



J-SERIES PUMPS

HIGH CAPACITY GAS INJECTION AND CIRCULATION PUMPS

Pyrotek J-Series circulation and gas injection pumps provide high flow and gas injection rates. These pumps increase metal circulation rates, melt rates, inject more process gas, and lower the conversion cost per pound. These pumps can pump two to three times more metal than similarly sized pumps at the same operational costs. The pumps can be installed in a side well and used in conjunction with Pyrotek's LOTUSS submergence system.

The J-Series pump can be assembled without an alignment fixture, and can be used in molten metal immediately after they are assembled to save production time. The pump's alignment can be adjusted at the motor mount and checked with a dial indicator. The J-Series pump's motor is protected from heat with a 75 millimetre (3 inch) rigid insulating board.

These pumps have a high-efficiency barrel or bladed impeller with a ceramic inlet wear plate that provides high flows and excellent pumping efficiency. The design also ensures consistent performance, increases pump mass flow, lowers exit velocity, and does not reduce the pumping capacity. The low velocity also minimizes the possibility of carryover of contaminants into the furnace hearth.

The J-Series pump's Tensor rods are high temperature alloy steel loaded under tension. By holding ceramic posts in compression to maximize their strength, these posts are stronger and more durable than their graphite counterparts. Tensor pump rods do not require ceramic sleeves to protect graphite posts from oxidation and abrasion, and if they do break the pump base is still supported by steel rods.



J-Series pump shafts are made from high quality graphite and treated with Pyrotek NOX to reduce oxidation, then they are covered in a high temperature refractory coating or a ceramic sleeve. The sleeve increases the diameter of the shaft and extends its product life.

NOTE: J-Series pumps can include an optional injection tube plug. The plug greatly reduces breaking and plugging in the injection tube and is easy to replace.

