CASE STUDY

MP1000 COUNTERWEIGHT ASSEMBLY REPAIR / UPGRADE

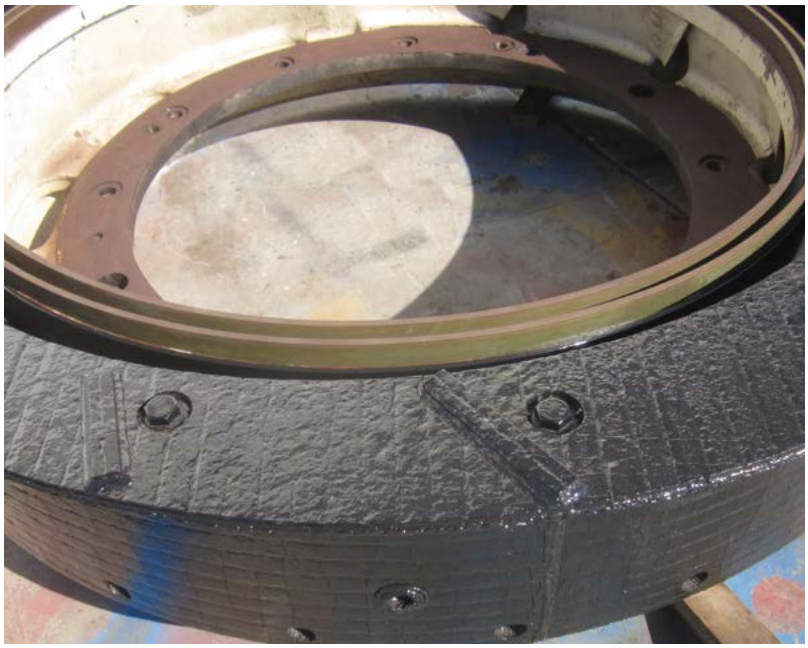
H-E PARTS INTERNATIONAL (H-E PARTS) SPECIALIZES IN PROVIDING WEAR MANAGEMENT SOLUTIONS. H-E PARTS LINER DEVELOPMENT PROGRAM HAS BEEN DEVELOPED TO OPTIMISE LINER DESIGNS ON A SITE BY SITE BASIS AND INVOLVES THE ONGOING ANALYSIS OF SITE OPERATIONAL REQUIREMENTS, MACHINE OPERATING PARAMETERS AND WORN LINER PROFILES.

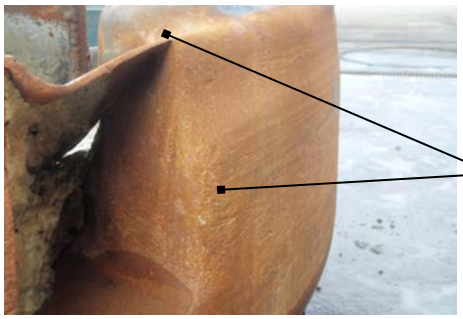
At a Western Australian gold mine the customer had an ongoing issue with the counterweight assemblies within their MP1000 crushers, not lasting to scheduled manganese liner change-outs. This was attributed to the top guard wearing through, causing excessive wear to the counterweight sub-assembly. The counterweight then became unbalanced, leading to excessive vibrations within the crusher. Our client was then forced into shutdown mode on a breakdown basis to get the counterweight assembly immediately changed out.

In addition to the repair and static rebalancing of the counterweight; H-E Parts recommended that the customer have both the top guard and outer guard manufactured with H-E Parts Protech™ PT-650 wear plate, which has superior wear and impact resistance in comparison to the original 400 Brinell Q&T plate. In consultation with H-E Parts in-house engineering department, our off-site repairs team then custom-fabricated and installed the PT-650 fitted counterweight guards at our Perth facility.

Since the first MP1000 counterweight fitted with PT-650 guards were put into service, the plant availability was greatly increased as a result of the counterweight life performing well past scheduled shutdowns; up to 12 months. The counterweight repair cost was reduced by more than 50% through protection of the counterweight assembly. Additionally, the crusher was protected from damage or wear to the immediate bushing and eccentric assemblies.

LOCATION	Western Australia, Australia.
TYPE	Gold Mine
APPLICATION	Metso MP1000 Counterweight Assembly





Counterweight sub assembly damage

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CRUSHING SOLUTIONS