



QPEC 1" Deep Bowl Vertical Sand Pump

QPEC 1" Vertical Sand Pump mounted to 24" x 64" Ball/Rod Mill

Applications

Designed for pumping abrasive or frothy slurries. Handles varying or intermittent flows. Typical installations include virtually all slurry pumping applications in mineral processing pilot plants and small commercial installations.

Improvements

Deep Bowl provides 250% of previous shallow bowl volume.

Plus Factors

Increased surge capacity; increased gpm pumping capacity; increased discharge pumping head and pumping efficiency due to increased runner intake head; greater ability to break down and handle froth; ability to either feed into top of bowl or at alternate side low level minimum entrance.

Plus Maintenance Factor

Deep Bowl pump is provided with 2" overflow riser on one side of the pump. This riser is designed to overflow slurry and/or froth at level that will protect the pump's lower seals and bearings from immersion. The riser can be rotated to the proper height to suit specific installations. Riser is provided with pipe-to-hose fitting for connection drain hose if desired. Rotating slings and double grease seal arrangement are still provided as added protection.

Advantages

Wearing parts are of case unachievable Ni-hard containing approximately 4% nickel, 2% chromium, 3.40% carbon, 0.75% molybdenum with 550 brinell.

Follower plate is of molded rubber.

Advantages (continued)

Runner adjustment is through a screw device positioned in heavy lug cast integral with the bearing housing.
Housing slides in babbitted bearings cast in the pump bowl.
Lower bearing is positioned above the slurry level and further protected by a rotating slinger and double grease seal arrangement.
Pump design eliminates air-locking.
Pump requires no packing gland or sealing water. No sump required as built integral with pump.
Gravity feed to the runner makes pump ideal for handling varying feed rates.
Pump can be operated dry without damage.
Pump is self-contained and easily relocated.
Parts are readily accessible. Repair is one-man operation.

Specifications

Runner and case are of 550 Brinell Ni-hard.
Follower plate is of molded rubber.
Bowl and spindle housing are of high quality ductile iron.
Bearing assembly is activated by heavy duty screw device and slides in babbitted guide beatings for runner clearance adjustment.
Bowl provided with 2" riser - pipe-to-hose outlet.
Bearings are anti-friction self-aligning type with grease lubrication. Integral locking collars position bearings on shaft. Upper bearing is protected by rotating dust cap.
Lower bearing is protected by a rotating slinger and double grease seal arrangement.
Runner is bolted to shaft through babbitted tapered connection
Runner case is gasketed and bolted to bottom of pump bowl.
V-belt drive provides pump speed flexibility.
Motor is totally enclosed and for 3 ph, 60 Hertz, 230/460 bolt or to suit other available electrical characteristics. Drive guard is OSHA type.

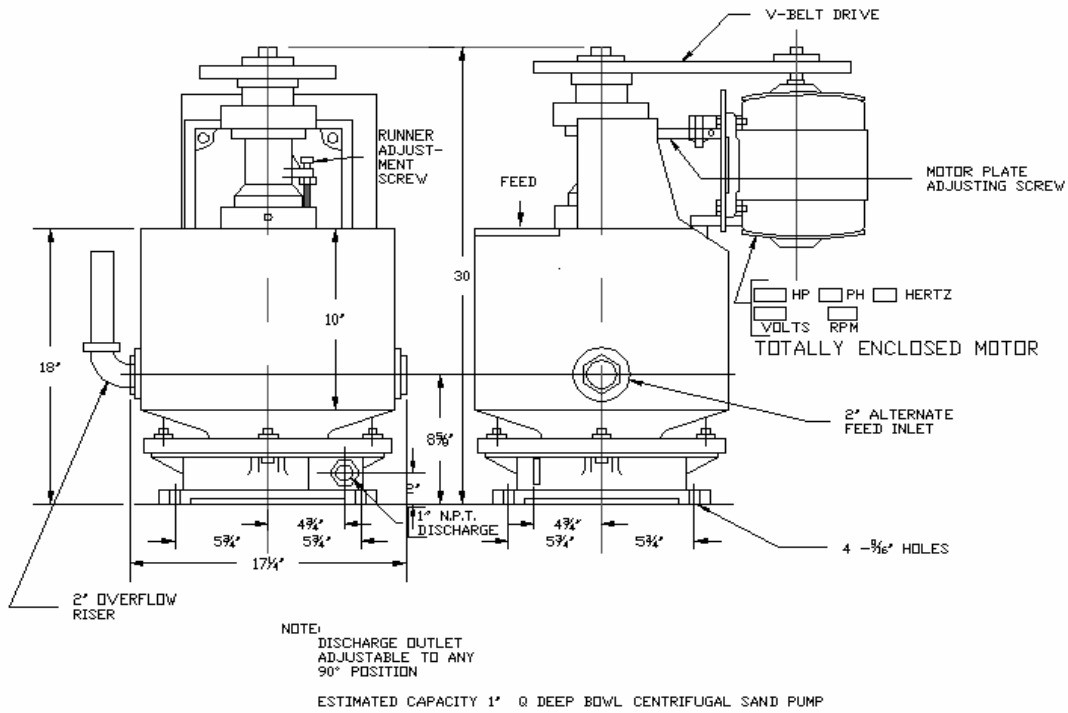
(Dimensions on next sheet.)



Two QPEC Sand Pumps containerized shipping overseas



1" QPEC Vertical Sand Pumps being installed in Africa



CAPACITY 25% SOLIDS	10' TDH		20' TDH		30' TDH		40' TDH		50' TDH		60' TDH	
	rpm	hp	rpm	hp	rpm	hp	rpm	hp	rpm	hp	rpm	hp
0 TO 10 gpm	1160	1-½	1210	1-½	1300	2	1450	2	1650	2	1810	2
10 TO 20 gpm	1200	1-½	1260	1-½	1325	2	1520	2	1720	2	1860	3
20 TO 30 gpm	1250	1-½	1320	1-½	1400	2	1630	2	1800	3	1920	3
30 TO 40 gpm	1315	1-½	1375	2	1510	2	1700	3	1860	3	1960	3

NOTE: ESTIMATED CAPACITY BASED ON 2.75 SPECIFIC GRAVITY, SOLIDS AT 25% SLURRY DENSITY.
PUMPS WILL HANDLE UP TO 60 gpm AGAINST 50' TDH OF SOLUTION OR DILUTE NON-ABRASIVE SLURRY.
CONSULT FACTORY FOR RECOMMENDATIONS.



Large shipment of QPEC 1" Vertical Sand Pumps