

Jaw Liner

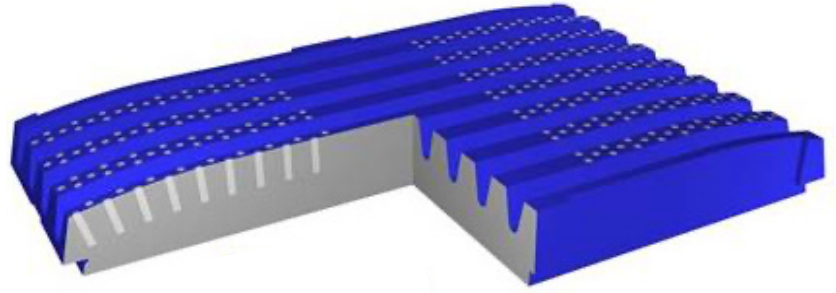
Optimization for
Increased Throughput

CASE STUDY

Location | Western Australia

Application | CT42x54 Jaw Crusher

Product | Optimized Jaw Liners



OVERVIEW

This project highlights HEPI's focus on practical engineering and smart design. By improving material composition and liner geometry, we delivered a solution that reduced maintenance and significantly increased crusher performance.

SITUATION

A mining customer in Western Australia was facing limited wear life with the standard jaw liners used in a CT42x54 crusher. On average, each set lasted only 24-26 days and processed about 45,000 tonnes before needing to be rotated. This led to frequent shutdowns, poor site labour utilisation, loss of production and increased operating costs.

SOLUTION

To address this issue, HEPI initiated its Liner Development process. HEPI analyzes worn components by scanning liners from the site and applies targeted improvements based on actual performance data. A comprehensive wear report, including proposed enhancements, is then provided to the customer. This process proposed to the customer involves the use of enhanced wear materials, including the integration of Metal Matrix Composite (MMC) inserts, and the refinement of liner profiles to optimize operational performance. These changes yielded an increase of approximately 114% in throughput, along with significantly improved wear life.

RESULTS

Metric	OEM Liners	HEPI
Wear Life	3-4 weeks	5-6 weeks
Material Processed per Set	85-90k tonnes	185-190k tonnes ($\approx +114\%$)
Change-Out Frequency	High	Reduced by over 50%
Equipment Downtime	Frequent	Significantly reduced
Maintenance Resources	High	Reduced (labour and crange)

