## SUGAR MILL DRIVES







## BREVINI POWER TRANSMISSION



Our innovative and global Company established in 1960 focuses on the engineering production and distribution of mechanical transmissions: Brevini offers a complete range of planetary gear units helical gearboxes and winches.

Brevini Power Transmission is a growing organization with a consolidated turnover of more than 320 million Euros and with 150,000 gearboxes produced per year. Our direct network of 26 Subsidiaries and 4 Service Centers provide excellent service and after sales support.

# BREVINI HEAVY DUTY POWERFUL SOLUTIONS





Brevini is a planetary partner who understands your applications, specifies the right equipment and adds value at every step. Brevini has kept materials moving through heavy duty operations for more than fifty years and is with you every step of the way. From purchase and installation to testing, monitoring, repair and overhauls, Brevini provides outstanding lead times and customer service. Count on our product quality, on-the-spot field service and industry-leading technical support to prevent costly maintenance, repairs and shutdowns, maximizing your return over the product's total lifecycle.





With sales and service operations worldwide (26 subsidiary companies) and a vast network of distributors, we deliver exactly what you need, when you need it.

Mining & mineral processing
Bulk materials handling and storage
Tunnel boring machines
Steel & metals processing
Cement plants
Sugar mills and plants



Product Dimensions are indicative.

Brevini has the right to change catalogue data, dimensions and performance, making corrections at any time without prior notice.

### Brevini Planetary Gearbox solutions for Sugar Industry:

### 1. Single Drive

### 2. Multiple Drive

- 2.1 Independent Drive
- 2.2 Assist Drive

### 3. Crystallizer

#### 4. Accessories

- 4.1 Forced Cooling System
- 4.2 Output Configuration: FR FS
- 4.3 Foot Bracket
- 4.4 Torque Arm
- 4.5 Technical Form for collecting data



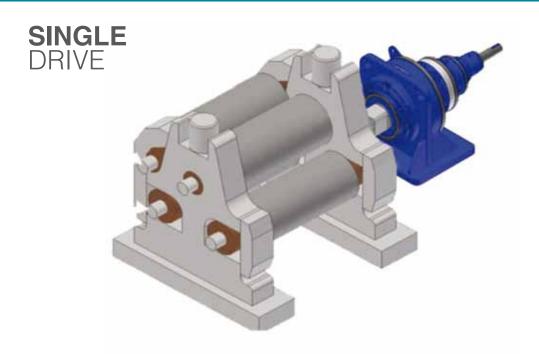
- 1 Brevini Modular Planetary Solution:
   Compactness: Foot Bracket or Shaft Mounted
   High Mechanical Efficiency
   Remarkable Power Saving
   Installation Cost Reduction: Foundation not required
   Maintenance Cost Saving
   Condition Monitoring Set Up
- Conventional helical gearbox driven by steam turbine

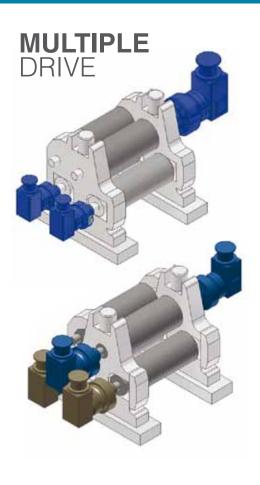






### BREVINI MILL DRIVING CONCEPT:





Multiple Drive concept is becoming more and more common.

### Main advantages are:

To split torque/power for each Roller, according with the load of production

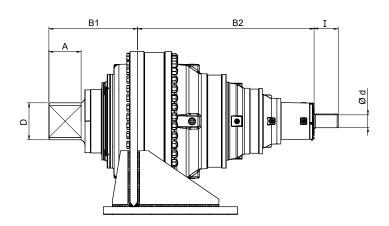
### Less power demand

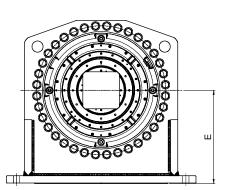
To have same size of Planetary Gearbox for each Mill

### Less spare part components

Increase the **EFFICIENCY** of the Transmission System and Increase the **PRODUCTION OUTPUT** 

# SINGLE DRIVE





### Technical data (3 stages)

GEARBOX MODEL	B1	B2	А	D	1	Ød	E	T2 ref. Nm
■ S5000	608	1264	240	280	210	110	730	740.000
■ S7500	689	1456	240	300	210	110	800	1.050.000
■ S10000	782	1689	280	340	310	140	920	1.500.000
■ S15000	820	1937	330	360	310	160	980	2.170.000
■ S20000	1100	1728	400	450	(1)	(1)	1150	3.150.000

- Use the torque values for the calculation of Service Factor: SF minimum = 2
- Selections based only to SF check will not be accepted Ask Brevini the Gearing and Bearing life time calculation

(1) available on request



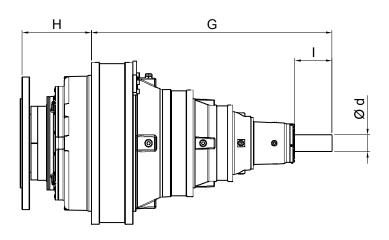


Brevini Planetary Gearbox in Brazil



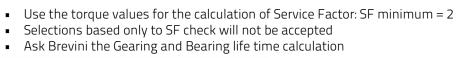
# MULTIPLE DRIVE

### **INDEPENDENT/ASSIST DRIVES**



### Technical data (3 stages)

GEARBOX MODEL	н	G	1	Ød	T2 ref. Nm
■ S1800	304	1114	130	80	275.000
S2500	327	1204	130	80	380.000
■ S3500	370	1339	210	100	540.000
■ S5000	435	1474	210	110	740.000
■ S7500	540	1666	210	110	1.050.000

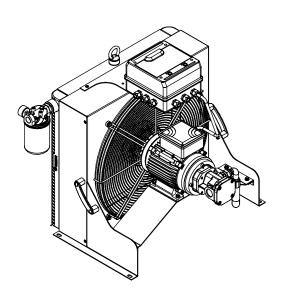




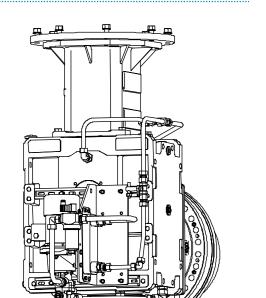


Brevini Planetary Gearbox in Brazil

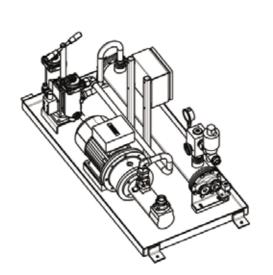
# FORCED COOLING SYSTEMS



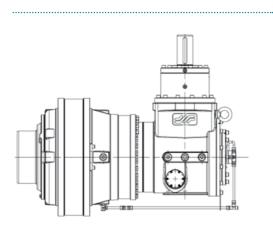
Air-Oil Forced Cooling System

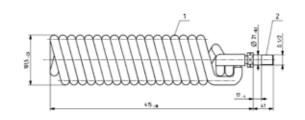


Water-Oil Forced Cooling System Directly mounted on the gearbox



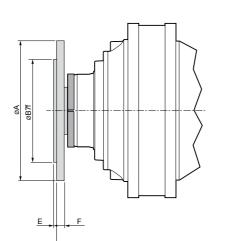
Water-Oil Forced Cooling System

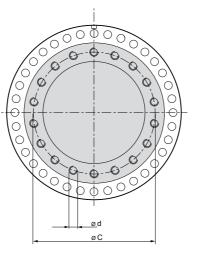




Internal Water-Oil Forced Cooling System

### **OUTPUT CONFIGURATION**





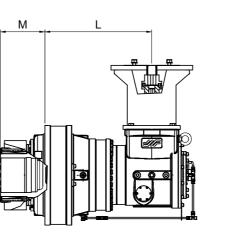
Technical data

ARBOX MODEL	А	B(f7)	E	F	С	Ød
S300	360	220	10	30	300	M30
S400	360	220	10	30	300	M30
S600	400	260	10	30	340	M30
S850	450	310	10	35	395	M30
S1200	510	375	10	35	450	M30
S1800	585	445	10	40	530	M30
S2500	655	480	10	40	580	M36
S3500	730	545	10	50	650	M36
S5000	800	620	10	50	730	M36
S7500	960	650	10	60	(1)	(1)

(1) = Largest sizes available on request

Brevini "FR" gearbox output is a configuration with Splined Hollow Shaft and Rotating Driving Flange (supplied by Brevini) to mount the gearbox directly on the roll shaft counter-flange, assuring a perfect alignment and full transmissible driving torque.

# MULTIPLE DRIVE



INDEPENDENT/ASSIST DRIVES

### **Technical data**

AKBOX MODEL	IVI	L	
S1800	322	776	
S2500	358	822	
S3500	368	935	
S5000	438	1017	
S7500	530	1051.5	

ref. Nm	GEARBOX MODEL	M	L
5.000	■ SL2PLB18020	322	729.5
0.000	■ SL2PLB25025	358	806
0.000	■ SL2PLB35031	368	937
0.000	■ SL2PLB50031	438	1022
50.000	■ SL2PLB75031	530	1273

- Use the torque values for the calculation of Service Factor: SF minimum = 2
   Selections based only to SF check will not be accepted
   Ask Brevini the Gearing and Bearing life time calculation

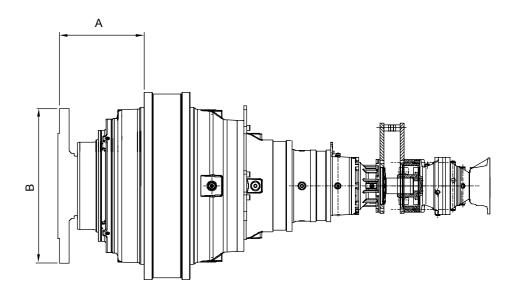




Brevini Planetary Gearbox in India

# SUGAR MILL DRIVES

### **CRYSTALLIZERS**

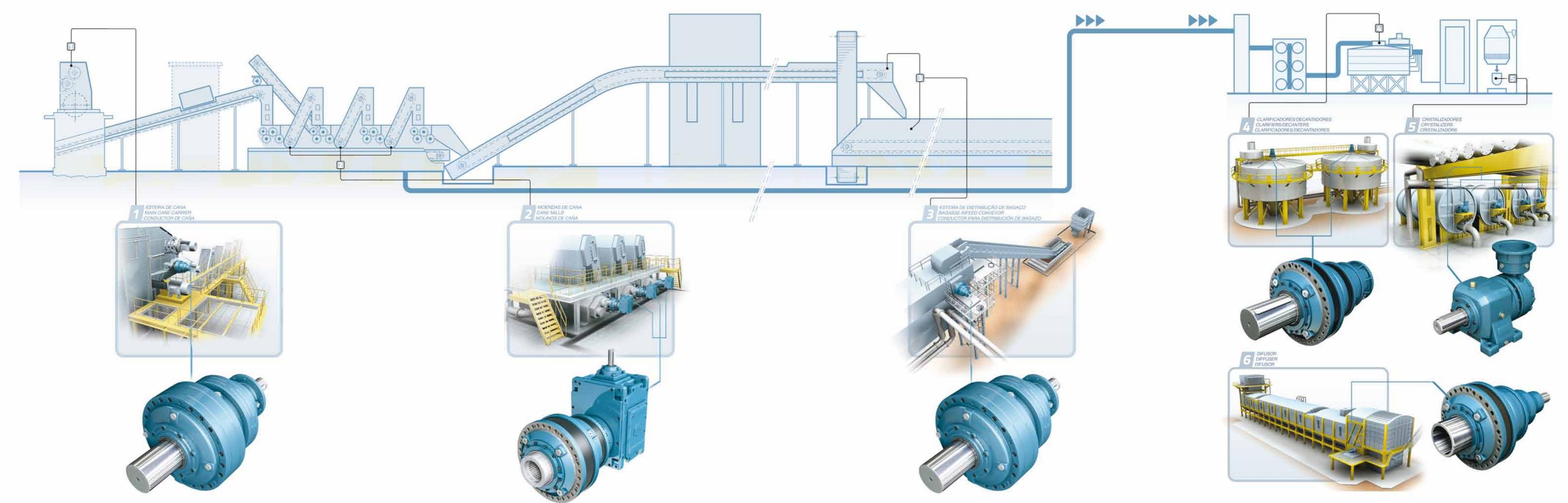


ARBOX MODEL	А	В
S300	187	360
S400	210	360
S600	230	400
S850	270	450
S1200	290	510

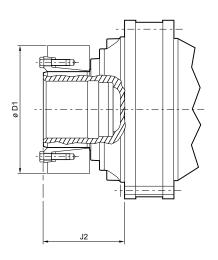
GEARBOX MODEL	А	В
■ S1800	304	585
■ S2500	327	655
S3500	370	730
■ S5000	435	800
■ S7500	540	960

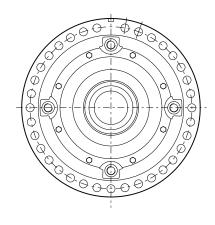


Brevini Planetary Gearbox in Mozambique

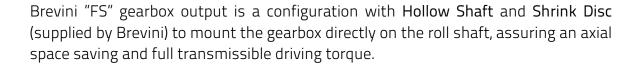


# **OUTPUT CONFIGURATION** FS



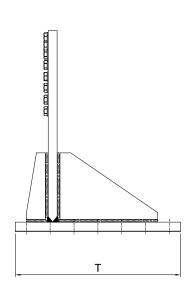


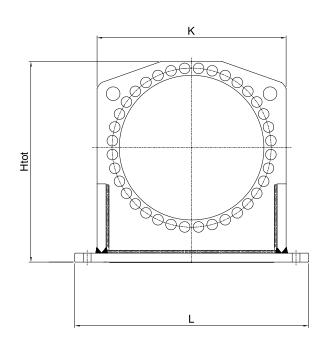
GEARBOX MODEL	J2	D1
■ S300	178	320
<b>S400</b>	208	320
■ S600	235	370
■ S850	257	405
■ S1200	315	460
■ S1800	322	485
S2500	358	570
■ S3500	368	590
<b>S5000</b>	438	680
■ S7500	530	850
■ S10000	630	940
■ S15000	710	970
<b>S20000</b>	800	1230





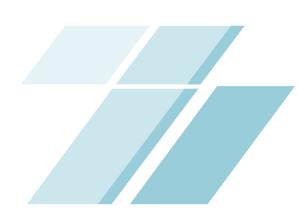
### **FOOT BRACKET**



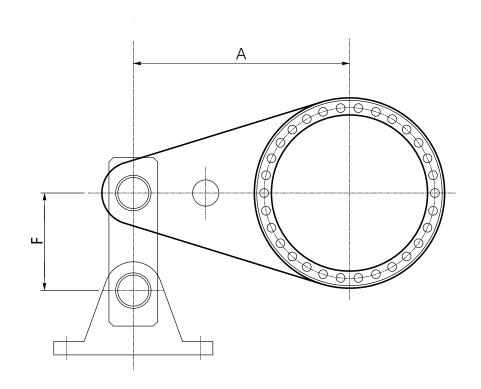


GEARBOX MODEL	Т	Htot	L	К
■ S5000	910	1220	1540	1210
■ S7500	1000	1380	1700	1320
■ S10000	1100	1593	1900	1500
■ S15000	1300	1730	2200	1650
■ S20000	1660	2015	2350	1900





### **TORQUE ARM**



GEARBOX MODEL	А	F
■ S300	600	150
■ S400	700	160
■ S600	800	180
■ S850	1000	200
■ S1200	1000	230
■ S1800	1200	250
S2500	1400	300
S3500	1600	350
<b>S5000</b>	2000	380
■ S7500	(1)	(1)
■ S10000	(1)	(1)





### **DATA FORM**

Date					
COMPANY					
Address					
Phone		email		fax	
Description of the Applica	tion				
	New Applicatio	n	Replac	ce an Existing S	olution
Selected Power needed	KW	Нр	Actual Power installed	KW	Нр
Torque	Nm	FT-Lbs	Torque	Nm	FT-Lbs
Output speed	rţ	om	Output speed	rp	m
Size of motor	Speed Installed Power Hrz Efficiency NEMA IEC				

NOTE/Drawing/Sketch

### MILL DRIVES & ASSIST DRIVES



### CANE CARRIERS









# CRYSTALLIZERS CLARIFIERS











Over **5000** active clients worldwide

Brevini Power Transmission's internationalization process is the key to the development of branches and production plants that consolidate its direct presence in 30 countries.



**Engineering & Service Centre** 



