Pyrotek Circulation and Gas-injection Pump Comparison

PROCESS

Water testing in lab of circulation of aluminium bath and gas-injection

PYROTEK PRODUCT

J-50 GI circulation and gas-injection pump—Pyrotek's J-series circulation and gas-injection pumps provide high flow and gas-injection rates.

Pyrotek J-50 pump.

The performance of a gas-injection pump is dependent on its ability to create a velocity-induced vacuum within the pump base at the point of injection. In other words, the higher the flow velocity of molten aluminium, the greater the amount of gas that can be injected into the metal stream. By creating a vacuum at the injection point within the pump, as with the Pyrotek J-50 GI, gas is drawn into the flow stream rather than forced into the stream. This allows the gas to remain in the flow where it can efficiently mix and react within the molten aluminium.

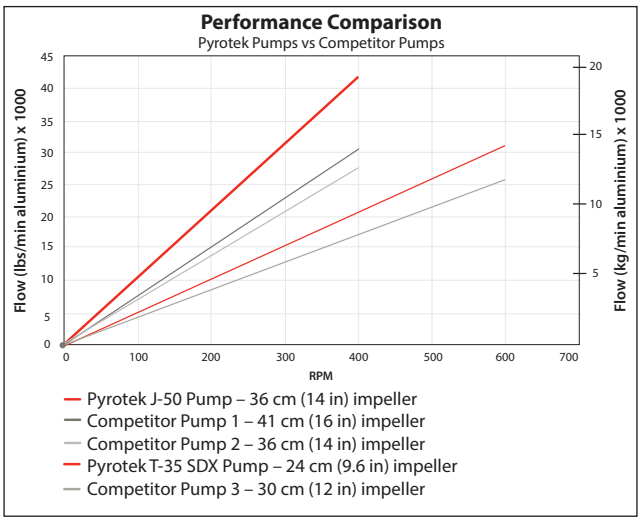
Pyrotek's J-50 pump is a highly efficient solution for the gas injection process within the aluminium industry. Due to its specially designed outlet, it is able to produce a significant vacuum at the point of injection while still injecting large quantities of gas.

Features

- Increase metal circulation rates
- Increase melt rates
- Inject more process gas
- Lower the conversion cost per kilogram
- Pump two to three times more metal than similarly sized pumps
- Can be installed in a side well
- Can be used in conjunction with Pyrotek's LOTUSS scrap submergence system
- High-efficiency barrel or bladed impeller with a ceramic inlet wear plate
- Consistent performance
- Low velocity minimizes carryover of contaminants into furnace hearth
- Highly durable Tensor® posts
- High-quality graphite shafts that are oxidation resistant

PERFORMANCE COMPARISON

In a lab water-test comparison with a competitor's gas-injection pump, the Pyrotek J-50 was able to efficiently inject gas at a rate of up to three times the amount of the competitor's pump running at the same RPM.



JAN-18-EN-1694