



## SIME brakes

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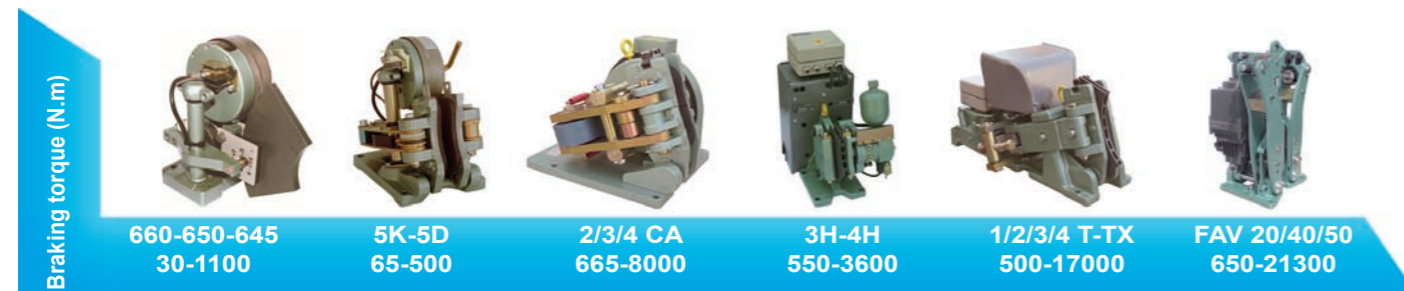
safety in motion

Stromag France, *industrial disc brakes world leader*, has developed, installed and maintained worldwide tens of thousands of safe, performant and complete braking solutions for:

- Port cranes
- Steel works cranes
- Coal and Nuclear power plants
- Pedestrian transport equipments
- Windmills
- Mines, belt conveyors

Stromag France is ISO 9001-V2000 certified

### Service disc brakes



### Emergency disc brakes



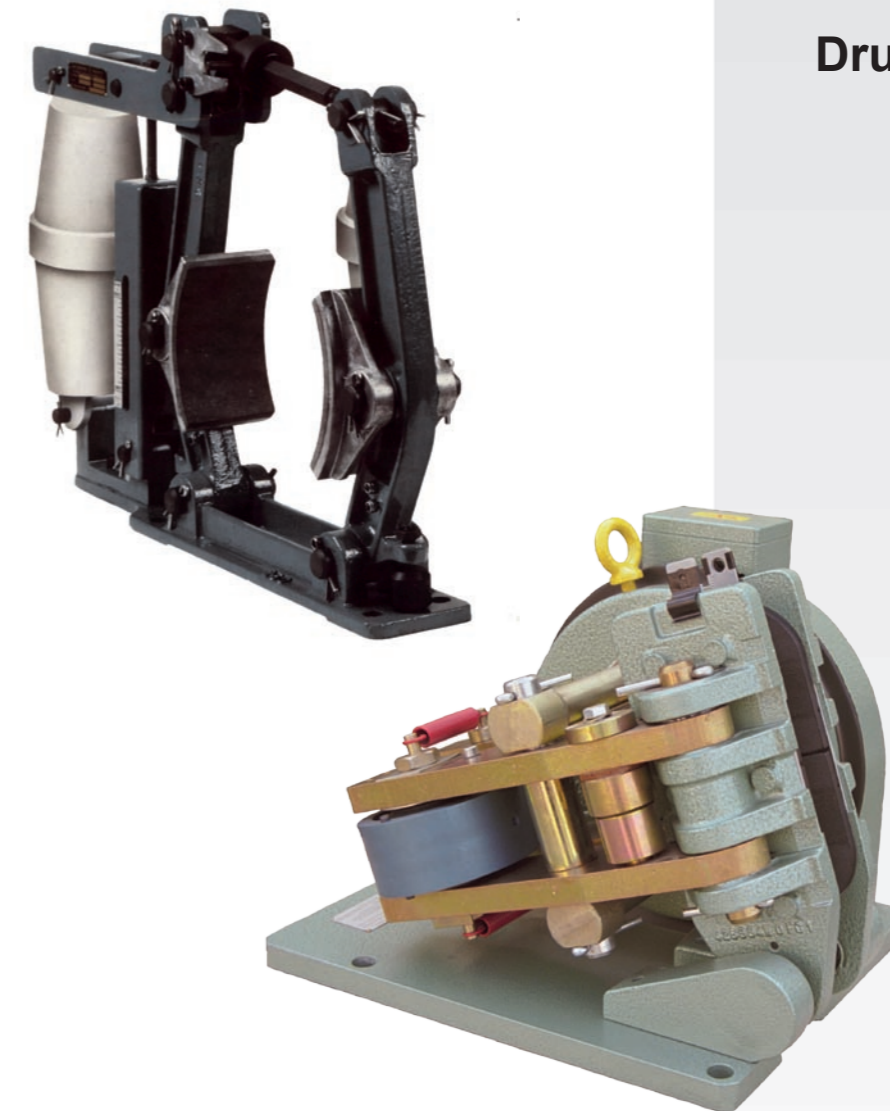
### EXPORTATION :

**HEAD OFFICE: Stromag France SAS**  
 20, allée des Erables - B.P. 40004  
 95911 - ROISSY C.D.G. CEDEX  
 FRANCE  
 Tel: +33.(0)1.49.90.32.20  
 Fax: +33.(0)1.49.89.06.38  
 Email: sales@stromagfrance.com  
 http://www.stromagfrance.com

### REPRESENTATION:

ALGERIA	GREECE	PAKISTAN
AUSTRALIA	INDIA	SOUTH AFRICA
AUSTRIA	ITALY	SPAIN
BELGIUM	JORDAN	SWEDEN
CANADA	KOREA (South)	SWITZERLAND
CHINA	LUXEMBURG	TAIWAN
DENMARK	MAURITANIA	TUNISIA
EGYPT	MOROCCO	UNITED KINGDOM
FINLAND	NETHERLANDS	U.S.A.
FRANCE	NEW ZEALAND	
GERMANY	NORWAY	

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Disc brakes

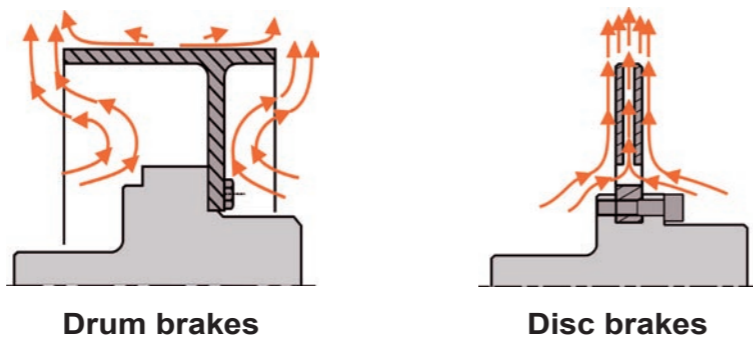
VS

Drum Brakes

## DISCS vs. DRUMS: a question of PERFORMANCE !

### Energy dissipation

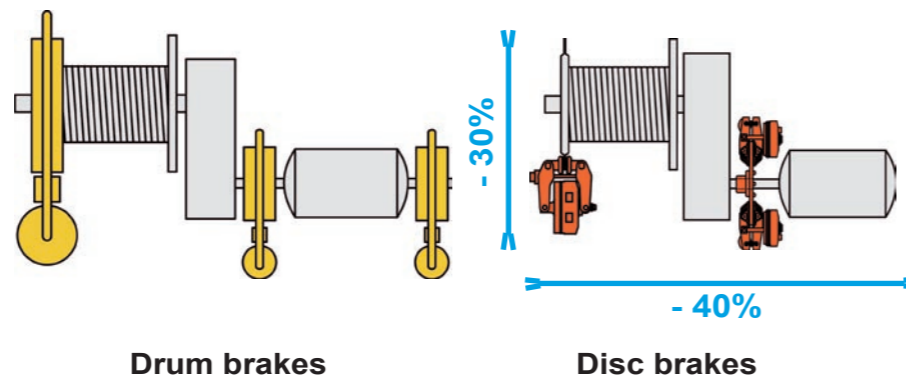
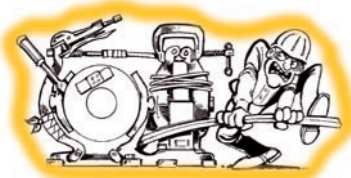
Disc brakes provide larger cooling air volume and more effective radiating surfaces.  
Ventilated discs are available



Disc brakes require fewer adjustments (no drum dilatation → less lining wear)

### External dimensions

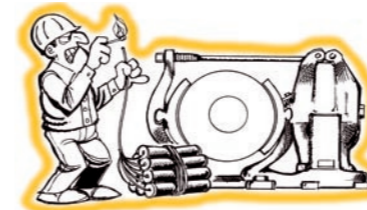
Disc brakes need less physical room and clearance for maintenance



Smaller motors, trolleys, couplings..

### Inertia - response time

Disc brake inertia is lower than drum brake's (60% less)



Shorter response time, no need to oversize brakes

and also..

### Automatic wear compensation

### 12 times faster lining replacement

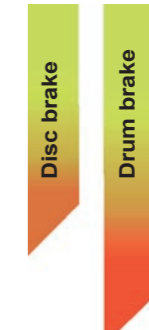
### Standardization

Stopping distance (same braking torque)



+ 30%

Generated energy (same braking torque)



+ 36%

Braking torque (same stopping distance)



+ 50%

Service disc brakes torque is steady over lining life

No need to dismount Stromag disc brakes: replacing pads takes only 5mn. (60mn. for drum brakes)

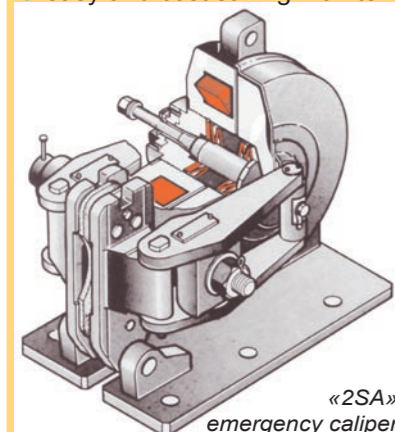
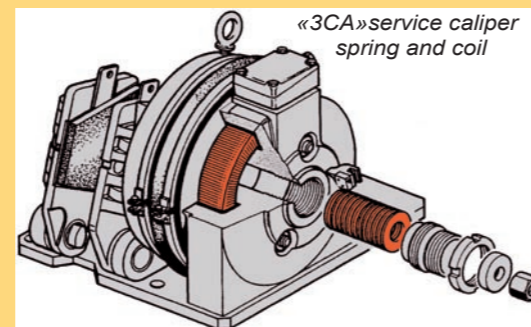
Spare parts reference list may be halved

## Service and Emergency brakes

Stromag provides spring applied fail to safe Service and Emergency brakes.

Service brakes must withstand heavy day-to-day duty. Stromag service calipers feature :

- short response time, low inertia
- ventilated discs for even better energy dissipation
- large and symmetrical lining/disc clearance
- automatic wear compensator
- constant braking torque over lining life
- easy and cost saving maintenance



Emergency brakes protect personnel and equipments in case of drive-line failure.

Stromag emergency calipers feature :

- short response time
- constant braking torque over lining life
- world's most powerful electromagnetic caliper (2SA)
- option: manual or controlled lowering; after an emergency braking, the operator can let down slowly the load to safety

## Electromechanical or hydraulic release ?

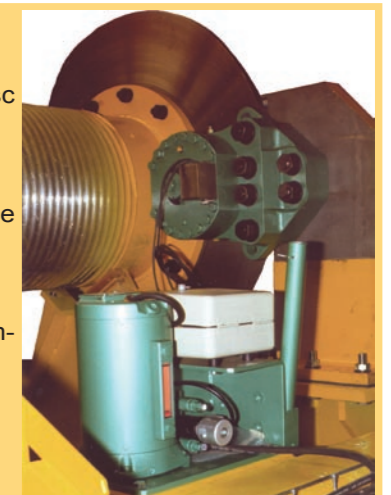
Choose release technology keeping in mind that Stromag masters both technologies: our disc brakes are the safest on the market !

### Electromechanical disc brakes

Electromechanical disc brakes have a long lasting history of reliability and immunity from on-site conditions

### Hydraulic disc brakes

Hydraulic disc brakes allow greater braking torques while equipment remains relatively compact



Left: trolley of a 30 tons coil handling crane; electromechanical brakes  
- 3CA /service caliper -2SA /emergency caliper  
Up /right: 350 tons laddle crane fitted with hydraulic brake  
- SH15 hydraulic emergency caliper + C210 power unit