 10 – 11,000 ft. lb. torque
- AC, DC, hydraulic
- Explosion proof
- Compact design
- Drop-in design

300D RANGE
- 5” – 51” diameter
- 30 – 60,000 ft. lb. torque
- AC, DC, hydraulic
- Explosion proof or intermittently rated ≤ 40°C
- Spring modulated brake pad
- Explosion proof or intermittently rated ≤ 40°C
- Spring modulated brake pad
- Explosion proof or intermittently rated ≤ 40°C
- Spring modulated brake pad

ACCESSORIES
- DC supplies: 230-460-575/3Ph/50-60 Hz
- DC supplies: 230V
- DC supplies: 230V

MBM
- MBM
- MBM
- MBM

MBT OPTIONS
- MBT OPTIONS
- MBT OPTIONS
- MBT OPTIONS
- MBT OPTIONS

TYPE “MST” – HYDRAULIC
- Hydraulically applied
- Hydraulic release
- Magnet coils encapsulated in epoxy resin
- Class F insulation
- Short: 125V through 600V DC
- Series: 240V through 500A

TYPE “MBT” – HYDRAULIC
- Hydraulically applied and electrically released
- Spring applied and electrically released
- Continuously or intermittently rated ≤ 40°C
- Class F insulation
- AC supplies: 230-460-575/3Ph/50-60 Hz

ACCESSORIES
- DC – standard (standardized)
- Discs/brake bands

BRAKETRONIC® SYSTEMS – “BRAKE BY WIRE”

The Braketronic Controller can replace existing hydraulic systems and provide fail-safe emergency braking. Use the Mondel Braketronic Controller on all types of cranes, movable lift bridges and similar applications.

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

OPTIONS
- Brake bleeding
- Spring applied and electrically released
- Magnet coils encapsulated in epoxy resin
- Class F insulation
- Short: 125V through 600V DC
- Series: 240V through 500A

“MSA” OPTIONS
- Forcing rectifiers (fast response for crane hoists, etc.)
- Constant potential rectifiers (for crane bridges, trolleys, etc.)
- External torque spring (for applications — consult factory)
- Class H insulation

“MST” OPTIONS
- Automatic Adjustment (AA) – Automatically compensates for all wear, eliminates time required to manually adjust for brake shoe wear
- Automatic Equalization (AE) – Automatically equalizes and monitors running shoe clearance and maintains proper running, which provides balanced braking and equal brake pad wear
- External torque spring with calibrated indicator
- Externally adjustable, time delays in both directions; set and release
- Breaktonic® Controller
- Nitride Corrosion Protection
- Latching hand release
- Stainless steel pro shop available
- Up to 3 limit switches to indicate brake position

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

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

“MBT” OPTIONS
- Automatic adjuster for brake lining wear
- Adjustable external torque spring with calibrated indicator
- Externally adjustable, time delays in both directions; set and release
- Breaktonic® Controller
- Nitride Corrosion Protection
- Latching hand release
- Up to 3 limit switches to indicate brake position

“MBT” OPTIONS
- 3 PH. AC & DC
- Fast response — standard units
- 2,000 cycles per hour
- Spring applied and electrically released
- Continuously or intermittently rated ≤ 40°C
- Class F insulation
- AC supplies: 230-460-575/3Ph/50-60 Hz
- DC supplies: 230V

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

OPTIONS
- Brake bleeding

4000 HEAVY-DUTY DISC BRAKES

Magnetek’s 4000 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 300 – conforms to container industry ratings and dimensions
- Type 400 – conforms to AIST ratings and dimensions

4000 RANGE
- 5” – 51” diameter
- 30 – 60,000 ft. lb. torque
- AC, DC, hydraulic
- EXPLOSION PROOF

Flexible mounting configurations
- Low inertia
- Fast response
- Automatic brake compensation
- Automatic pad clearance

ACCESSORIES
- DC – standard (standardized)
- Discs/brake bands

“MBE” OPTIONS
- DC MAGNET
- Spring-applied and electrically released
- Magnet coils encapsulated in epoxy resin
- Class F insulation
- Short: 125V through 600V DC
- Series: 240V through 500A

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

OPTIONS
- Brake bleeding

Magnetek’s heavy-duty, cost-effective Mondel Industrial Duty/Greenhouse Series brakes are designed for a wide variety of industrial applications. A minimum of moving parts provides an extremely reliable and long lasting brake that is easy to install, adjust and examine. The 300F range has a compact size, with low shaft height, making it easy to retrofit into existing applications where space is tight. Typical industrial applications include: overhead cranes, conveyors, hoists, bridges, turntables, fans and winches. Other applications include movable bridges, lift gates and other types of cranking machinery.
Magnetek’s heavy-duty, cast-iron Mondel Industrial Duty/General Purpose Shoe Brakes are designed for a wide variety of industrial applications. A maximum of moving parts provides an extremely reliable brake that is easy to install, adjust and maintain. The 2005 range has a compact size, with low shaft height, making it easy to retrofit existing applications where space is tight. Typical industrial applications include: overhead cranes, conveyors, hoists, bridges, turntables, fans and winches. Other applications include movable bridges, lift gates and other types of cranking machinery.

2005 GENERAL PURPOSE INDUSTRIAL 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 sheds, stocker reclaimers, shiploaders, port cranes, shredder cranes, shovel diggers, mill assembly cranes, incrementer cranes, and large gantry cranes.

Magnetek’s AIST-NEMA rated Mondel Mill Duty Brakes are specifically 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 sheds, stocker reclaimers, shiploaders, port cranes, shredder cranes, shovel diggers, mill assembly cranes, incrementer cranes, and large gantry cranes.

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 sheds, stocker reclaimers, shiploaders, port cranes, shredder cranes, shovel diggers, mill assembly cranes, incrementer cranes, and large gantry cranes.

300M RANGE

• 5” – 20” diameter
• DC, AC, hydraulic

300M OPTIONS

• Adjustable external torque spring with calibrated indicator
• Varispeed adjustable, stepless
• Time delays in both directions; set and release
• Latching mechanical release

300M ACCESSORIES

• Discs – standard/ventilated
• Discs/hubs ( keyed)
• Disc/splittings ( Baked)

300M HEAVY-DUTY DISC BRAKES

Magnetek’s 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 minimize maintenance for the most demanding applications. Two types are available:

• Type 501 – conforms to container industry ratings and dimensions.
• Type 401 – conforms to AISI crane and dimensions.

400D RANGE

• 8” – 31” diameter
• 50,000,000 lb. ft. torque
• AC, DC, hydraulic

400D OPTIONS

• Adjustable external torque spring with calibrated indicator
• Varispeed adjustable, stepless
• Time delays in both directions; set and release
• Latching mechanical release

400D ACCESSORIES

• Discs – standard/ventilated
• Discs/hubs ( keyed)
• Disc/splittings ( Baked)

BRAKETRONIC® SYSTEMS – “BRAKE BY WIRE”

Magnetek’s Braketronics Controller provides variable torque control to Mondel Thruhole Operated Shoe or Disc Brakes. By means of a Braketronics unit, one or multiple brakes can be proportionately controlled from foot pedal, master switch, radio control, or selectively from either one. The “Thruhole” design is gradually apply the brakes by preprogrammed ramping, with or without manual control.

The Braketronics Controller can replace existing hydraulic systems and provide fail-safe emergency braking. Use the Mondel Braketronics Controller as all types of cranes, movable 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
• Preprogrammed ramping controlled by push button
• Input voltages: 250V DC, 240V/360V AC, 3-phase, 415V 3-phase, 230V single phase
• Control single or multiple brakes

INDUSTRIAL or MDD Duty

OPTIONS

• Brakeatronics for low ambient temperature applications
• Factory training
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 BRAKES AVAILABLE

- Stainless steel frame hardware & links
- Nitinol 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

#### ENGINEERING SYSTEMS & SOLUTIONS

- Project Evaluation
- Project Management
- Engineering Design
- System Wire-Diagramming Tools
- Field Testing, Tuning and Support
- Customer Training and Maintenance Support
- Application Solutions
- PLC/Program Development

#### POWER ELECTRICAL CHARACTERISTICS

- 230, 460 and 575 Volt Power Supplies
- 1-1200 HP
- Escalator Application Software
- Special Free Wheel Software

#### MONDEL® BRAKES

- 200S Industrial Shoe Brakes
  - 4”–19” Diameter
  - 6–2250 Lb. Ft. Torque
  - AC, DC, Hydraulic Actuators
  - AC Explosion Proof Actuators
  - AIST-NEMA 300M Mill Duty Shoe Brakes
  - 5”–30” Diameter
  - 10–11,000 Lb. Ft. Torque
  - AC, DC, Hydraulic Actuators
  - AC Explosion Proof Actuators
  - 400D Heavy Duty Disc Brakes
  - 8”–50” Diameter
  - 50–30,000 Lb. Ft. Torque
  - AC, DC, Hydraulic Actuators
  - AC Explosion Proof Actuators

#### ELECTROMOTIVE SYSTEMS TROUBLESHOOTING DBASE MONDEL

- $525 and higher push button (SW305)
- Standard 25 and 12 Hole Tabsters
- Custom Configured Tabsters

#### TELEGRAPH & CABLE FREE REMOTE CONTROL SYSTEMS

- 2005 Product
- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015

#### EXCLUSION ERRORS SYSTEMS

- Sage™

#### MONDEL BRAKES

- 200S Industrial Shoe Brakes
  - 4”–19” Diameter
  - 6–2250 Lb. Ft. Torque
- AC, DC, Hydraulic Actuators
- AC Explosion Proof Actuators

- 400D Mill Duty Disc Brakes
  - 8”–50” Diameter
  - 50–30,000 Lb. Ft. Torque
- AC, DC, Hydraulic Actuators
- AC Explosion Proof Actuators

- 400S Heavy Duty Disc Brakes
  - 8”–50” Diameter
  - 50–30,000 Lb. Ft. Torque
- AC, DC, Hydraulic Actuators
- AC Explosion Proof Actuators

- Braketronic™ Control System
- Braketronic Console
- Standard Pre-engineered Panel
- Mill Duty Foot Pedal System
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 movable structures
- Conveyors
- Terriblakes
- Side entry/lock during gates
- Any industrial braking application

YOUR ONE-STOP SOURCE FOR MATERIAL HANDLING CONTROL SOLUTIONS

ENGINEERED SYSTEMS & SOLUTIONS

Project Evaluation
Project Management
Engineering Design
System-Wide Systematic Testing
Field Training, Testing and Support
Customer Training and Maintenance Support
Application Solutions
PLC/Program Development

IMPULSE™ AC ADJUSTABLE FREQUENCY DRIVES
- 230, 460 and 575 Volt Power Platforms
- 25–1200 Hp
- Exclusively Application Software
- Special Custom Software

EMPLOYEE™ DUAL BRAKES
- 300–4000 Hp
- 5–5000 lb
- 4000–12,000 lb

WICK-HORN WATER ACCELERATION CONTROL
- Single & Dual - up to 3.2 Ama
- Controller Panel

HIGH SPEED WATER CONTROL PANELS
Standard Pre-engineered Systems
Custom Engineered Systems

MOTOR & ACCESSORIES

Standard Electric Duty AC Induction Motors
Flux Vector Designed Motors

POWER DELIVERY SYSTEMS

IMPULSE™: Max. — No. 11, 35, 133, 310 Brakes
IMPULSE™: FL — No. 18, 115, 275, 440 Brakes
IMPULSE™: FL — No. 20, 70, 135, 220, 330 Brakes
IMPULSE™: FL — No. 20, 70, 135, 220, 330 Brakes

M5™ Continuous Bar System — 110 Brakes

ELECTROMOTIVE™ FUSING SYSTEMS
Standard Duty
Heavy Duty

SP & SUPP VEHICLE PEED BUTTON CONTROL
Standard & Custom 12 Button Panels
Complete Configured Panels

TELEMAC & CRANE/article RADIO REMOTE CONTROL SYSTEMS

Pendant
Pilot

CUSTOM ENGINEERED BRAKES

AIST-NEMA 300M Mill Duty Shoe Brakes
5”–30” Diameter
10–11,000 Lb. Ft. Torque
AC, DC, Hydraulic Actuators
AC Explosion Proof Actuators

400D Heavy Duty Disc Brakes
8”–50” Diameter
50–30,000 Lb. Ft. Torque
AC, DC, Hydraulic Actuators
AC Explosion Proof Actuators

Braketronic™ Control System
| Standard Pre-engineered Panel |
| Mill Duty Foot Pedal (optional) |