

# CASE STUDY

## IMPROVING C160 & C200 JAW CRUSHER PERFORMANCE

H-E PARTS INTERNATIONAL CRUSHING SOLUTIONS (HEPICS) SPECIALISES IN PROVIDING WEAR MANAGEMENT SOLUTIONS. HEPICS 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.

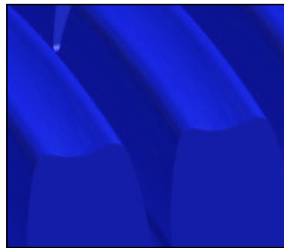
BHP Area C located in the Pilbara region of Western Australia, operates Metso C160 and C200 jaw crushers as its primary processing plant and was experiencing excessive wear and insufficient liner life. The wear was occurring on its OEM supplied liners, with each set only lasting 12 weeks before requiring change-out.

HEPICS approached Area C and offered to provide a wear analysis and design a custom liner profile to suit site specific conditions, and subsequently increase liner life. HEPICS engineers carefully analysed the application before providing a customised design to ensure a consistent life and performance was achieved from each liner. This involved two major design improvements;

- Tooth Profile - new profile shape
- Chamber shape - new profile allows the active chamber length to be increased, which decreases localised wear at the lower end of the chamber, where the majority of wear is experienced. This leads to a substantial increase in liner life.

HEPICS first set of liners were installed on the C160 and C200 crushers and lasted 20 weeks or a 66% life improvement over the original OEM supplied liners. In addition to greatly reducing the total cost of ownership, this product innovation has afforded BHP significant cost savings via reduced shutdowns and increased productivity.

Safety has also been enhanced, with HEPICS proprietary Safe-T Lift® liner lifting device being utilised on-site. Following on from this, further advancements have been made to the C200 crusher resulting in a 100% life improvement over the original OEM supplied liners.



<b>LOCATION</b>	BHP Area C
<b>MINE TYPE</b>	Iron Ore
<b>APPLICATION</b>	Metso C160 & C200 Jaw Crusher
<b>PRODUCT</b>	CME® manganese liners



LINERS	PREVIOUS SUPPLIER	CME MNELITE™
C160 JAW LIFE (WEEKS)	12	20 (trial proposed to reach 24 weeks)
C200 JAW LIFE (WEEKS)	12	20 (1st profile) 24 (2nd profile)