

CASE STUDY

FOUR TIMES THE LINER LIFE WITH IMPROVED OVERLAY PLATE

H-E PARTS INTERNATIONAL (H-E PARTS) SPECIALIZES IN PROVIDING WEAR MANAGEMENT SOLUTIONS. OFFERING A FULL RANGE OF CME™ WEAR PROTECTION PRODUCTS, H-E PARTS PROVIDES THE RIGHT MATERIAL OR COMBINATION OF MATERIALS FOR EACH APPLICATION.

At an iron ore mine located in Western Australia, the customer had an ongoing issue with high wear rates in their scrubber discharge chutes. During each shutdown in a 12-week shutdown cycle, the existing 0.79" (20 mm) alloy-chromium carbide overlay plate supplied by a competitor was found to be completely worn through, resulting in damage to the exposed parent metal of the chute.

The customer contacted H-E Parts to overcome the issue and after a thorough analysis of the wear situation, H-E Parts recommended improving the material selection by replacing the existing overlay plate with H-E Parts CME™ overlay liners, which are composed of one of the highest wear resistant materials produced in the world today.

The result was a remarkable improvement in wear rates. The CME™ overlay liners exceeded the life of the competitors' plate with only 0.10" (2.5 mm) wear on the leading edge after 12 weeks, resulting in the plant extending maintenance shutdowns to every 48 weeks, instead of 12 weeks. The chute is now protected from damage and no longer requires costly repairs during shutdowns. A significant reduction in the exposure to health and safety risks were also realized by the client through the reduced frequency of repairs.

The major expense incurred by the client to hire a 250 to 300-ton crane every 12 weeks is now required only once every 48 weeks. Since installation of the CME™ liners, the client estimates that AUD \$600,000 in combined savings in labor and crane hire will be achieved, with the relief on maintenance resources alone expected to be around 300 hours per annum.

LOCATION	Western Australia
MINE TYPE	Iron Ore Mine
MACHINE	Scrubber Discharge Chute
PRODUCT	CME™ Wear Plate



CME™ overlay liners after 2 weeks - no wear



Competing plate after 2 weeks - 4mm of wear