LGZ/PGZ Automatic Bottom Discharge Scaper 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 Ra0.2-0.4μm, 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: recoll or air-assist scraper
9. Program control: PLC, cake level detector
10. CIP system: cleaning ball and spray pipe
12. Coating treatment: HALAR lining, PE lining
Explosion Proof System Diagram
Nitrogen Protection System Workflow

LGZ External Dimension and Piping

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

D1 Feeding pipe
D2 Washing pipe
D3 Liquid exit pipe
D4 Drain pipe
### Technical Parameter of LGZ/PGZ Scraper Centrifuge

<table>
<thead>
<tr>
<th>Item</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LGZ/PGZ800</td>
</tr>
<tr>
<td>Basket Dia. (mm)</td>
<td>800</td>
</tr>
<tr>
<td>Basket Volume (L)</td>
<td>100</td>
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<tr>
<td>Max. Load (kg)</td>
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<tr>
<td>Max. Speed (rpm)</td>
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<tr>
<td>Centrifugal Force</td>
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<tr>
<td>Motor Power (kW)</td>
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<tr>
<td>Dimension (L×W×H) (mm)</td>
<td>1850×1250</td>
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<tr>
<td>Weight (kg)</td>
<td>1800</td>
</tr>
</tbody>
</table>

### 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 | 1460 | 370 | 150 | 80 | 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 | 2900 | 2155 | 2100 | 2100 | 1600 | 1110 | 2720 | 3625 | 2030 | 487 | 205 | 36 | 706 | 80 | 25 | 150 | 300 |
| LGZ/PGZ1800 | 3200 | 3200 | 2600 | 2500 | 2480 | 2000 | 1330 | 2950 | 2950 | 2250 | 705 | 504 | 80 | 800 | 80 | 25 | 250 | 400 |