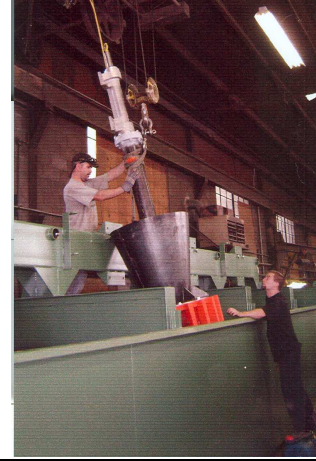




QPEC No. 180 T-BR 4 cell Flotation Machine



Installing a No. 180 T-BR Mechanism

Application

Quinn offers a complete line of pilot plant and commercial size flotation cells to normally handle a feed range up to 1000 tons per day. The units are used primarily in mineral processing plants. They also have important applications in chemical, industrial, and environmental areas requiring the efficient dispersion of fine air or gas bubbles in slurries or liquids.

Advantages

Mechanism principle - Large volume-low pressure. Air is introduced down the standpipe and mixes with slurry drawn down the recirculation well and upwards from the cell bottom by the impeller (T-BR top and bottom recirculation) in the full 360° throat area. The pre-aerated slurry is diffused under intense pressure into the cell resulting in a thorough mixture of finely dispersed air bubbles and slurry.

This design not only permits efficient slurry suspension with lighter slurry drawn down the well to displace heavier slurries which cause undue wear and power consumption. Low pressure air is supplied through the combination superstructure- header and controlled by individual cell air valves. Wearing parts are of polyurethane for maximum wear life and oil resistance. Impellers are connected to the shaft by a unique design requiring only removal of a single cap screw which is urethane capped.

Froth paddle bearings are positioned high above normal for the operating levels.

Quinn quality permits close clearance between impeller and diffuser resulting in high aeration capability. Cell liners are easily replaced as held in position by four bolts with urethane wear caps.

Feed intermediate and discharge weir boxes are provided to suit the cell bank requirements.

(Dimensions and specifications on reverse side.)

Specifications

Tanks: Fabricated heavy plate steel construction with feed box and adjustable weir box assemblies at end of each bank of cells. Upper and lower baffle plates provided between each cell. Cell drains and adjustable sand gate at end of each bank.

Superstructure: Rectangular tubing designed to support mechanism and drive assemblies and function as air header. Mechanisms: Enclosed aluminum spindle bearing housings, ball bearings, grease seal, and dust cap.

Machined standpipe with air valve and connections to air header.
Replaceable urethane diffuser, bell, impeller and shaft sleeve.
Impeller connection assemblies with urethane capped ss cap screw.
Assembled as a unit with 1/8" pre-set clearance between impeller and diffuser.

Froth paddle assembly: Adjustable single paddle standard, double or quadruple available. Complete with bearings, TE gearmotor, and torque limiting device.

V-Belt drive: Dual cell standard or single cell, as required.

Motors: Size as per table. Totally enclosed for 3 ph, 60 Hertz, 230/460 volt current or other characteristics.

Guards: OSHA type V-belt drive guards.

Assembly: Units rustoleum primed, green enamel finish, completely assembled and prepared for domestic or export shipment.

Optional: Units available for corrosion resistance with stainless steel, urethane spray or elastomer lined.

Optional: Froth launders attached to cells or self-supported available.