

# SLURRY PUMP AND VALVE

## ▶ XPA Wear-resistant Rubber Slurry Pump

### Principle

Driven by motor, the pump body and inlet line are filled with liquid before starting the pump. With high-speed rotation, the impeller drives the liquid between the vanes to rotate together. Due to the effect of centrifugal force, the liquid is thrown to the outer edge of impeller from the impeller center with kinetic energy increased. After the liquid entering the pump shell, as the flow channel in the volute type pump shell is gradually enlarged, the liquid velocity is decreased gradually, which makes part of the kinetic energy transform into static energy, therefore the liquid with high pressure is discharged along the outlet. At the same time, the impeller center forms a certain vacuum for that the liquid is thrown out. The pressure on liquid level is higher than that of impeller center, so the liquid in suction pipe will flow into the pump under the action of pressure difference. With the constant rotation of impeller, the liquid is sucked and extruded continuously.



### Features

Based on the outstanding wear resistance of rubber and the molded rubber flow parts, XPA series wear-resistant rubber lined pump has absolute authority in terms of wear resistance. It has the features of smooth operation, energy conservation, low noise, cost saving, high efficiency, easy maintenance, and durability.

The maximum concentration of pulp delivery should be no more than 60% (weightometer).

The temperature of pulp delivery is among - 40 - + 70 °C .

### Application

Xinhai rubber pump is suitable for handling corrosive slurry or fluid containing solid materials, exceeding the scope of application of metal and other types of pumps.

Beneficiation-metallurgy plant: Hydrocyclone feeding in grinding ore cycle (including the first stage of grading hydrocyclone); pump delivery, concentration & filtering of tailings, concentrates and intermediate products; all kinds of slurry pump delivery.

Power plant: The delivery of tail ash, slag and coal slurry.

Sand and gravel plant: Sand and gravel transportation, sand and water supply of mining, all kinds of classification and dewatering equipment with remarkable wear resistance by contrast.

Coal preparation plant: Grading, screening and conveying of dense medium; coal slurry transportation.

Chemical plant: The treatments of chemical liquid, acid or base, slurry, and waste water at low and medium temperature.

Water conservancy project: Damming, bed silt displacement, sand and gravel classification, etc.

Paper mill: The treatments of clay slip, paper pulp and waste water.

Ceramic and glass plant: porcelain clay and sand & gravel transportation, hydrocyclones feeding and waste water treatment.

Steel Plant: The delivery of slurry, Oxide skin, and corrosive liquid.

Special instructions should be offered to us if with oil and chemical.

### Technical Parameters

Model & Spec.	Flow (m <sup>3</sup> /h)	Max. Head (m)	Rotating Speed (r/min)	Max. Rated Power (kW)	Max. Efficiency (%)	Impeller Diameter (mm)	Weight (kg)	Overall Dimension (mm)
XPA 50/50	20~60	38	800~2400	22	51	200	156	725 × 482 × 491
XPA 80/80	30~100	45	600~2100	45	53	256	326	915 × 590 × 595
XPA 100/100	60~160	50	600~1600	75	57	340	440	999 × 648 × 660
XPA 150/125	100~260	47	400~1400	110	63	372	608	1280 × 736 × 758
XPA 200/150	160~450	47	450~1200	132	69	433	736	1313 × 788 × 822
XPA 250/200	300~900	46	400~1200	250	78	454	1250	1600 × 812 × 956
XPA 300/250	400~1500	45	300~900	600	73	610	1956	1698 × 966 × 1083