

SAB Drum Brakes with Thrusters North America



SAB DRUM BRAKES ARE ASSEMBLED AND SUPPORTED IN NORTH AMERICA

Series SAB Drum Brakes are assembled and supported by Wichita Clutch, in Wichita Falls, Texas in the United States.

Series SAB Drum Brakes with Thrusters

FOR STEEL MILL CRANES

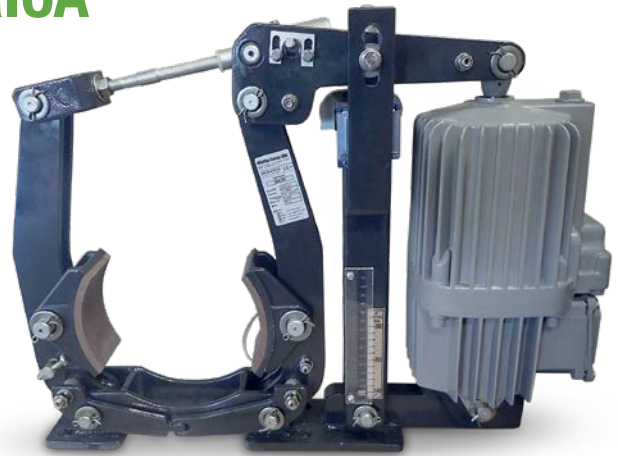
A leading steel producer needed a robust replacement braking solution for the overhead cranes at its round and round-corner square bar mill in the Southeastern U.S. The mill was experiencing repeated problems with the existing drum brakes and thrusters installed on multiple cranes throughout the mill.

The thruster seals were leaking because they couldn't withstand the harsh mill environment. The brakes often failed, causing an excessive amount of unplanned service delays and production stoppages. The most trouble was experienced on the cranes near the furnace where the thrusters needed to be replaced after less than a year due to heat and contamination damage.

The brakes, installed between the hoist's drive motor and gearbox, or directly on the hoist drum, function as service (holding) brakes. Each crane utilizes two to four thrusters. Rectifiers control the crane's electric motors. However, when the crane is stopped, it actually moves back and forth slightly as the rectifiers try to correct the crane's position. The drum brakes engage to securely hold the crane safely and precisely in a single position.

After visiting the mill with a distribution partner, our engineers worked closely with the mill's crane maintenance engineering team. After successful in-plant prototype testing, we were initially awarded an order to replace a majority of the competitor brakes. Recently, the distributor was directed to supply SAB units for all future brake replacements.

The Series SAB drum brakes with electrohydraulic thrusters supplied follow the AISE N.11 normative and are sized for drum diameters between 6" and 30". All units featured our exclusive "Steel Makers Option" which is designed to withstand high temperature and dusty mill environments.



SAB Brakes Product Highlights

- Drum brakes with electrohydraulic thrusters
- Safety and Service brakes
- Maintenance-free, self-lubricated bushes
- Auto-aligning brake shoe device
- Galvanized steel spindles and hinges
- Automatic wear compensation
- SDB units meet DIN 15435 & DIN 15430 norms
- SAB units meet AISE N.11 - 63.120

WICHITA CLUTCH

1-860-238-4783

FEATURES AND BENEFITS

SAB Thruster Drum Brakes offer many technical advantages and options:

- an automatic system of lining wear compensation
- a torque scale for easy adjustment
- an opening proving switch (option BRLS)
- a brake engaged proving switch (option BELS)
- a manual release lever (option HRL)
- full lining wear indicators (option LWI)
- special paint or protection level (options SPA & SPR)

TS thrusters offer also a large range of options to meet requirements of every applications.

SPA SPECIAL PAINT
SPR PROTECTION LEVEL C4
options

SW-SV-AV-DV
Thruster options

Steel Works - Special Voltage Thruster
delay: Ascent Valve or Descent Valve

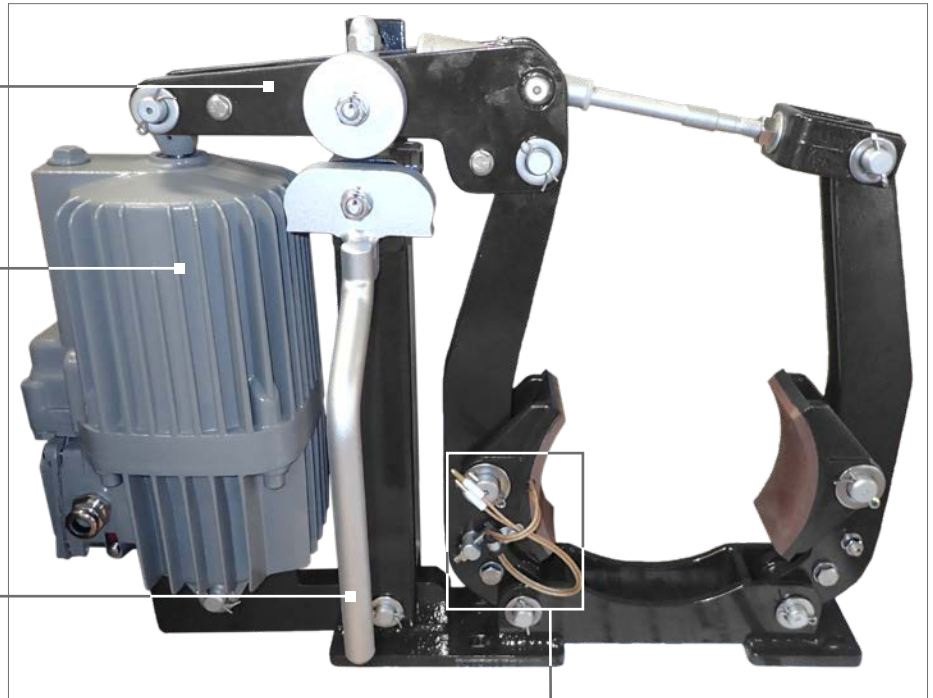
HRL HAND RELEASE
LEVER (standard)

AUTOMATIC LINING WEAR
COMPENSATION SYSTEM
(standard)

BRLS/BELS OPENING
SWITCH option

LWI FULL LINING
WEAR INDICATORS
option

TORQUE SCALE
(standard)

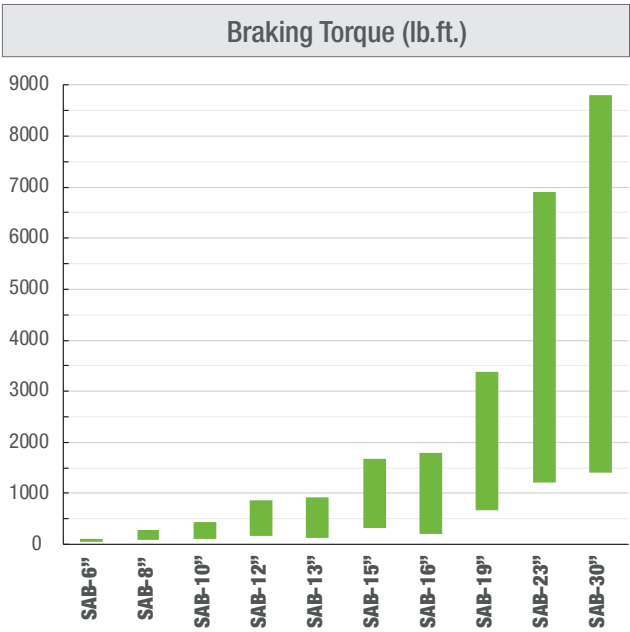


SAB THRUSTER DRUM BRAKES

SAB Thruster Drum Brakes are associated with different thrusters and springs for a large range of braking forces.

Protected against adverse environmental effects in their respective applications, they have precision tuned safety functions.

They permit easy adjustment of the braking torque with an accurate scale control following the demands of the AISE No. 11.



Standard voltage	230 / 460VAC 60Hz
Weight	From 70 to 980 lb
H x W x D	16.5 x 17 x 6.3 inch to 44.5 x 68 x 9.45 inch
Nominal Braking Torque	55 to 8800 lb.ft
Drums	6 to 30 inch

SAB DRUM BRAKES

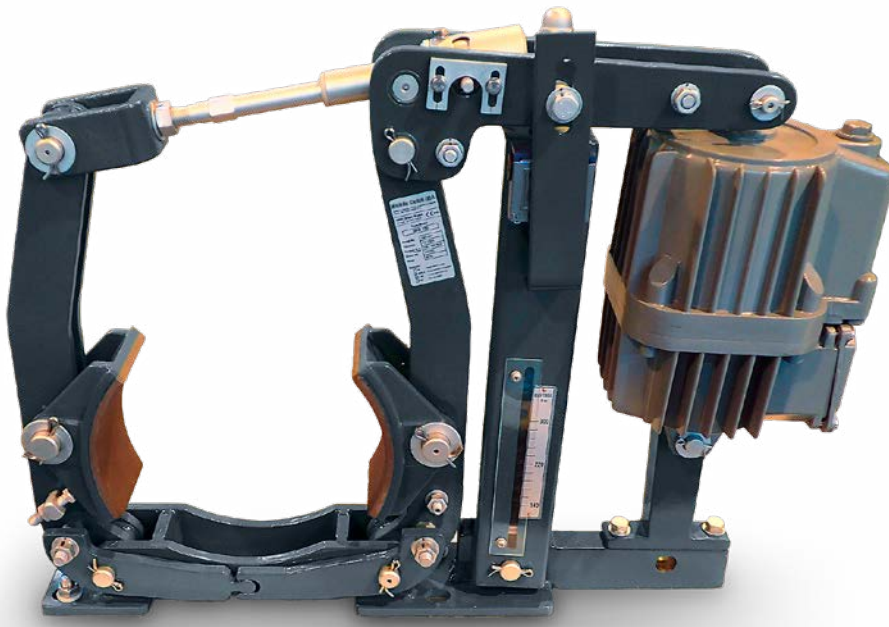
TECHNICAL DATA AND DIMENSIONS

According to standard **AISE N. 11 - 63.120**

- Spring application braking
- Thruster release
- Standard voltage 230/460 VAC 60Hz
- Paint color RAL7021
- Protection level C4M
- Automatic lining wear compensation
- Brake shoe auto-aligning device
- Scale for torque adjustment
- Brake lever synchronization
- Aluminium shoes with non asbestos organic linings
- Self lubricated bushings at main hinge points
- Galvanized steel spindles and hinges

Operating conditions

- Ambient temperature : -20°C to 50°C
- Relative humidity no higher than 90%
- IP rating : IP65



OPTIONS :

AV - DV	Thruster delay : Ascent Valve or Descent Valve
BELS	Brake Engaging Limit Switch
BRLS	Brake Release Limit Switch
HRL	Hand release lever with or without stop
HRLM	Switch for hand release monitoring
LWI	Full lining wear indicators
SPA	Paint according to Customer Specification
SV	Special Voltage

THRUSTER TECHNICAL DATA :

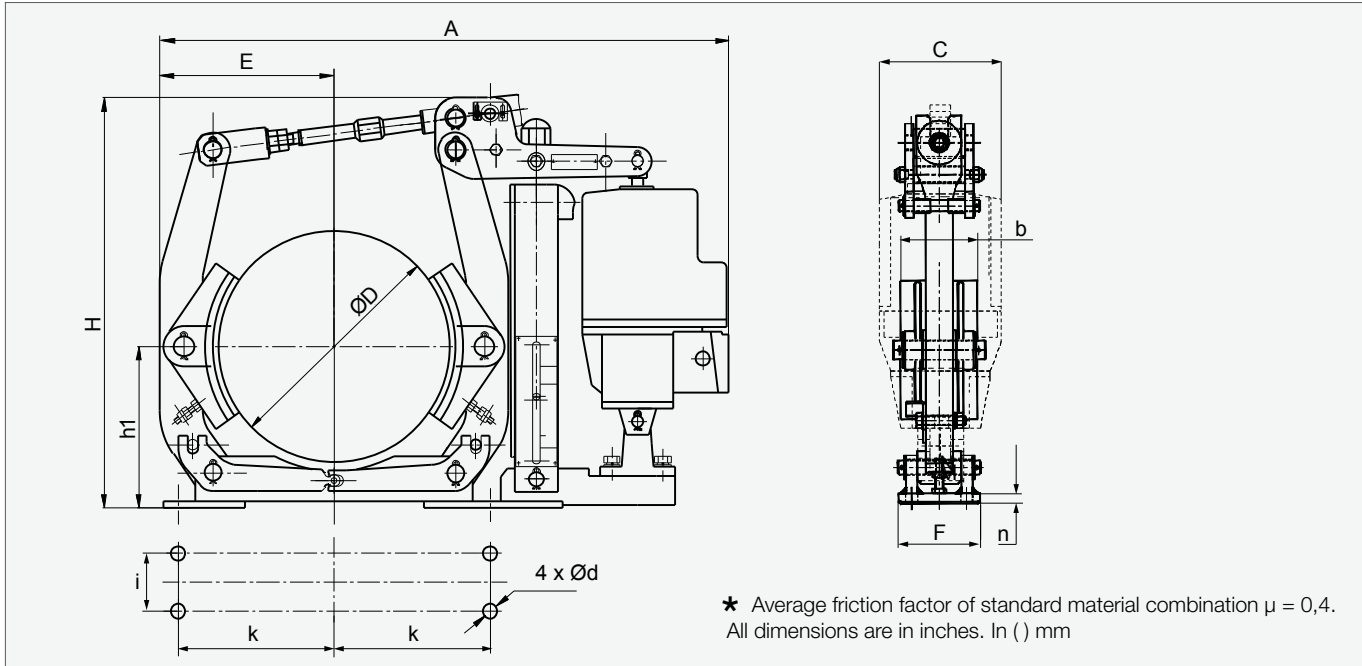
Thruster type	Power (W)	Current at 400 V (A)	Weight (kg)
TS 230/5	200	0.5	14
TS 300/5	200	0.5	14
TS 500/6	210	0.5	23
TS 800/6	330	1.2	24
TS 1210/6	330	1.2	39
TS 2010/6	450	1.3	39
TS 3010/6	550	1.4	40

Due to continuous development and improvement, all dimensions and characteristics are subject to change without notice.

SAB DRUM BRAKES

TECHNICAL DATA AND DIMENSIONS

According to standard **AISE N. 11 - 63.120**



Brake type	Thruster TS	M _{BR MAX} (lb-ft) ★	A	b	C	D	d	E	F	H	h1	i	k	n	Weight (lb)
SAB – 6"	230/5	55-110	22.4	1.65	6.3	6 (152)	3/8 (9.5)	5.5	7.25	16.5	4.75 (120)	3 (76)	4 (102)	0.38	70
SAB – 8"	230/5	85-190	25.16	3.00	6.3	8 (203)	0.69 (17)	6.73	7.28	19.29	7.0 (178)	5.76 (146)	3.25 (83)	0.39	77
	300/5	140-275													84
SAB – 10"	230/5	110-220	28.46	3.54	6.3	10 (254)	0.69 (17)	8.07	7.87	21.65	8.38 (213)	6.26 (160)	4.0 (102)	0.47	100
	300/5	140-280													106
	500/6	220-440	29.92		7.48	116									
SAB – 12"	300/5	170-345	32.44	5.51	6.3	12 (305)	0.81 (21)	10.40	11.00	23.86	9.88 (251)	9.0 (228)	5.75 (146)	0.55	155
	500/6	270-540	164												
	800/6	430-855	33.6		7.48						176				
SAB – 13"	300/5	180-375	32.44	5.51	6.3	13 (330)	0.81 (21)	10.40	11.00	23.86	9.88 (251)	9.0 (228)	5.75 (146)	0.55	160
	500/6	295-590	164												
	800/6	460-930	33.6		7.48						176				
SAB – 15"	500/6	330-665	40.20	6.49	7.48	15 (381)	1.06 (27)	12.20	13.38	28.15	12.13 (308)	10.76 (273)	7.5 (191)	0.55	300
	800/6	515-1030													308
	1210/6	840-1675	39.76		9.45					335					
SAB – 16"	500/6	355-710	40.20	6.49	7.48	16 (406)	1.06 (27)	12.20	13.38	28.15	12.13 (308)	10.76 (273)	7.5 (191)	0.55	304
	800/6	550-1110													308
	1210/6	900-1800	39.76		9.45					335					
SAB – 19"	800/6	665-1330	46.46	8.50	7.48	19 (483)	1.06 (27)	14.64	15.35	30.27	13.25 (337)	13 (330)	9.25 (235)	0.79	445
	1210/6	1055-2110													455
	2010/6	1700-3390			9.45					455					
SAB – 23"	1210/6	1220-2440	53.15	10.98	9.45	23 (584)	1.31 (33)	17.60	18.90	41.0	15.88 (403)	16 (406)	11.75 (298)	0.79	695
	2010/6	1900-3870													695
	3010/6	2850-5760													705
	3010/12	3450-6900													
SAB – 30"	1210/6	1400-2800	70.00	14.01	9.45	30 (762)	1.56 (40)	21.57	22.83	53.34	20.75 (527)	19 (482)	15.0 (381)	1.06	950
	2010/6	2360-4720													950
	3010/6	3650-7370													980
	3010/12	4400-8800													

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APPLICATION DATA FORM

Email or Fax to: Wichita Clutch | Customer Service and Engineering

Email: wichita.info@wichitaclutch.com

Phone: +1-940-723-3400

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CONTACT INFORMATION

Name: _____ Date: _____

Email: _____ Phone: _____

Company: _____ Location: _____

ENQUIRY INFORMATION

Motor Brakes:

Motor Power: _____

Motor Speed: _____

Shaft Diameter: _____

Load Brakes:

Torque Range: _____

Shaft Speed: _____

Shaft Diameter: _____

Rotational Inertia to stop: _____

Additional Application Notes:

Inform us of any details of brake requirements; dynamic braking, backlash, lifetime, response time, etc.

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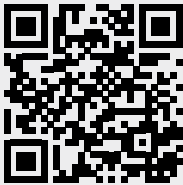
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