



Pyrotek Starburst Rotors

ALUMINIUM PROCESS

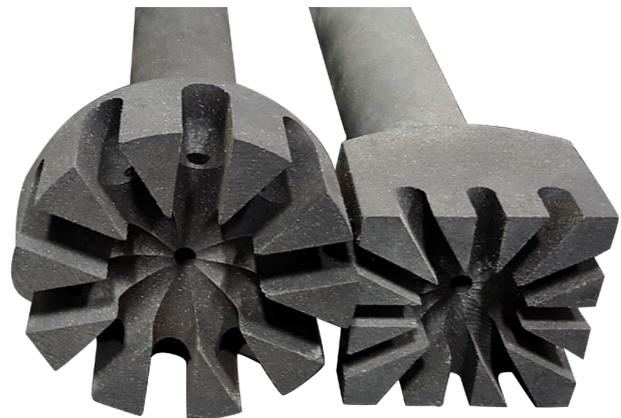
Degassing

TEST PROCEDURE

Pyrotek recently conducted tests comparing the performance of the in-line degassing 102 mm (4 in) and 114 mm (4.5 in) Starburst® rotors to a 102 mm (4 in) in-line degassing rotor and a 114 mm (4.5 in) in-line degassing rotor. The test results showed that the Pyrotek Starburst rotors removed more hydrogen during the degassing process than the other rotors.

The test was performed in a 559 mm (22 in) diameter tank with a depth of 394 mm (15.5 in). Each rotor was placed 89 mm (3.5 in) from the bottom of the tank for testing. Oxygen was fed into the water prior to testing, and the oxygen level was measured with a YSI oxygen probe attached to the side of the tank. When the water's oxygen level reached 95 percent, the gas feed was switched to nitrogen at a rate of 1.13 m³/h (40 SCFH). When the water's oxygen level reached 92 percent, the rotors began spinning at 875 RPM and the oxygen levels were read every 15 seconds for two minutes.

NOTE: The testing was performed in water to provide a safer test environment and because water's dynamic viscosity is similar to molten aluminium.



Standard

Starburst

RESULTS

The following graph displays that the Pyrotek Starburst rotors were able to outperform standard in-line degassing rotor designs in reducing the water's oxygen levels.

