# Optimising Liner Maintenance with Wear Zone Kits

**Location** Pilbara Region, WA, Australia

Platform Deflector Asset

**Conditions** Fixed Plant Wear Liners

**Solution** Wear Zone Kits

## **Situation**

A large greenfield mine in the Pilbara Region of Western Australia was experiencing heavy sectional wear on its CV0101 deflector asset.

Wear analysis showed that the liners would wear out by 33mm after processing 4.6MT of material, requiring liner replacements every 12 weeks.

Adding to the challenge, the customer lacked sufficient Bills of Material (BOM), hindering the efficiency of their quoting and ordering processes.

This lack of documentation, combined with extended lead times for sourcing billets, forced the customer to push their liners to their wear limits. As a result, they faced frequent adhoc repairs, increased downtime, and reduced production efficiency.

# **Solution**

Bradken collaborated closely with the customer's site engineer to address the inefficiencies and improve the maintenance process. By utilising condition monitoring data on the worn deflector over time, Bradken was able to determine those areas of the deflector regularly needing replacement while keeping the lower wearing areas in situ. This knowledge led to "High Wear Zone" and "Low Wear Zone" kits or BOM.

The BOM and kits allowed the customer to refer to predefined quotes, facilitating quick price adjustments and order processing. This systematic approach enabled Bradken to meet the customer's requested delivery dates, even when lead times posed a challenge.

### **Results Summary**

- Streamline inventory planning
- Pre-ordering of spare sets to ensure stock availability
- Optimised time spent in ordering and quoting



Condition monitoring heat map highlighting



New blocks of the high wear area kit (silver/as cast) installed in the refurbished















# Optimising Liner Maintenance with Wear Zone Kits

**Location** Pilbara Region, WA, Australia

Platform Deflector Asset

**Conditions** Fixed Plant Wear Liners

**Solution** Wear Zone Kits

## **Results**

Bradken's wear zone kits and custom BOM creation minimised challenges and reduced the for ordering and quoting This approach also enabled the customer to pre-plan and ensure stock availability, eliminating the potential risk downtime or maintenance disruptions.

Additionally, the improved system allowed the customer to pre-order spare sets, helping them prepare for maintenance shutdowns without the need to recreate markups. These enhancements, now integrated into their SAP system for future use, have streamlined operations while improving production and maintenance efficiency.

### **Results Summary**

- Streamline inventory planning
- Pre-ordering of spare sets to ensure stock availability
- Optimised time spent in ordering and quoting



Condition monitoring heat map highlighting



New blocks of the high wear area kit (silver/as cast) installed in the refurbished













