

Cement Plant, Nigeria

A Ferobide Wear Liner Case Study

Industry

Cement Manufacturing

Annual Production Capacity

9 Million Metric Tonnes
3 production lines

Primary Equipment

Loesche Vertical Roller Mill
Line 1 - 540 t/h capacity

The Challenge

A large cement manufacturing facility processes a highly abrasive grade of limestone, presenting a significant challenge to equipment longevity.

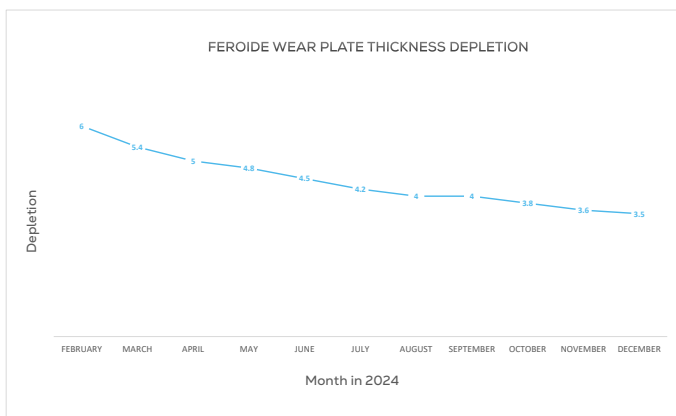
The highly abrasive environment regularly caused the rapid degradation of raw mill wear liners, resulting in:

- Frequent unscheduled maintenance
- High production downtime costs
- Increased labour and parts expenses




Previous wear liner solutions typically only lasted 2-4 months.

The Solution

Following the impressive results of a 4-month trial, the plant implemented Ferobide across critical zones on Production Line 1.



Impact at a Glance

-  Reduced unscheduled maintenance
-  Lower total cost of ownership
-  Improved mill uptime and operational efficiency

Previous Solutions





Lifespan

Premium Chromium Carbide Overlay (10+6mm) 3-4 months

Abrasion-Resistant Steel (20mm) ~2 months

Ferobide Plates (6+6mm) **Over 13 months (Ongoing)**

Ongoing Results

-  1,500 Ferobide plates installed (Feb 2024)
-  Supported over 3 million tonnes of production
-  Less than 50% wear volume loss recorded
-  Outperformed previous solutions in both durability and cost-effectiveness

Next Steps

Based on this success, the plant is preparing to expand Ferobide implementation to raw mills on all three production lines.