

Wear Piping Thicker CCO in Pipe

Location	Albian Sands - Canadian Natural
Platform	Piping
Conditions	Slurry transport, 28" diameter piping high wear with rock size up to 3" in a high pressure piping system
Solution	12mm CCO overlay on piping

Results

- Reduced maintenance costs and downtime with extended time between maintenance intervals
- Improved the TCO of the CCO slurry lines
- Implemented thicker CCO in high-wear locations allowing increased throughput

Situation

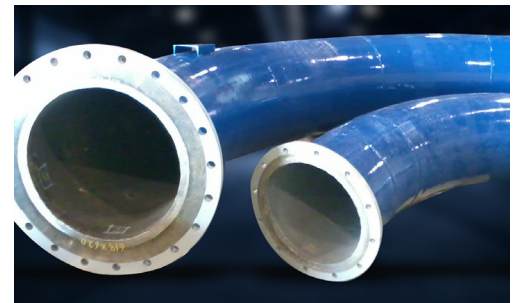
A customer sought to increase slurry pipeline lifespan and improve the total cost of ownership (TCO). While alternative materials existed, they preferred Chromium Carbide Overlay (CCO) in specific areas to meet wear life requirements and budget, however, further enhancements were needed for the application. By extending the wear life by 30-40% this would result in longer maintenance intervals from the original timing of three months to six months. Other materials offered more longevity, however at a much higher cost.

Solution

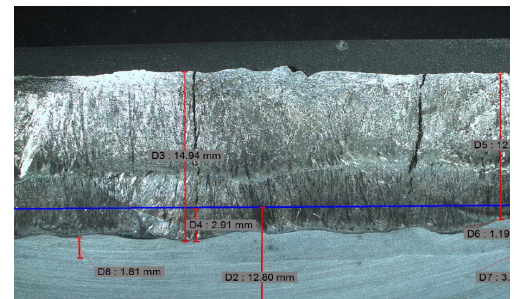
Bradken developed an overlay that could be applied 50% thicker than the traditional CCO for piping to meet application requirements. The customer conducted trials to evaluate the performance of the thicker overlay and its ability to provide the anticipated 50% additional wear life. The trial was successful, and the customer began implementing the thicker overlay in high-wear locations across its operations.

Results

The overlay performed as expected, with no degradation in erosion resistance or impact resistance. The customer achieved the extended maintenance intervals they were aiming for, improving the TCO of the CCO slurry lines. By implementing the thicker CCO in high-wear locations they were able to increase throughput, reduce maintenance and optimize their operations.



CCO Piping



CCO Slurry Lines



CCO Piping



Our Innovation. Your Advantage.

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