

CASE STUDY

PROTECH™ LINERS IMPROVE CHUTE PERFORMANCE

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

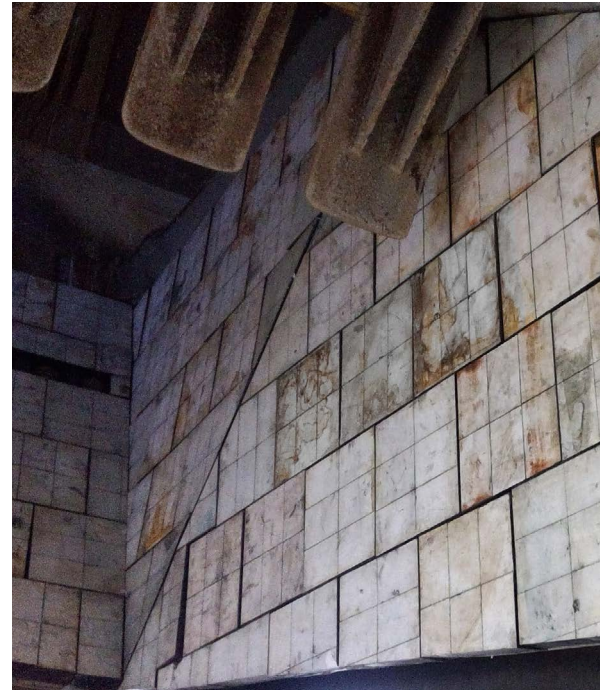
A prominent gold mine located in New South Wales, Australia. High wear rates were occurring in both the HPGR choke chute and discharge chutes. H-E Parts was engaged to provide a solution that would extend the current liner life from 12 weeks to 52 weeks on the HPGR and double the life from 12 weeks to 26 weeks on the discharge chutes.

In order to analyze the chute issues, an H-E Parts technical applications specialist traveled to site to evaluate the chutes, conduct in service monitoring, and define any site specific variables that may affect the performance of the chute liners. From this evaluation, H-E Parts recommended an initial trial using a combination of improved materials, as well as some liner design changes. This was possible due to H-E Parts' ability to provide a full suite of ProTech™ wear materials in several differing grades.

The HPGR choke chute was upgraded from a D80 grade wear plate to Protech PT-1200T. This resulted in an improvement from 12 weeks to 52+ weeks, as post 12 months the PT-1200T still had 65% wear life in its most worn area of the liner. Incorporated into this upgraded liner was a redesign of the liner to include a rollover lip to protect the transition point.

On the discharge chutes, H-E Parts recommended that a new material option be implemented. Subsequently, a ProTech PT-82C ceramic liner package was offered. The PT-82C liner package was installed into two chutes (2070/2071). After 52 weeks of production, the liners had only worn 12% in the most affected area. With such little wear, the ceramic liners have been left in operation and are expected to achieve ~8 years of production, providing a vastly improved total cost of ownership to the customer, as well as relief on maintenance labor and shutdowns required. It was noted by the customer that the on-site representation during installation by H-E Parts technicians, ease of fitting, and adherence to drawing specifications across such a large package of liners was particularly pleasing.

LOCATION	A Prominent Gold Mine, New South Whales, Australia
APPLICATION	HPGR Choke Chute and Discharge Chutes
PRODUCT	ProTech™ PT-1200T wear plate and PT-82C ceramic liners



ProTech™ PT-82C ceramic liners in discharge chutes

PROTECH™ LINER PERFORMANCE TABLE

	PREVIOUS SUPPLIER LIFE (WKS)	SITE REQUIRED LIFE (WKS)	PROTECH™		
			LINER LIFE (WKS)	INCREASED LIFE (%)	ESTIMATED TOTAL LIFE (WKS)
HPGR Choke Chute	12	52	52	333%	~104
Discharge Chutes 2070/2071	12	26	*52+	333%+	~416

*Upgraded ProTech™ liners still in production.

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