



**SCAMONT**  
ENGINEERING

## MULTI-STAGE CENTRIFUGAL CLEARWATER PUMPS

DYNAMIC | POWER | MOTION

# GRIFO

MULTI-STAGE CLEARWATER PUMPS

## GHP

### High Performance

The GHP high lift, horizontally designed multi-stage centrifugal pump units are suitable for pumping water at a maximum temperature of 40°C and operate at 1490 rpm, pumping to heads of 1 200 metres at a volumetric output of 200 litres per second.

#### FEATURES

Robustly constructed to withstand the harshest mining environments, the pumps embody modern hydraulic design principles.

Superior manufacturing standards and top quality materials ensure compatibility between rotating and stationary wearing parts giving a high level of corrosion and erosion resistance. This extends operating life, efficiency and reliability and results in low maintenance costs.

The split form drive-end bearing and bearing bracket allows the bearing to be replaced without removing the motor from its position.

The bronze impellers are spun cast ensuring mechanical and metallurgical integrity.

High lift,

high volume

Multi-Stage

Clear Water Pumps



#### ADVANTAGES

- The unique Grifo design of the balancing disc assembly has completely eliminated the problems and time consuming efforts previously required for balancing disc maintenance.



# SRB

## Sliding Roller Bearing

In 1998 the Grifo Self Balancing GSB pump units, which utilise non-friction, heavy duty ball and roller bearings to support the rotating element were successfully introduced to the market. As a result of this innovation all standard balance disc centrifugal multi-stage pumps can now be converted from white metal bearing arrangements to the non-friction, heavy duty sliding roller bearings (SRB).

### FEATURES

Heavy duty sliding roller bearings, rating 40 000 hours, with elongated inner race allow for axial movement of the rotating element in the course of normal balance disc wear.

A water flinger disc minimises water flow along the shaft to the bearing housing from the gland sealing arrangement.

Labyrinth seals on the bearing housing prevents ingress of water and dirt into the bearing housing.

Positive oil lubrication is ensured by incorporation of an oil ring in the bearing housing.

High lift,

high volume

Multi-Stage

Clear Water Pumps



### ADVANTAGES

- Easy maintenance and reduction of downtime.
- Reduction of major damage to rotating and stationary elements normally associated with failure of white metal bearings.
- Reduction in the harmonic vibration of the rotating element.



# GSB

## Self Balancing

The Grifo Self Balancing multi-stage centrifugal pump units are suitable for pumping clear water at a maximum temperature of 40°C. They represent a major advance in high lift multi-stage pump technology and are designed to meet the stringent demands of modern day mine dewatering methods. Scamont Engineering manufactures four different pump models for effective operation under varying conditions.

### GSB 250

Operates at 1490 rpm, pumping to heads of 1 500 metres at a volumetric output of 240 litres per second.

### GSB 200

Operates at 1490 rpm, pumping to heads of 1 330 metres at a volumetric output of 120 litres per second.

### GSB 150

Operates at 1490 rpm, pumping to heads of 650 metres at a volumetric output of 60 litres per second.

### GSB 150

Operates at 2980 rpm, pumping to heads of 2 100 metres at a volumetric output of 105 litres per second.

### FEATURES

The pump units are robustly constructed to withstand the harshest mining environments, and incorporate modern hydraulic design principles.

Conventional balancing discs and the associated maintenance problems are completely excluded by fitment of opposing impellers on either side of the centre casing section which eliminate hydraulic thrust.

Spun cast bronze impellers ensure mechanical and metallurgical integrity.

High lift,

150-1490

high volume

150-2980

Multi-Stage

200

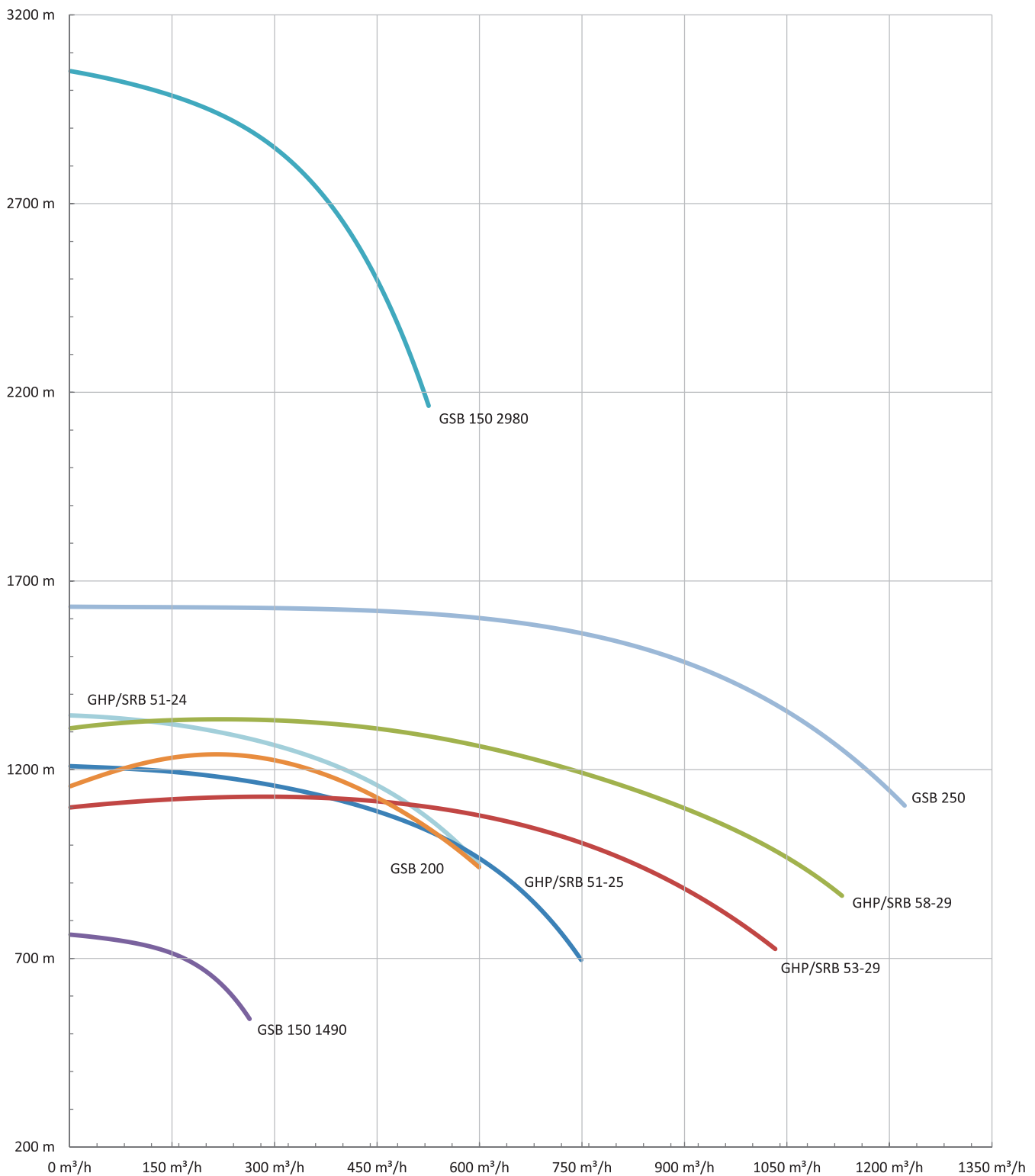
Clear Water Pumps

250



### ADVANTAGES

- Pump components can be supplied with ceramic or other coatings, preventing damage in locations where poor quality water is pumped.
- Costly intermediate pump stations are no longer necessary in the construction of new shaft systems. Refurbishment cost of GSB pump units is significantly reduced due to the minimal axial and radial thrust of the rotating element.
- Physical dimensions of the GSB pump unit are similar to existing pump units and only minor foundation and piping alterations are required for installation of the GSB unit.
- The units are maintenance free, thus pump stations can be fully automated, significantly reducing operational, maintenance and labour costs over the entire life of the mine.



| Pump Model    | Pump Speed         | Max No. of Stages | Max Head | Max Flow Rate | Max Efficiency |
|---------------|--------------------|-------------------|----------|---------------|----------------|
| GHP/SRB 51-24 | 1490 rpm Clockwise | 12 Stages         | 1344 m   | 600 m³/h      | 79%            |
| GHP/SRB 51-25 | 1490 rpm Clockwise | 12 Stages         | 1210 m   | 750 m³/h      | 79%            |
| GHP/SRB 53-29 | 1490 rpm Clockwise | 10 Stages         | 1129 m   | 1035 m³/h     | 82%            |
| GHP/SRB 58-29 | 1490 rpm Clockwise | 10 Stages         | 1333 m   | 1133 m³/h     | 82%            |
| GSB 150 1490  | 1490 rpm Clockwise | 18 Stages         | 763 m    | 263 m³/h      | 79%            |
| GSB 150 2980  | 2980 rpm Clockwise | 18 Stages         | 3052 m   | 526 m³/h      | 80%            |
| GSB 200       | 1490 rpm Clockwise | 12 Stages         | 1241 m   | 600 m³/h      | 78%            |
| GSB 250       | 1490 rpm Clockwise | 12 Stages         | 1632 m   | 1225 m³/h     | 81%            |



Scamont is a South African company manufacturing high-quality precision equipment, at reasonable prices, backed by expert consultation and maintenance services. This positions our company as leaders in the supply of slurry and clear water pumps and rock drill machines to local and global mining industries. Scamont's success has been established by long-standing supply relationships with all the major South African mining houses, some extending over 25 years, and has led to expansion into other African countries such as Zambia, DRC, Tanzania, Botswana, and further afield to Australia and South East Asia.

- We repair and service most makes of multi-stage pumps
- We are a South African based company
- We are a high quality, low cost manufacturer

