

Case Study/Testimonial

SI-TEC[®] CERAMIC COMPOSITE IMPELLOR



Almost 4x the Wear Life

- 1) Standard Chrome Shoe
- 2) Generation A Ceramic
- 3) Generation B Ceramic
- 4) Generation C Ceramic

BENEFITS

- Minimize shutdowns
- Avoid exposure to potential injuries
- Save maintenance hours
- Increase equipment up time

Application: VSI crusher with 4 Impellor table

Feed: Silica Sand - 16 mesh

	With Si-Tec®	Without Si-Tec®
Number of Impellors	4	16
Production interruptions	0	4
Hands entering the chamber	0	24

CHALLENGE

A Customer's Silicon Sand crushing operation was wearing their original standard high chrome impeller shoes at a high rate significantly impacting production volume and profitability. With increased wear on the shoes, frequent change outs were required causing down time and increasing risk.

SOLUTION

Spokane Industries engineering, working with the manager and operations team, designed a ceramic composite unique to their impellor shoe and application. The initial design doubled the wear life. After several iterations, we are now seeing four times the wear life of standard high chrome iron. The current ceramic insert pattern also allows for better gradation which results in less recirculation throughout the life of the shoe. Also, with new iterations in design of the ceramic profile, we have been able to create a better deflection pattern improving longevity in other parts within the chamber of the crusher.

Please contact us for more information: 1-800-541-3601 • www.SpokaneIndustries.com