REFERENCE CATALOGUE FOR KATEEL PRODUCTS

www.kateel.com

Precise | Reliable | Safe
STEEL MILLS:

KATEEL Brakes are used for 6-Hi and 4-Hi Mill Applications, Bridle Drives in both Galvanizing and Pickling Line, Pay-Off Reel, Colour Coating Line, Entry Accumulator & Exit Accumulator, Tension Reel, Electrolysis Line, Cranes; Hot Metal Cranes as well as EOT Cranes, Mobile Tripper Car, Charging Car, Quenching Car, Heavy duty Fan Motor etc.
Kateel Brakes for Crane Application:

1. Electro-hydraulic Thruster Disc and Drum Brakes: for Service Braking application & Hoisting, CT and LT.
2. Electro-magnetic Disc and Drum Brakes: For service Braking application & Hoisting, CT, LT.
3. Hydraulic Fail-safe Disc Brakes: For Emergency Braking application- Brake shall be mounted directly on Rope Drum Flange.
4. Switching Frequency Ring / Encoder: to read speed of the hoist.
5. PLC Based control panel system: Collects signal

from Switching frequency ring / Encoder, and conveys command to the Hydraulic power pack to Open / Close Brake.

6. The PLC is set for indicating 10% of over speed, in case the drum starts rotating 10% above the set RPM, the feedback will go to the brake and the brake will apply automatically. The over speed is sensed by the encoder. In case of over speed due to any reason, the relay is energized and will switch off the Pump Motor and solenoids resulting in immediate application of brake.
WHAT IS SMOOTH BRAKING?

1. It is an Intelligent Braking system that regulates the speed of the conveyor.
2. It ensures a controlled "smooth Braking process, resulting in less wear and stress on the mechanical components of the brake system.
3. Smooth Braking option can be used for any of the following:

THE ADVANTAGES OF SMOOTH BRAKING OPTION:

1. Controlled and precise Braking regardless of the load.
2. A cost-effective solution compared to any other braking system.
3. The maintenance costs of the main assemblies like Belt, Gearboxes, Motors, etc. will be significantly reduced due to less wear and stress on these components.
4. The lower wear and stress on the main assemblies increases the overall safety of the entire system.
Stacker and Reclaimer

Hydraulic Disc Brakes mounted on Tripper Wheel in Port Conveyor

Thruster Drum Brake mounted on Charging and Discharging car in Steel Industry

Hydraulic Disc Brakes

Hydraulic Disc Brake

Electro-hydraulic Thruster Disc Brake
### APPLICATIONS

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### OUR RANGE OF DISC AND DRUM BRAKES

1. Pneumatic Active Disc Brakes
   - Air Applied - Spring Released
2. Pneumatic Fail-safe Disc Brakes
   - Spring Applied - Air released
3. Hydraulic Active Disc Brakes
   - Hydraulically Applied - Spring Released
4. Hydraulic Fail-safe Disc Brakes
   - Spring Applied - Hydraulically Released
5. Mechanical Lever or Hand Knob Operated Disc Brakes
   - Manual
6. Electro-hydraulic Thruster operated Disc Brakes & Drum Brakes
   - Fail-safe
7. Electro-magnetic Disc Brakes & Drum Brakes
   - Fail-safe
# COMPANY                       | PRODUCT                                      | APPLICATION                  |
---                              |---------------------------------------------|-----------------------------|
1. Nuclear Power Corporation     | Pneumatic Disc Brakes                       | 6 MW Motor                  |
   through BHEL - Bhopal          |                                             |                             |
   Kudankulam                    |                                             |                             |
4. CG Power and Industrial       | Pneumatic Disc Brake                        | 6 MW Motor                  |
   Solutions Limited-Bhopal      |                                             |                             |
5. TD Power System-Bangalore    | Hydraulic Disc Brake                        | Up to 20 MW Generator       |
6. Andritz Hydro Turbine-Bhopal  | Hydraulic Disc Brake                        | Up to 40 MW Generator       |
7. CG Power and Industrial       | Hydraulic Disc Brake                        | Up to 20 MW Generator       |
   Solutions Limited-Bhopal      |                                             |                             |

**MINING**

1. Orissa Mining Corporation (OMC) | Hydraulic Disc Brake with Smooth Braking System | Downhill Conveyor            |
2. Tatasteel Naomundi Mines       | Hydraulic Disc Brake with Smooth Braking System | Downhill Conveyor            |
3. Macmet India Ltd.              | Hydraulic Disc Brakes / Hydraulic Rail Clamp | Pipe Conveyor                |
4. Ultratech Cement               | Hydraulic Disc Brakes with Smooth Braking System | Convoyor                    |
5. Paradeep Port Trust            | Hydraulic Disc Brakes / Thruster Disc Brake  | Coal Handling Plant          |
6. TRF, Kolkata                   | Electro-hydraulic Thruster Disc Brakes for Ship Unloaders | Long Travel                 |
7. Chennai Port Trust through L & T, Chennai | Electro-hydraulic Thruster Brakes | Stacker and Reclaimer        |
8. TATA STEEL Joda                | Hydraulic Disc Brakes with Smooth Braking System | Downhill Conveyor            |
9. L & T Kolkata-Northern Coal Field Project | Hydraulic Disc Brakes with Smooth Braking System | Downhill Conveyor            |
10. MSPL-Hospet                   | Hydraulic Disc Brakes with Smooth Braking System | Downhill Conveyor            |
11. FL SMIDTH-Chennai             | Hydraulic Brakes with Smooth Braking System | Downhill Conveyor            |
12. Thyssenkrupp-Pune             | Thruster Drum Brakes / Hydraulic Disc Brakes / Rail Clamp | Convoyor and Stacker         |
13. BGR Energy-Chennai            | Thruster Drum Brakes / Rail Clamp            | Convoyor and Stacker         |

**WINDER**

1. A P Trivedi & Sons            | Hydraulic Disc Brake                        | MINE WINDER                  |
2. Emco Winches, Holland         | Hydraulic Disc Brake                        | WINCH                        |
3. Maheswari Mining Corporation | Hydraulic Disc Brake                        | WINCH                        |

**CRANE**

1. MUKAND LIMITED-Mumbai         | Hydraulic Disc Brakes with PLC panel / Hydraulic Rail Clamp | Crane                        |
2. KONE Crane-Pune               | Hydraulic Disc Brakes with PLC panel / Hydraulic Rail Clamp | Crane                        |
3. Anupam Industries             | Emergency Braking System used in Metro project – Riyadh | Crane                        |
4. Alpha Services                | Emergency Braking System used in Metro project - Riyadh | Crane                        |
5. Electro Mech                  | Hydraulic Disc Brakes                        | Emergency for Crane          |
6. Avon Crane                    | Hydraulic Disc Brakes                        | Emergency for Crane          |
7. TATA STEEL                    | Hydraulic Disc Brakes - Emergency Brake      | LD-II Hot Metal 250 T Crane   |
8. JSW LIMITED-Kutch&Vasind      | Hydraulic Disc Brakes with PLC panel and Hydraulic Power Pack. | Crane                        |
9. UNIQUE CRANE-Nashik           | Hydraulic Disc Brakes with PLC panel and Hydraulic Power Pack. | Crane                        |

**STEEL**

1. TATA Steel CRM                | Drum Brakes                                  | Crane                        |
2. TATA Tin Plate                | Pneumatic brakes                             | Process Line                 |
3. CMI FPE                      | Hydraulic Disc Brake                         | Mill(ETR/DTR)                |
4. JSW Group                     | Hydraulic Disc Brake / Pneumatic Brake       | Mill(ETR/DTR)                |
5. Bhushan Group                 | Hydraulic Disc Brake / Thruster Brakes / Rail Clamp | Mill(ETR/DTR)                |