



## Case History

**Application:** Stainless Steel Auto-pour Ladles

**Operating Temperature:** 1300°F

**Emisshield® Product Used:** Emisshield® STG-1 (patent pending)

**Problem:** Ladles in contact with molten aluminum begin to wear because of their exposure to abrasion and high heat. These ladles are repairable and get 20,000 pours before repairs are needed.

**Application of Emisshield®:** Emisshield® STG-1 was applied to the ladles to help increase their lifespan. All ladles were grit blasted and cleaned with an alkaline cleaner. The coating was then applied using a HVLP spray gun. The Emisshield® STG-1 was not sintered before being put into service.

**Results after applying Emisshield®:** The ladles coated with Emisshield® STG-1 were in service for 40,000 pours before requiring repairs.

Emisshield™ Ceramic/Refractory STG-1 increased the life of the stainless steel ladles by 100%. This improvement shows how Emisshield® Ceramic/Refractory products can help increase the lifespan of refractory tools by reducing wear due to heat exposure and slag build up.

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