



UTP WELDING CONSUMABLES FOR THE CEMENT INDUSTRY

voestalpine Bohler Welding is committed to working closely with customers to develop optimal surface protection solutions for critical components in the cement industry.

A STRONG PARTNERSHIP: GTV ENGINEERING AND UTP

GTV Engineering Limited, based in central India, has been a leader in heavy engineering for 45 years, manufacturing essential fabricated and machined components for the cement, minerals and steel sectors.

GTV's collaboration with UTP began in 2015 when the company sought a technology partner for manufacturing abrasion-resistant wear plates. Today, GTV supplies these wear plates not only in India but also to Japan, Indonesia, Sri Lanka, Nepal, the UAE, Egypt, and Germany. Given the extreme wear conditions in cement plants, the quality of wear plates must be world-class to ensure machinery durability and optimal performance.



CHALLENGES IN CEMENT PRODUCTION

Cement production involves grinding raw materials into fine powder using vertical or horizontal mills. These operations generate high levels of abrasion, intensified by 24/7 plant operation. The resulting wear on machinery leads to efficiency losses, reduced equipment lifespan, and increased maintenance costs.

To combat these challenges, critical machinery surfaces must be protected with high-performance wear-resistant solutions. One of GTV's key solutions is overlay welding on wear plates, which significantly enhances component durability.

Wear plates: A high-performance solution

GTV manufactures wear plates in various grades and specifications, designed to withstand impact, abrasion, erosion, and heat. These plates are further optimized with welded overlays using chromium or tungsten carbide-based consumables, ensuring superior abrasion resistance.

Wear plate thickness options

5 + 3 mm	6 + 4 mm	8 + 5 mm	10 + 6 mm
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SOLUTION ADVANCED WELDING CONSUMABLE: WEARCORE XD 62-O

Classifications:

EN 14700: T Fe 16 / DIN 8555: MF 10-GF-65-GT

WEARcore XD 62-O is an open-arc metal-cored designed to resist grinding abrasion with low impact. This wire has typical microstructure of Primary Carbides and M7C3 eutectic carbides in an austenitic matrix. The deposited layers naturally develop stress relief cracks, enhancing wear resistance.

TECHNICAL DETAILS

Weld Overlay Results

Welding Characteristics	Results
Welding Position	PA / 1G
Current	300 - 500 Amps
Arc Stability & Force	Excellent
Welding Performance	Low spatter and minimal fume
Bead Shape	Uniform, flat bead



WEARcore XD 62-O welded with Current of 350 AMP

Hardness

Layer	Specification Hardness (HRc)
Multilayer	61 - 64
Two Layer	57 - 58
Single Layer	48 - 49

Tests confirm that WEARcore XD 62-O delivers excellent weldability and hardness from the first layer. Weld beads remain free from slag and spatter, ensuring reliable overlay protection.

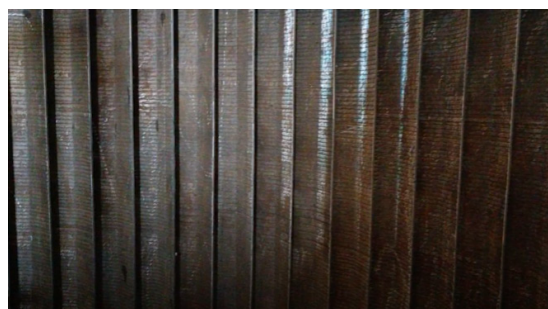
GTV ENGINEERING: DELIVERING PROVEN RESULTS

With these high-quality abrasion-resistant wear plates, GTV Engineering provides optimal solutions for critical components such as classifiers, ducts, grit cones, louvers, hoppers, chutes, and separators. The company serves leading European OEMs and major cement producers in India, including Ultratech Cement, Adani Cement, Shree Cement, Wonder Cement, and Dalmia Cement.



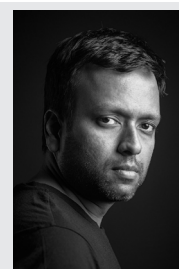
Strategic decision to in-house wear plate production

To ensure consistent quality and timely supply, GTV established its own wear plate production, collaborating closely with UTP for technology support.



Abrasion resistant wear plates

"Our partnership with UTP was one of the best decisions for GTV. With their welding consumables and expert support from Germany, we successfully optimized our welding process. Since then, we have had no quality issues, and our wear plates perform exceptionally well in the most abrasive environments."



Gaurav Agarwal, Executive Director,
GTV Engineering Limited.

"Through this successful collaboration, GTV and UTP continue to provide superior wear protection solutions, ensuring durability and efficiency in the cement industry's most demanding applications."

states Neeraj Tiwari, Business Development
Manager UTP for Cement

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As a leader in the world of welding and part of the voestalpine steel and technology group, we are close to you with more than 100 years of experience, 50 subsidiaries and 4,000 sales partners worldwide. Thanks to our comprehensive product portfolio, welding expertise and global orientation, we know your needs and, as a total solution provider, ensure the best results for your most demanding challenges. Perfectly interlinked and as unique as your business.



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