



CASE STUDY

"Clearly the studded mantle has improved performance from 1.3MT to 2.2MT"
Superintendent Coarse Ore Maintenance

OUTCOME:

From **3** To **2**
Mantles per set of Concaves

Contact us to learn more about **Hansteel Industries Australia** and **ENDURASTUD®**:



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Location:

Pilbara Region, Western Australia

Commodity:

Copper / Gold

Plant Throughput:

23,000,000tpa

Equipment:

3 x Metso 54x75 Gyratory Crushers

CHALLENGE:

Site had trialed various vendors for the supply of gyratory mantles; however, had limited success in extending the service life of the mantles beyond 3 mantles to 1 set of concaves. They were seeking a solution that would extend the service life of their mantles by greater than 50% to enable on only 2 mantle change outs per set of concaves.

To achieve this, the customer required an innovative solution to deliver a step-change in mantle performance.

SOLUTION:

Through analyzing the worn gyratory mantle liners and equipment configuration in conjunction with the customer, HSI offered a tailored lower mantle design utilizing the **ENDURASTUD®** technology to maximize the equipment service life.

The HSI solution focused on design, manufacture and supply of a new lower mantle and concaves that included:

- **ENDURASTUD®** technology
- HSI proprietary Mn alloy
- Optimized liner thickness
- Machine set-up adjustment (OSS/CSS)

BENEFITS:



Improve Service Life

ENDURASTUD® mantles achieved a step-change improvement in service life.



Low Risk Profile

ENDURASTUD® technology builds on proven crusher wear parts providing improved performance at significantly lower risk.



Technical Support

All ENDURASTUD® products are backed by HSI's extensive industry experience and technical support.

"4MT from 2 mantles...looking through our recorded history, 3.5MT with 4 mantles was the best in the past"

– Superintendent Coarse Ore Maintenance

GYRATORY CRUSHER

Average Tonnes per Mantle

