



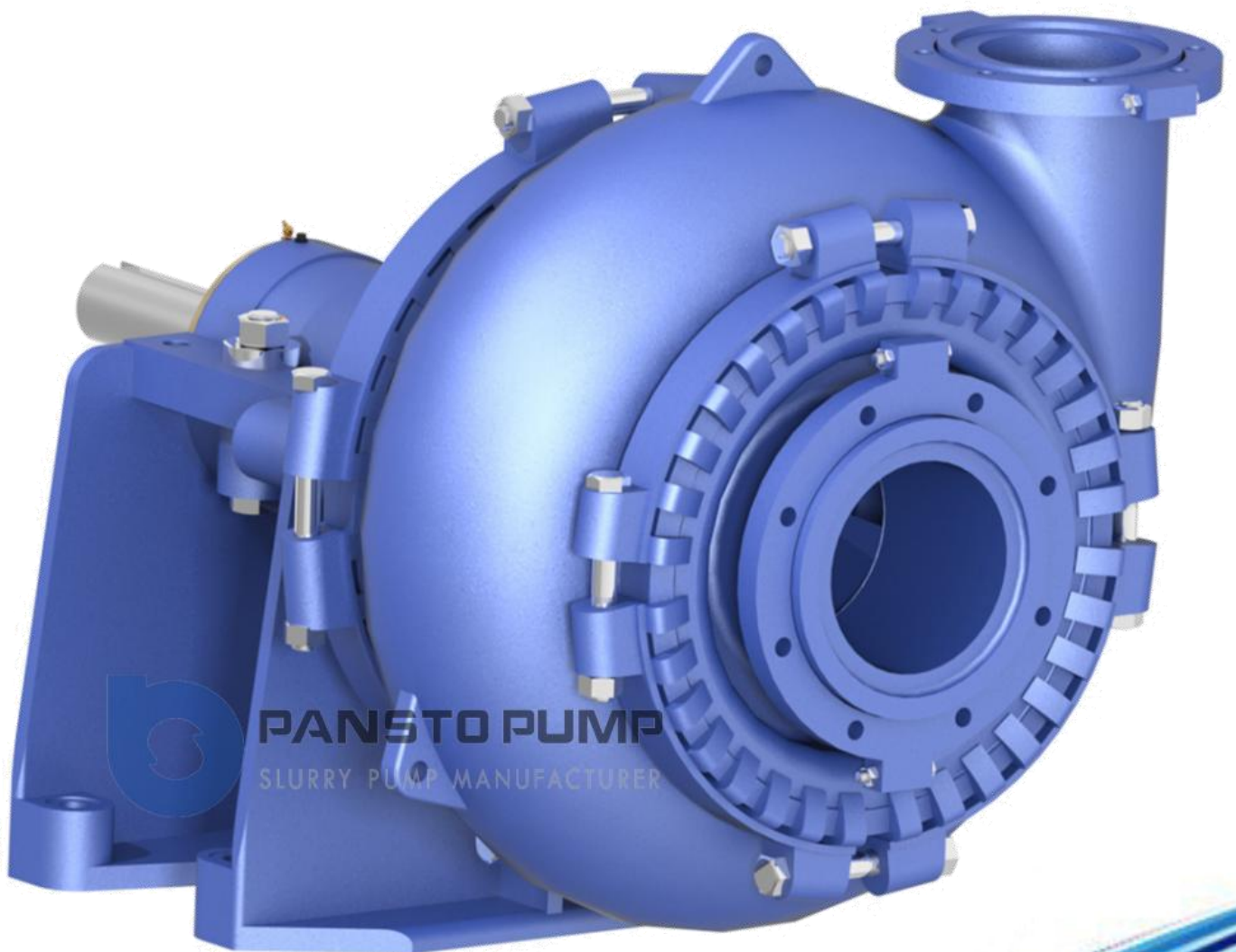
PANSTO PUMP

SLURRY PUMP MANUFACTURER

Pansto

PG/PGH

Gravel Pumps

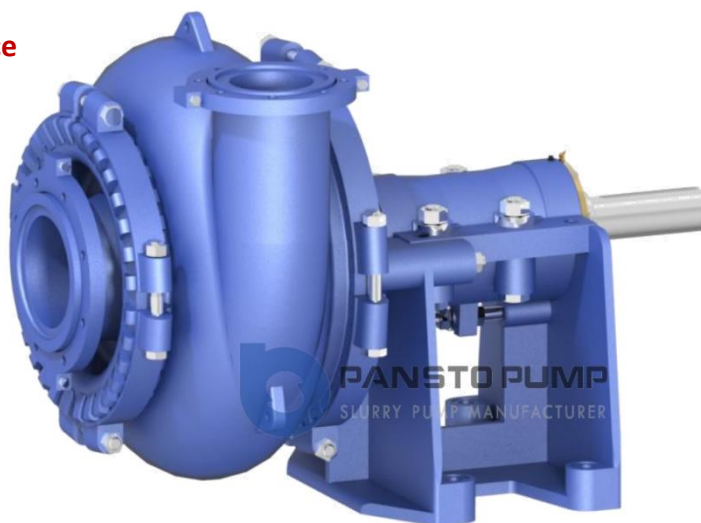


PANSTO PUMP

SLURRY PUMP MANUFACTURER

Pansto PG/PGH series of gravel pumps are horizontal centrifugal slurry pumps designed for handling slurry with larger solid particles such as gravel, sand, etc.

- **Excellent hydraulic performance**
- **Wider wet passage**
- **Lower NPSHr**
- **Easy to maintain**
- **Reliability in operation**



The PG gravel pumps are typically used for pumping gravel, dredging or pumping solids too large to be handled by Type PH pumps. The PGH range is again similar in construction to the PG Types, but features larger impeller diameters and heavier casing than the PG range to allow pumping of heads up to 80 meters, typically used in dredging applications where long discharge distances are required.

The PG/PGH pumps have excellent performance of NPSH, therefore, they are also suitable for lower NPSHa applications.

Advantages

Maximize Passage Size ---- Large flow passage design for passing extremely large particles.

Excellent performance of NPSH ---- Low NPSHr ensures that the pump works properly at a lower inlet pressure.

Heavy duty shaft ---- A large diameter shaft with a short overhang minimizes deflection and vibration.

Heavy duty bearings ---- Heavy duty grease lubricated tapered roller bearings for maximum bearing life.

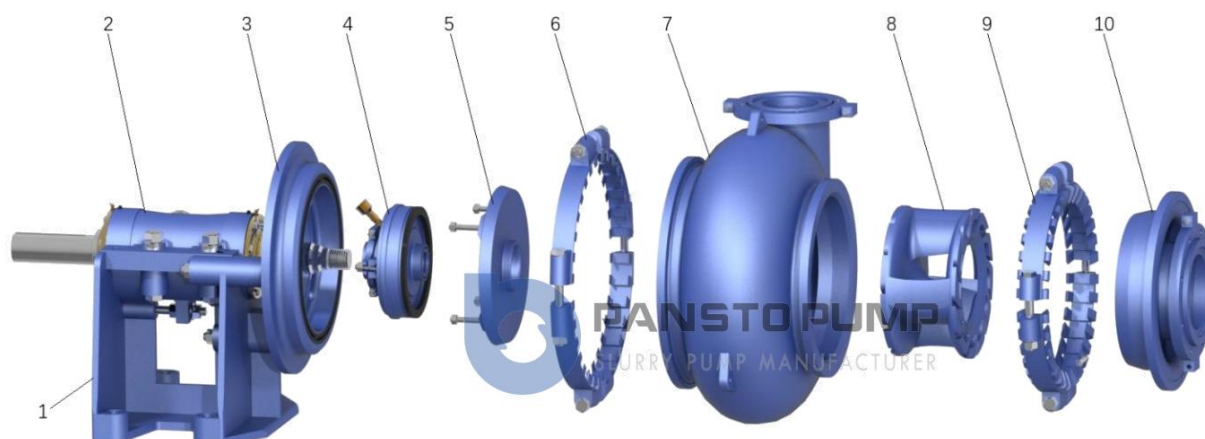
Excellent wear-resistant parts --- high-chrome alloy wet end parts.

Multiple shaft seals available ---- Packing seal, expeller dynamic seal, mechanical seal.

Arbitrary discharge direction ---- The discharge can be turned at arbitrary directions.

Flexible to arrange ---- A variety of motor arrangements are available, such as direct coupled, overhead mounted, side mounted, reverse overhead mounted.

Structure



Exploded view for PG/PGH pumps

- | | |
|------------------------------|--------------------------------|
| 1 --- Base | 2 --- Bearing assembly |
| 3 --- Adapter plate | 4 --- Shaft seal assembly |
| 5 --- Back liner plate | 6 --- Adapter plate clamp band |
| 7 --- Volute | 8 --- Impeller |
| 9 --- Cover plate clamp band | 10 --- Cover plate |

Note: This is the basic structures of the PG/PGH pumps, there would be some differences up to varied pump size.

Materials for wet end parts

| Name | Material description | Hardness | Applications |
|---------|---|----------|--|
| BTMCr27 | 27% Cr Erosion Resistant White Iron | ≥56HRC | It is a wear resistant white iron that offers excellent performance under erosive conditions. |
| BTMCr28 | 28% Cr, Low C, High Cr, White Iron | ≥45HRC | It is particularly suitable for FGD and other corrosive applications, where the pH is less than 4. |
| BTMCr33 | 33% Cr, Erosion & Corrosion Alloy, High Cr, Low C | ≥35HRC | It can transport oxygenated slurry with PH not be less than 1 such as phosphoric acid duties and other corrosive applications. |

Contact us for other special material options.

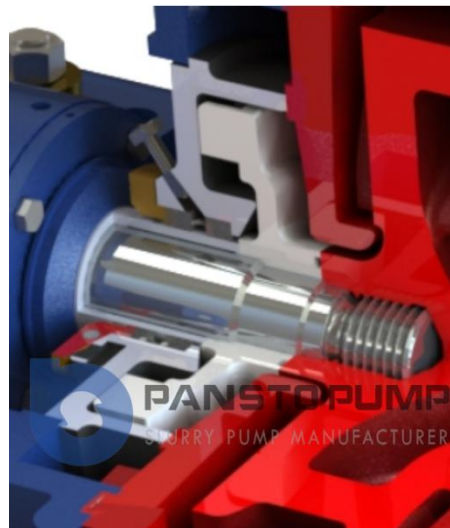
Shaft seal options

The shaft seal is one of the most important mechanical elements in centrifugal slurry pump and the correct type of seal must be carefully selected to suit each individual pump system. There are three commonly used shaft sealing options:



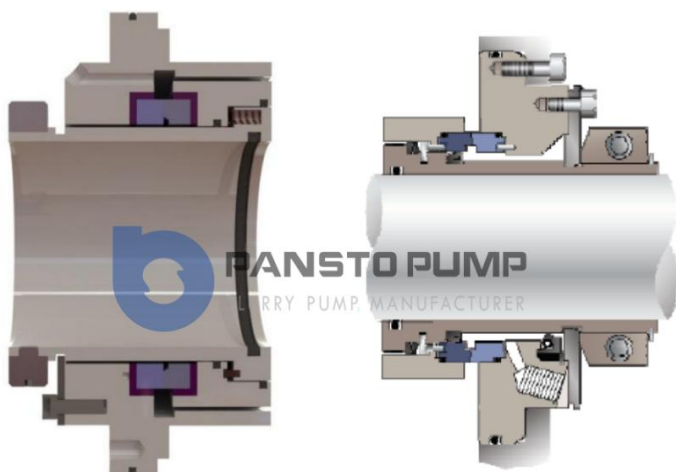
Packing seal

The soft, packed gland seal is the most commonly used seal in slurry applications. Clean water at a certain pressure being injected into the packing through the lantern, preventing leakage from casing. Simple structure, easy maintenance, low cost.



Expeller dynamic seal

The expeller acts as a turbine to reduce the pressure of the slurry attempting to escape around the back of the impeller. A secondary seal, grease lubricated packing or rubber lip seal stops leakage when the pump is not running. No gland water is needed.



High pressure flush

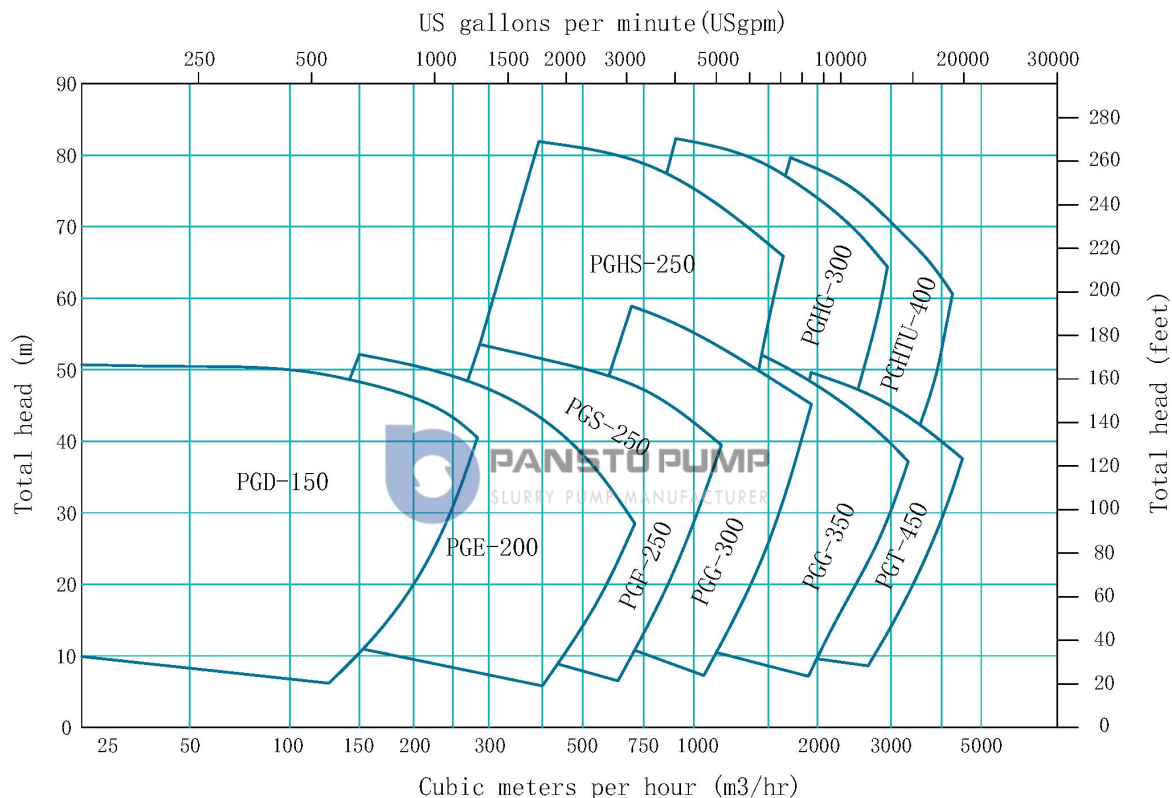
Low pressure flush

Mechanical seal

The mechanical seal consists of a stationary and a rotating face pressed together under mechanical and hydraulic pressure to prevent leakage. It has the best seal effect, used for zero leakage conditions. Low pressure flush mechanical seal do not dilute the product. High cost.

Contact us for other special shaft sealing options.

Quick selection chart for PG/PGH pumps

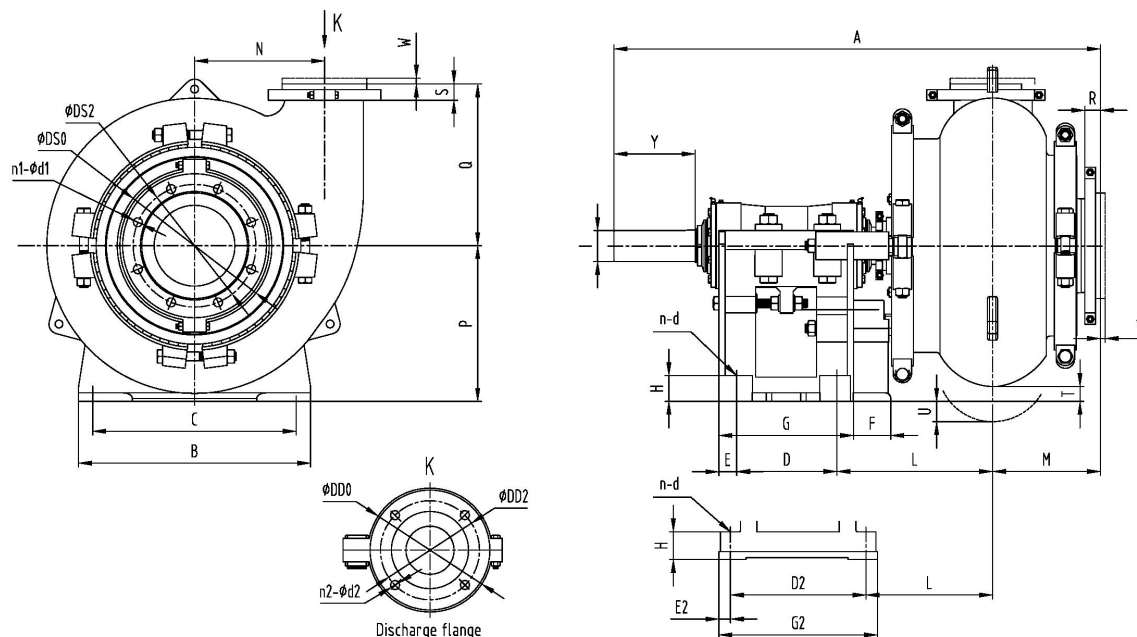


Clear water performance parameters

| TYPE | OUTLET DIA. (mm) | SPEED (r/min) | CLEAN WATER PERFORMANCE | | | MAX. POWER (kw) | IMPELLER DIA. (mm) | MAX. PARTICLE SIZE (mm) |
|-----------|------------------|---------------|-------------------------|----------|---------------------|-----------------|--------------------|-------------------------|
| | | | CAPACITY (m³/h) | HEAD (m) | MAX EFF. η (%) | | | |
| PGD-150 | 100 | 600-1400 | 36-250 | 7-56 | 50 | 60 | 378 | 82 |
| PGE-200 | 150 | 800-1400 | 180-540 | 12-52 | 60 | 120 | 378 | 127 |
| PGF-250 | 200 | 500-1000 | 180-820 | 12-56 | 60 | 260 | 533 | 178 |
| PGS-250 | 200 | 500-1000 | 180-820 | 12-56 | 60 | 560 | 533 | 178 |
| PGG-300 | 250 | 400-850 | 360-1200 | 12-60 | 65 | 600 | 667 | 220 |
| PGG-350 | 300 | 300-700 | 700-2700 | 8-70 | 65 | 1200 | 864 | 241 |
| PGHS-250 | 200 | 500-950 | 750-1300 | 20-75 | 72 | 560 | 686 | 180 |
| PGHG-300 | 250 | 350-700 | 1400-2700 | 10-60 | 70 | 600 | 915 | 210 |
| PGHTU-400 | 350 | 250-500 | 720-4320 | 20-70 | 72 | 1200 | 1220 | 230 |

Note: Approximate clear water performance and to be used for preliminary selection only.

Outline and installation dimensions



| TYPE | Base dimensions | | | | | | | | | | | | | |
|-----------|-----------------|------|------|-----|----|----|-----|-----|----|------|-----|-----|-----|-------|
| | A | B | C | D | E | F | G | D2 | E2 | G2 | H | Y | I | n-d |
| PGD-150 | 1006 | 492 | 432 | 213 | 38 | 75 | 289 | — | — | — | 54 | 164 | 65 | 4-Φ22 |
| PGE-200 | 1286 | 622 | 546 | 257 | 54 | 83 | 365 | — | — | — | 75 | 222 | 80 | 4-Φ29 |
| PGF-250 | 1591 | 857 | 762 | 349 | 45 | 45 | 540 | — | — | — | 98 | 281 | 100 | 4-Φ35 |
| PGS-250 | 1720 | 920 | 760 | — | — | — | — | 640 | 70 | 780 | 90 | 280 | 120 | 4-Φ35 |
| PGG-300 | 2010 | 1207 | 851 | — | — | — | — | 749 | 64 | 876 | 152 | 356 | 140 | 4-Φ41 |
| PGG-350 | 2096 | 1207 | 851 | — | — | — | — | 749 | 64 | 876 | 152 | 356 | 140 | 4-Φ41 |
| PGHS-250 | 1774 | 920 | 760 | — | — | — | — | 640 | 70 | 780 | 90 | 280 | 120 | 4-Φ35 |
| PGHG-300 | 2062 | 1219 | 851 | — | — | — | — | 749 | 64 | 876 | 152 | 356 | 140 | 4-Φ41 |
| PGHTU-400 | 2367 | 1460 | 1200 | — | — | — | — | 860 | 95 | 1050 | 150 | 350 | 150 | 4-Φ79 |

| TYPE | Wet end dimensions | | | | | | | | | Joint ring | | Suction flange | | | Discharge flange | | |
|-----------|--------------------|-----|-----|-----|------|----|----|-----|-----|------------|----|----------------|-----|--------|------------------|-----|--------|
| | L | M | N | P | Q | R | S | T | U | V | W | DS0 | DS2 | n1-d1 | DD0 | DD2 | n2-d2 |
| PGD-150 | 330 | 203 | 260 | 330 | 343 | 33 | 32 | 16 | — | 8 | 5 | 305 | 260 | 8-Φ19 | 254 | 210 | 4-Φ19 |
| PGE-200 | 392 | 295 | 352 | 457 | 405 | 29 | 29 | 54 | — | 6 | 8 | 368 | 324 | 8-Φ19 | 305 | 260 | 8-Φ19 |
| PGF-250 | 487 | 330 | 416 | 610 | 533 | 48 | 41 | 60 | — | 8 | 6 | 457 | 406 | 8-Φ22 | 368 | 324 | 8-Φ19 |
| PGS-250 | 378 | 330 | 416 | 450 | 533 | 48 | 41 | — | 102 | 8 | 6 | 457 | 406 | 8-Φ22 | 368 | 324 | 8-Φ19 |
| PGG-300 | 473 | 368 | 522 | 851 | 665 | 48 | 49 | 238 | — | 10 | 8 | 527 | 470 | 12-Φ22 | 457 | 406 | 8-Φ22 |
| PGG-350 | 502 | 424 | 610 | 851 | 787 | 48 | 48 | 121 | — | 8 | 10 | 552 | 495 | 8-Φ22 | 527 | 470 | 12-Φ22 |
| PGHS-250 | 455 | 330 | 475 | 450 | 620 | 48 | 42 | — | 206 | 8 | 6 | 457 | 406 | 8-Φ22 | 368 | 324 | 8-Φ19 |
| PGHG-300 | 496 | 400 | 605 | 851 | 800 | 60 | 60 | 40 | — | 10 | 8 | 533 | 476 | 8-Φ29 | 483 | 432 | 8-Φ25 |
| PGHTU-400 | 649 | 448 | 765 | 900 | 1008 | 72 | 82 | — | 120 | 8 | 10 | 650 | 600 | 12-Φ28 | 600 | 540 | 12-Φ28 |

Note: All sizes are in millimeters.

Application cases

Typical applications

- Sand excavation
- Dredge
- Shield tunnel
- Mineral Processing Plants
- Iron and steel plant
- Coal washery
- Alumina
- Municipal engineering
- Other larger solid particles or lower NPSHa applications



PG pumps in tunnel engineering, China



PG pumps in Municipal engineering, China

PG pumps in Sand excavation, Southeast Asia





PANSTO PUMP
SLURRY PUMP MANUFACTURER

Shijiazhuang Pansto pump Industry Co., Ltd.

Add: Shijiazhuang Equipment Manufacturing Base, Hebei Province, China

E-mail: sales@panstopump.com

Follow us

WhatsApp: +86 15732149758



Favorite our mobile website

Update content every day

Search for "pansto pump" or visit "www.slurrypumpminerals.com"