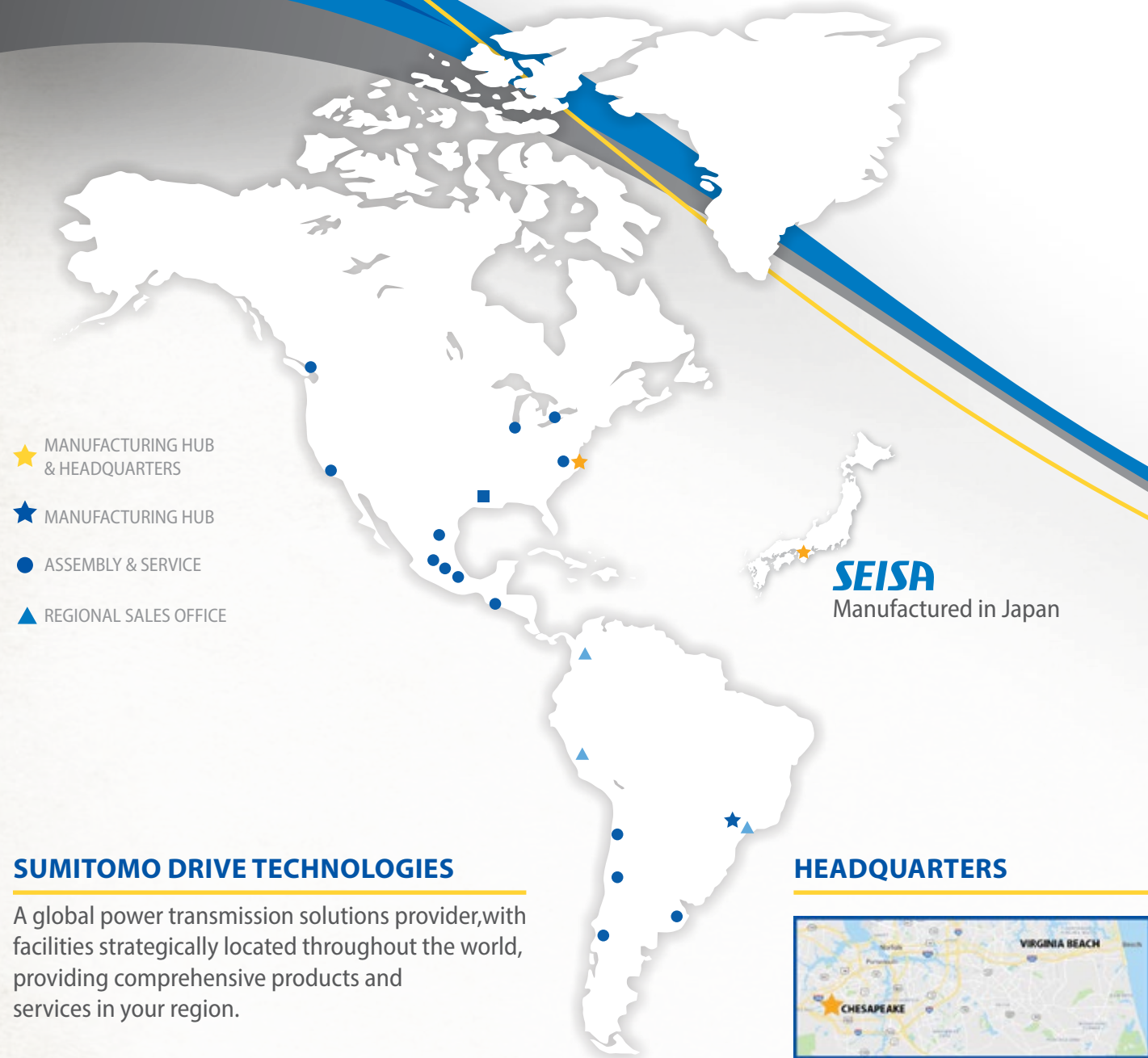


SEISA LARGE-SIZE CEMENT MILL DRIVE



- ★ MANUFACTURING HUB & HEADQUARTERS
- ★ MANUFACTURING HUB
- ASSEMBLY & SERVICE
- ▲ REGIONAL SALES OFFICE

SEISA
Manufactured in Japan

SUMITOMO DRIVE TECHNOLOGIES

A global power transmission solutions provider, with facilities strategically located throughout the world, providing comprehensive products and services in your region.

HEADQUARTERS



4200 Holland Blvd
Chesapeake, VA 23323

Email: SMA.CustomerService@shi-g.com

Phone: 757-485-3355



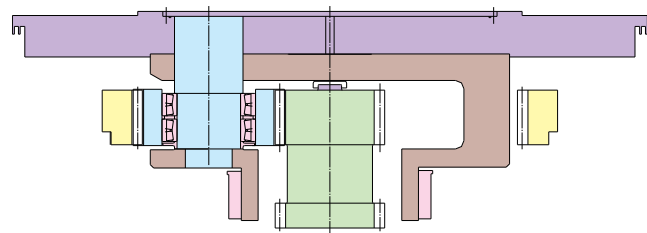
Our gear reducer is ideal for driving cement raw mills, clinker mills, and slag mills. Seisa is a global leader in mill gear reducers, having successfully supplied over 300 sets to highly satisfied customers worldwide.

FEATURES

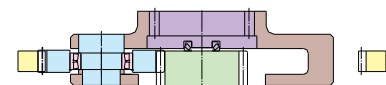
HIGH RELIABILITY

Our vertical roller mill drives feature a standardized building block design, consisting of the following block assemblies. This design ensures simplicity and provides the highest level of reliability.

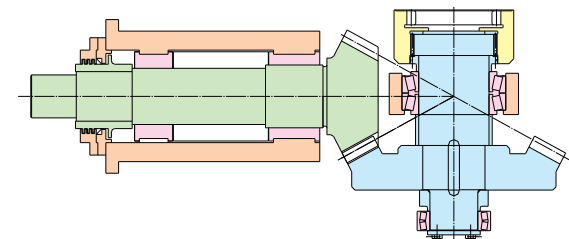
Output Flange & Main Planetary Gear Parts



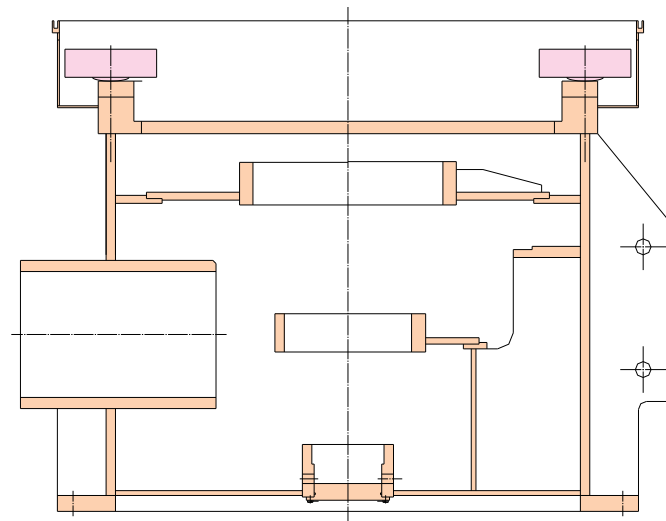
Intermediate Planetary Parts



Bevel Gear Parts



Thrust Bearing & Casing Parts

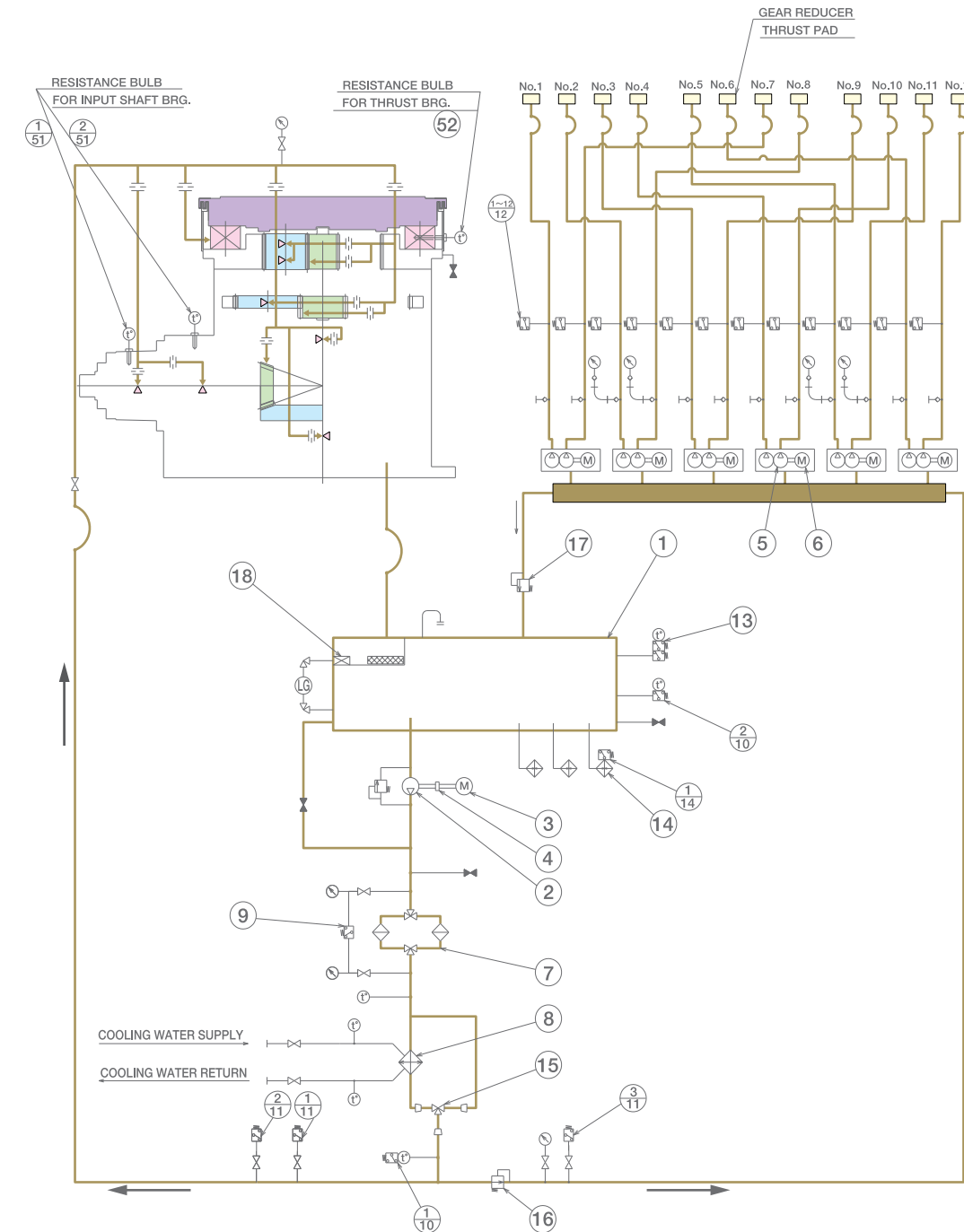


SAVING INSTALLATION COST

Thanks to its compact size and lightweight construction, our completely assembled unit is delivered directly to your site. This eliminates the need for significant on-site assembly and adjustments. As a result, installation time at the site is significantly reduced.

EASY MAINTENANCE

Maintenance primarily involves checking the lubrication system.



SYMBOL	NAME
	THERMOMETER
	PRESSURE GAUGE
	LEVEL GAUGE
	QUICK JOINT
	AIR BREATHER
	VALVE
	ORIFICE

No.	NAME OF PARTS	Q'TY
1	RESISTANCE BULB	1
2	RESISTANCE BULB	1
52	RESISTANCE BULB	1

No.	NAME OF PARTS	Q'TY
1	OIL TANK	1
2	OIL PUMP (L.P)	1
3	ELECTRIC MOTOR (L.P)	1
4	COUPLING	1
5	OIL PUMP (H.P)	6
6	ELECTRIC MOTOR (H.P)	6
7	OIL STRAINER	1
8	OIL COOLER	1
9	DIFFERENTIAL PRESS SWITCH	1
1	TEMPERATURE SWITCH	1
2	TEMPERATURE SWITCH	1
1	PRESSURE SWITCH	1
2	PRESSURE SWITCH	1
3	PRESSURE SWITCH	1
12	PRESSURE SWITCH	12
13	TEMPERATURE SWITCH	1
14	OIL HEATER	3
1	SENSBEY	1
15	TEMP. CONTROL VALVE	1
16	PRESS. REDUCING VALVE	1
17	SAFETY VALVE	1
18	MAGNET SEPARATER	1

TYPE BPP & BHP

GEAR GEOMETRY

Our planetary gears utilize a tooth form with a **25-degree** pressure angle and 1.1 module addendum, providing **13%** higher strength and **18%** greater durability compared to the commonly used tooth form with a 20-degree pressure angle.

SUN PINION AND PLANET GEARS

Our sun pinion and planet gears are made from precision-machined Cr-Mo or Ni-Cr-Mo forged steel. After carburization and hardening, they undergo tooth grinding for optimal performance.

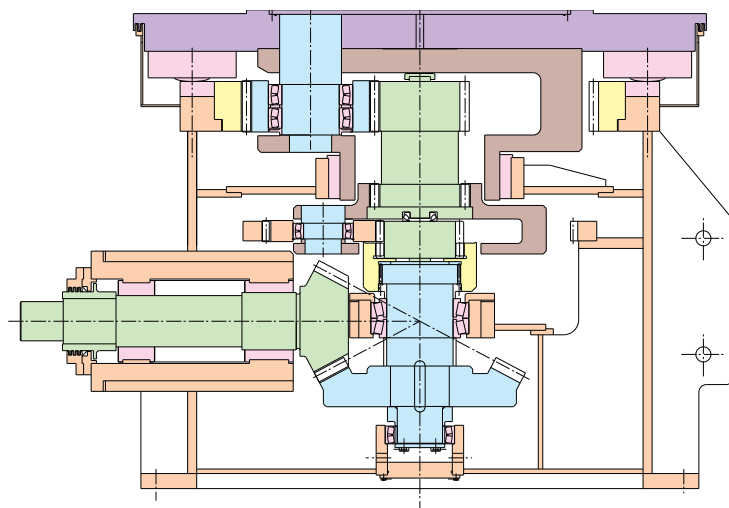
INTERNAL GEAR

The internal gear, fabricated from carbon steel or Cr-Mo forged steel, undergoes gear shaping or grinding after quenching and tempering for superior quality.

SPIRAL BEVEL GEARS

The gear teeth undergo carburization and hardening before being precision-cut using special carbide tool blades on Klingelnberg or Gleason spiral bevel gear cutting machines. This process ensures a high level of accuracy, meeting **JIS Accuracy Class 0 or 1** standards (equivalent to AGMA Class 12 or DIN Class 4).

TYPE BPP



The gear reducer for a large size mill consists of triple stage reduction of Bevel/Planetary type.



3800kW Bevel Planetary Gear Reducer for Vertical Type Roller Mill

GEARS

The design of gears is based on AGMA standards and all gears are designed with AGMA service factor 2.5 min.

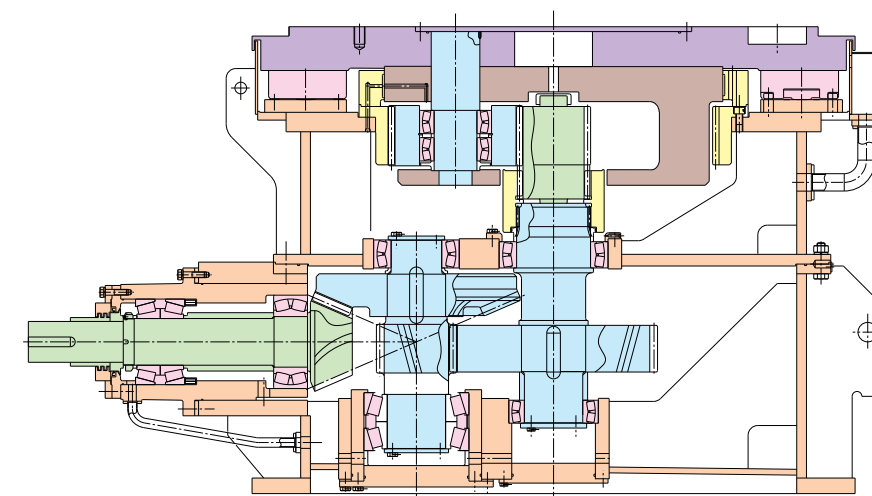
THRUST BEARINGS

For larger-sized units, hydrostatic thrust bearings maintain a required oil film thickness on each thrust pad by supplying high-pressure oil to their sliding surfaces. The independent oil feeding to each thrust pad ensures a constant oil volume and maintains the required oil film thickness, even under varying thrust loads.

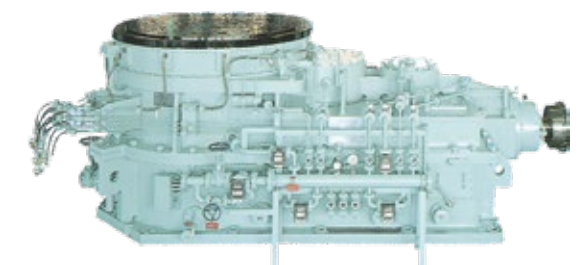
NON-DESTRUCTIVE CHECK OF GEARS

1. Chemical composition and mechanical properties are verified through the mill sheet provided by a reputable steel manufacturer.
2. Following heat treatment, materials undergo thorough ultrasonic inspection to detect and ensure the absence of any internal defects or heat treatment-induced flaws.
3. Once tooth grinding is completed, a magnetic particle inspection is conducted on the surface-hardened gear teeth to detect and verify the absence of any surface hairline cracks or similar flaws.

TYPE BHP



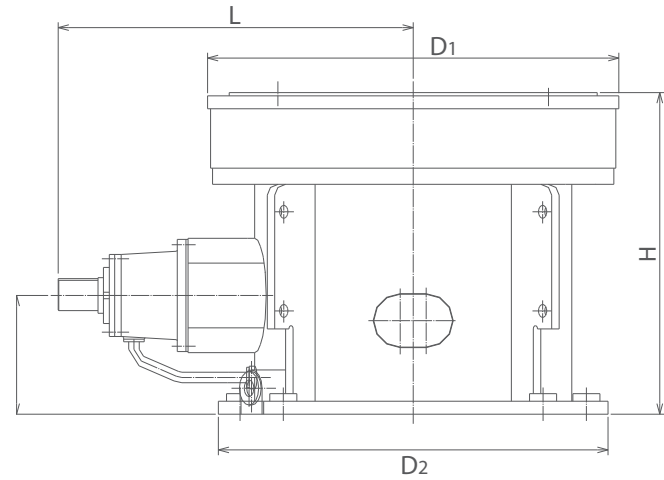
The gear reducer for medium size mill consists of triple stage reduction of Bevel/Helical/Planetary type.



3300kW Bevel Helical Gear Reducer for Vertical Type Roller Mill

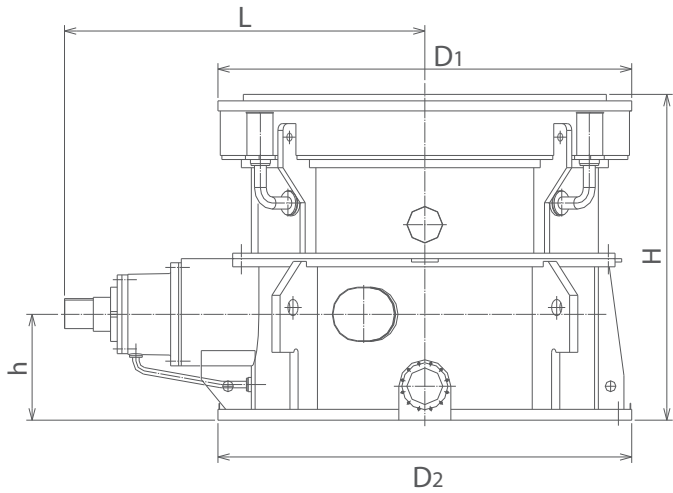
SELECTION

LARGE SIZE MILL



TYPE	NOMINAL POWER (kW)	H	D1	L	D2	h	MASS (ton)
		mm	mm	mm	mm	mm	
BPP164V	2900	2300	2900	1920	2850	700	47
BPP176V	3300	2450	3000	2000	2950	750	56
BPP190V	3600	2610	3250	2150	3200	800	70
BPP202V	4300	2740	3400	2300	3350	850	81
BPP215V	5000	2850	3550	2500	3500	930	98
BPP230V	5600	3065	3800	2650	3700	1000	120

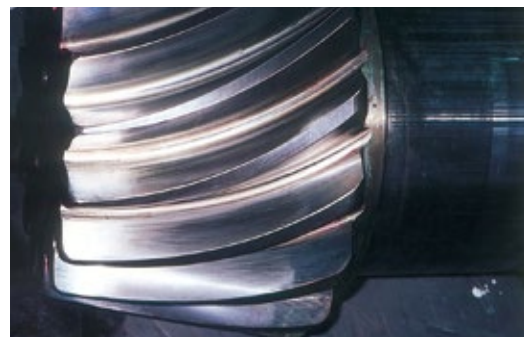
MEDIUM SIZE MILL



TYPE	NOMINAL POWER (kW)	H	D1	L	D2	h	MASS (ton)
		mm	mm	mm	mm	mm	
BHP106V	1200	1815	2200	2080	2300	710	21
BHP115V	1500	1815	2200	2130	2300	710	23
BHP127V	1750	2000	2680	2200	2400	720	33
BHP131V	2000	2220	2700	2400	2550	733	37
BHP133V	2300	2250	2750	2500	2800	760	45
BHP167V	2600	2400	3100	2700	3000	780	51



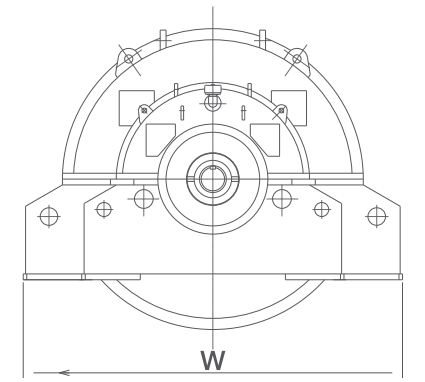
Internal Gear



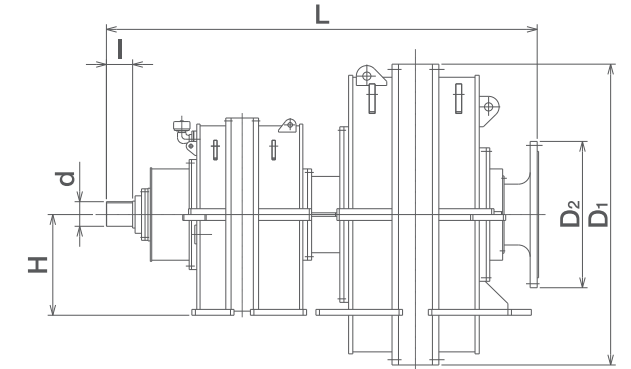
Spiral Bevel Gear



SELECTION



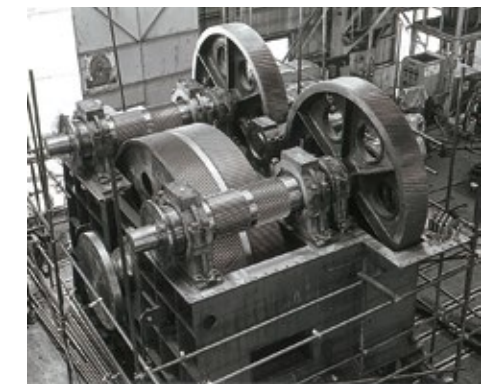
TYPE	NOMINAL POWER (kW)	L	W	D1	I	D2	H	d	MASS (ton)
		mm	mm	mm	mm	mm	mm	mm	
DPP205H	2900	3700	3000	2440	200	1250	800	190	34.0
DPP218H	3500	3900	3200	2570	224	1400	860	200	40.0
DPP240H	4200	4100	3500	2800	224	1400	950	210	50.0
DPP255H	5400	4200	3800	3000	250	1500	1100	230	65.0



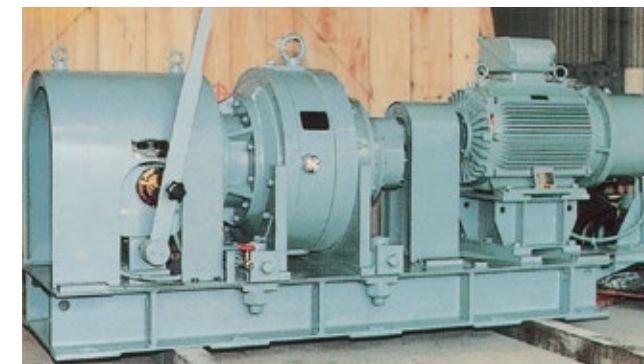
TYPE	NOMINAL POWER (kW)	L	W	D1	I	D2	H	d	MASS (ton)
		mm	mm	mm	mm	mm	mm	mm	
DPP285H	6600	4500	4100	3350	280	1550	1150	240	80.0
DPP310H	7700	4750	4300	3610	305	1650	1200	270	95.0
DPP323H	8600	5000	4400	3750	305	1700	1300	280	105.0



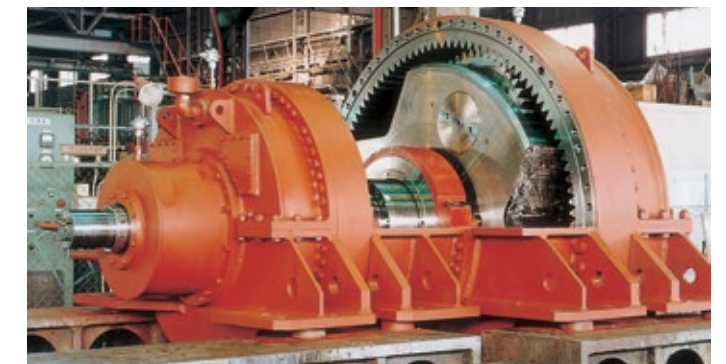
6300 kW Planetary Gear Reducer for Cement Mill



3700 kW Symmetry Type Gear Reducer for Cement Mill



Inching Device for Cement Mill



1500 kW Planetary Gear Reducer for Cement Mill