CASE STUDY RENOLD CONVEYOR CHAIN

Application:

Feeder Breaker

Industry: Coal

Product: Conveyor chain

Problem:

Short chain life

Solution:

Special coating of critical components. Superior manufacturing techniques.

Outcome:

Renold manufactured chain ran for 2 times the life of competitor chain



Overview

Our competitor's chain was installed in Sep '21 and was replaced after only 6-8 months of service. The cause was found to be excessive wear and corrosion resulting in elongation. After testing Renold chain for comparison, it was found the projected lifespan of Renold chain was 16-18 months, more than 2 times the life of the competitor's chain.

The Renold Solution



With the ability to control all steps in the manufacturing process due to the chain being manufactured in their chain facility in Melbourne, Renold's chain solution included:

- Special Renoshield coating to provide very hard and corrosion resistant coating
- Improved design preventing links from seizing
- Special heat treatment process for the pins, bushes and sideplates

Conclusion

The Renold solution provided a chain that could effectively run for 16-18 months on this application, more than 2 times the life of the competitor's chain. After 12 months of service, the Renoshield coating is still clearly visible.

Pin - Renoshield Coating



Renoshield coating and pin still partially intact after 8 months in operation.



Renoshield coating and pin still partially intact after 12 months in operation.