

LGZ/PGZ Automatic Bottom Discharge Scraper Centrifuges with Base Plate

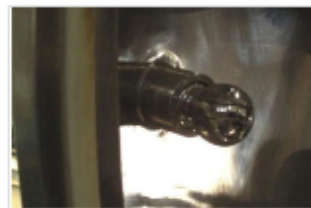


Introduction

The LGZ/PGZ automatic bottom discharge scraper centrifuges with base plate is the high-end scraper centrifuge allowing for diversified configurations and fully automatic control. This automatic discharge centrifuge is amazingly characterized by multiple protections including asepsis, sanitation, sealing and explosion proof. Our explosion-proof vertical centrifuge is the proven choice for industries of pharmacy, fine processing and food, etc.

Main Features

1. Utilization of base plate enables lower center of gravity and stable operation. Four supports require no foundation for installation.
2. Liquid damper delivers excellent vibration isolation and absorbing.
3. Independent inclined feeding tray allows for well-proportioned and controllable feeding.
4. Recoil and gas-assisted scraper minimizes cake remains and enhances regeneration of filter cloths.
5. Nitrogen protection system ensures operation safety of our automatic bottom discharge centrifuge.
6. Large hinged cover and CIP (clean-in-place) system prevents cross-contamination of production.
7. Multiple protection systems are available as over-vibration protection, over-current protection, thermal control protection, cake layer control, scraper movement protection, cover-opened protection, interlock protection between mechanical and electrical components as well as countless warnings and signs.
8. This scraper centrifuge is fitted with PLC, touch screen, variable frequency drive, dynamic braking, regenerative braking, automatic fault diagnosis, automatic human-machine interface and DCS port.
9. Interior and exterior surfaces receive polishing treatment to achieve roughness up to Ra0.2-0.4 μ m, meeting related requirements of cGMP (Current Good Manufacturing Practice).

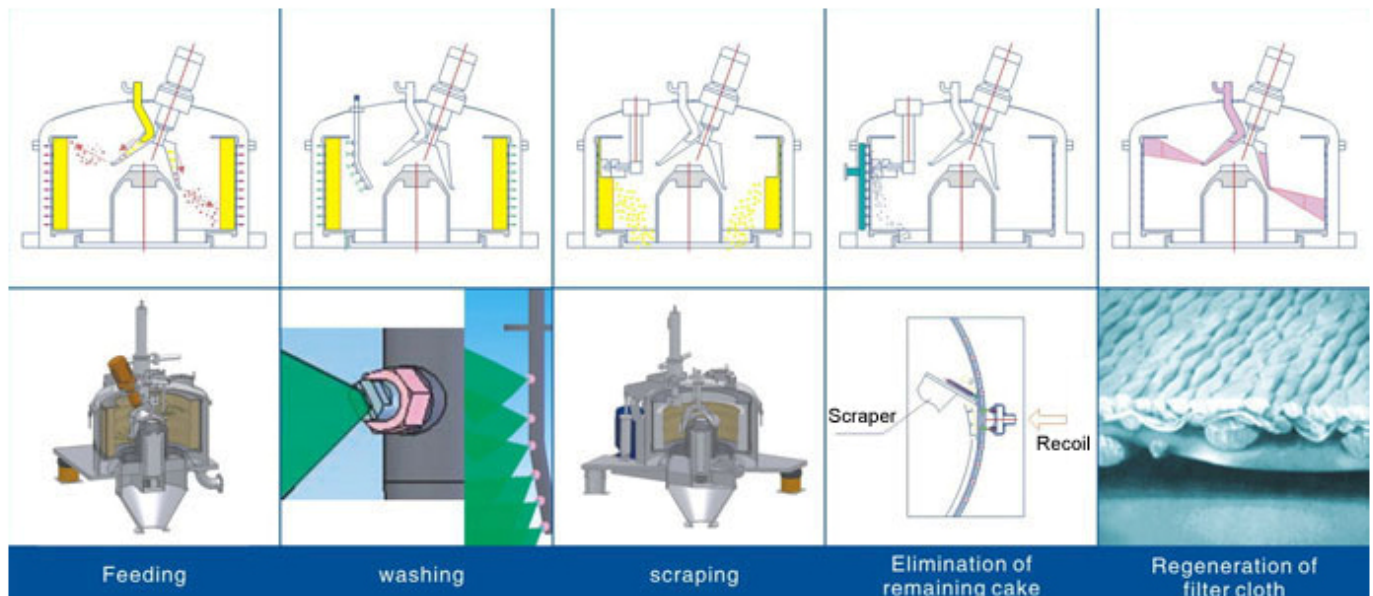


Applications

This automatic bottom discharge scraper centrifuge is mainly applicable for liquid-solid separation of slurries containing solid phases as well as fibroid substances. In particular, our automatic scraper centrifuge is highly recommended for separation of substances featuring high viscosity, fineness as well as toxicity, combustibility and explosibility.

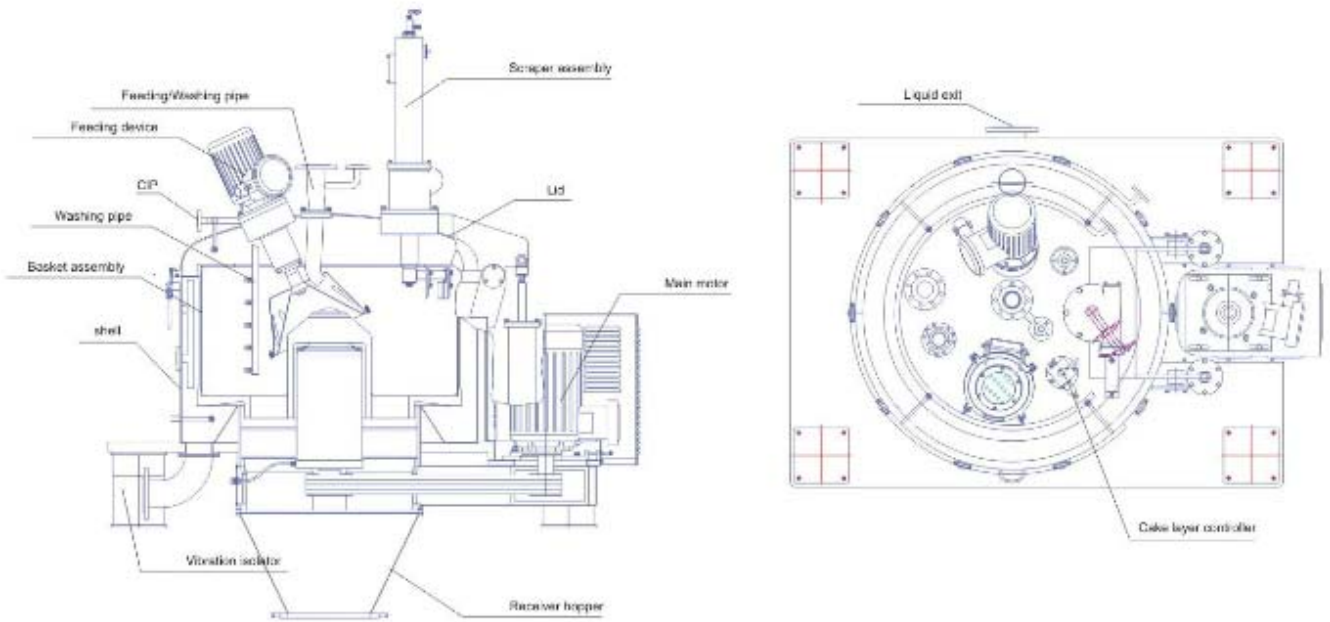
Based on high automation, large capacity and remote control capability, our centrifuge with base plate has been the tool of choice for pharmacy industry to handle antibiotics, vitamins and medical intermediates, etc. It can be seen in food industry to clean salt, gourmet powders, foodstuff additives, starch, sugar and condiment, etc. It also processes chemicals like thiamin, plasters, mirabilite, copper sulfate, potassium chloride, borax, dyestuffs, pigment, resin and pesticides. It finds extensive applications in industries of mining and environment protection.

Workflow of LGZ/PGZ Scraper Centrifuge

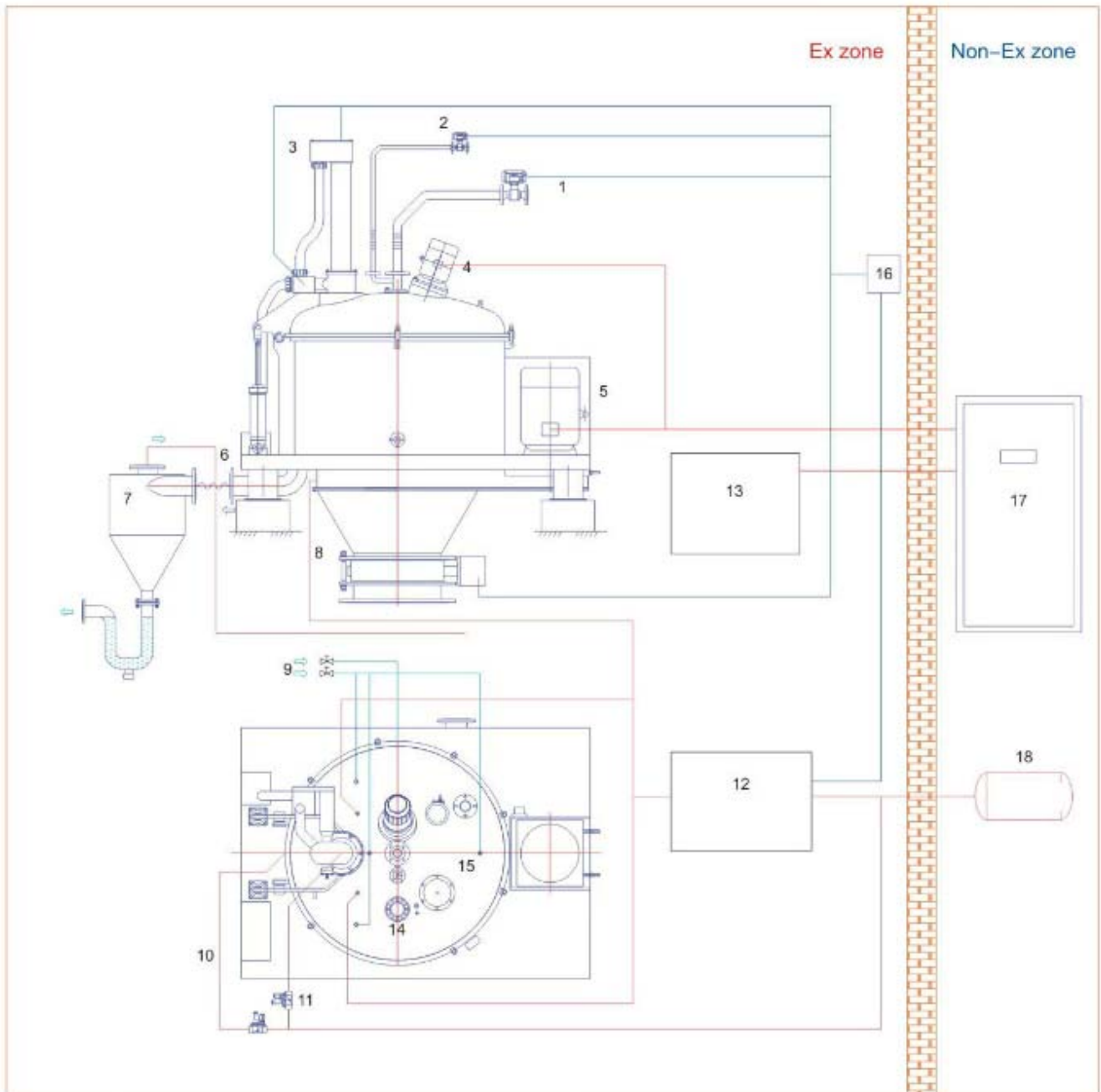


Optional Configuration of LGZ/PGZ Scraper Centrifuge

1. Cover: Large cover, full cover, flat cover
2. Feeding method: inclined feed tray, side feed tube, middle feeding tube
3. Scraper discharge: pneumatic or hydraulic
4. Motor drive: common motor, variable frequency drive motor, explosion-proof motor, dynamic braking or regenerative braking
5. Protection: nitrogen protection system, explosion proof, vibration protection, temperature protection, electric-mechanical interlocking, rotation monitoring and overload protection
6. Surface finish: Mirror, matte, dulling
7. Electronic component: supplied by brand manufacturers
8. Residual cake treatment: recoil or air-assist scraper
9. Program control: PLC, cake level detector
10. CIP system: cleaning ball and spray pipe
11. Nitrogen protection system: automatic nitrogen supplier, hydraulic sealing device and gas-liquid separator
12. Coating treatment: HALAR lining, PE lining

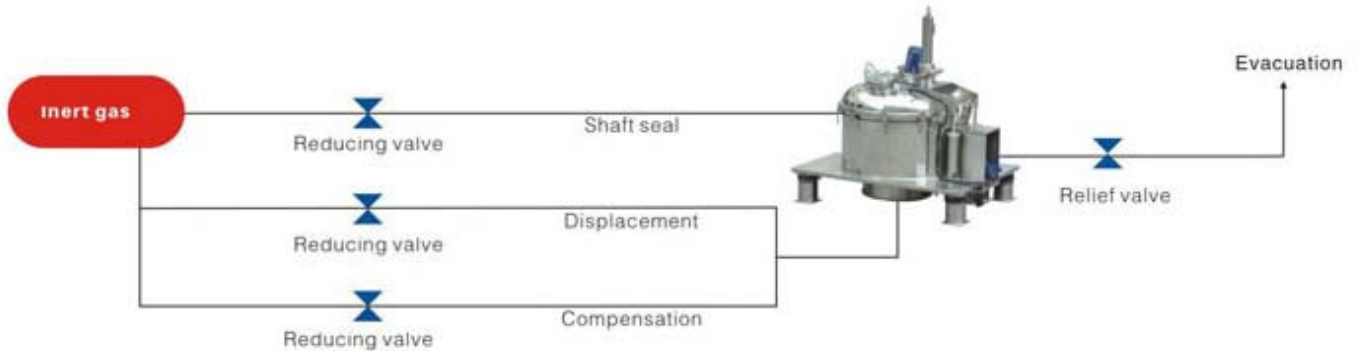


Explosion Proof System Diagram

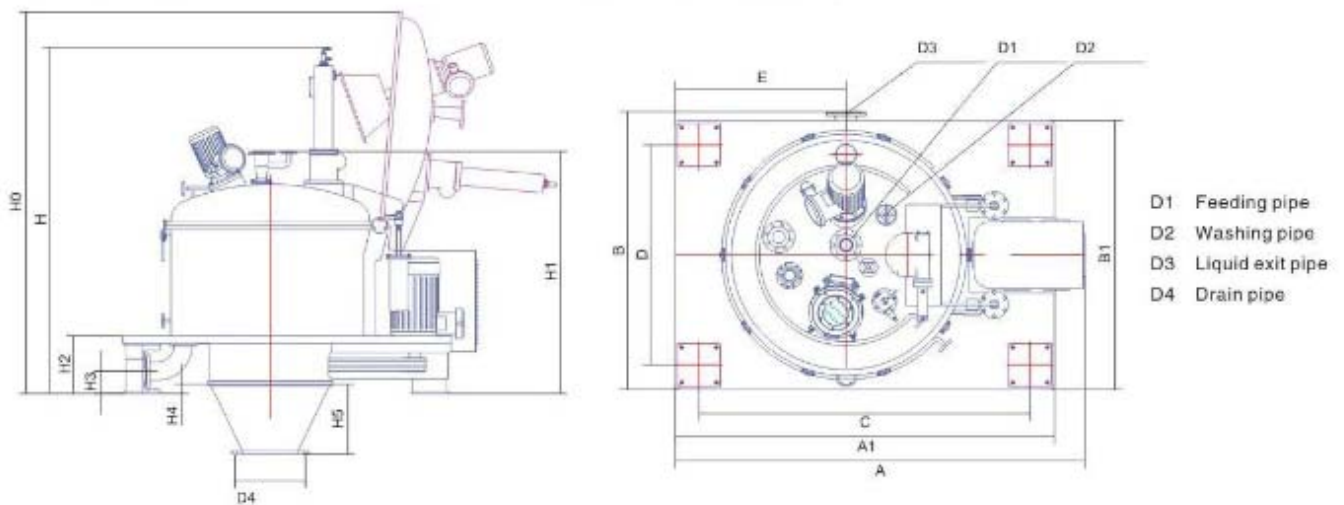


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|-----------------------------------|---------------------------------------|
| 1 Feeding valve | 10 Gas recoil valve |
| 2 Washing valve | 11 Gas auxiliary scraper valve |
| 3 Scraper device | 12 Nitrogen protection system |
| 4 Feeding motor | 13 Ex control panel |
| 5 Main motor | 14 Explosion proof light |
| 6 Drainage pipe | 15 Observation mirror |
| 7 Gas-liquid separator | 16 Pneumatic/hydraulic control system |
| 8 Solid discharge butterfly valve | 17 Electric control box |
| 9 CIP system | 18 Nitrogen gas source |

Nitrogen Protection System Workflow



LGZ External Dimension and Piping



Parameter

Technical Parameter of LGZ/PGZ Scraper Centrifuge

Item	Model					
	LGZ/PGZ800	LGZ/PGZ1000	LGZ/PGZ1250	LGZ/PGZ1500	LGZ/PGZ1600	LGZ/PGZ1800
Basket Dia. (mm)	800	1000	1250	1500	1600	1800
Basket Volume (L)	100	175	400	610	775	1000
Max. Load (kg)	135	235	480	820	1050	1200
Max. Speed (rpm)	1500	1100	970	850	850	800
Centrifugal Force	1006	675	658	606	647	645
Motor Power (kW)	7.5	15	22	37	37	45
Dimension (L×W×H) (mm)	1850×1250×2045	2100×1500×2250	2450×1800×2047	2900×2100×2700	3000×2200×2700	3260×2300×2100
Weight (kg)	1800	3500	4500	7800	8500	12000

External Dimension and Piping of LGZ/PGZ Scraper Centrifuge

Model	A	A1	B	B1	C	D	E	H	H0	H1	H2	H3	H4	H5	D1	D2	D3	D4
LGZ/PGZ800	1870	1750	1250	1200	1450	900	720	1900	2065	1250	290	400	82	250	40	25	80	300
LGZ/PGZ1000	2230	2040	1500	1450	1760	1170	910	2300	2430	1480	370	150	86	490	50	25	100	300
LGZ/PGZ1250	2600	2400	1755	1700	2095	1390	1080	2530	2800	1765	420	163	70	510	80	25	125	400
LGZ/PGZ1500	2900	2700	2100	2000	2000	1500	1060	2700	3430	1990	625	550	100	626	80	25	150	500
LGZ/PGZ1600	3000	2800	2155	2100	2100	1600	1110	2720	3625	2030	487	205	36	705	80	25	150	300
LGZ/PGZ1800	3200	3200	2600	2500	2480	2000	1330	2950	2950	2250	705	504	80	800	80	25	250	400