WA Applications for Cement Plants

A worldwide presence

Our Technical ‘Spark’ Solves Your Industrial Challenges

Welding Alloys

Your ideal partner for difficult welds!

$\text{WA Wear Plates}$

- Higher real efficiency
- 50% reduction in downtime
- Improved wear life
- Improved productivity
- Improved safety
- Improved cost-effectiveness

$\text{GAMMA 182-O}$

- 10-15% savings in material consumption
- Welding time is considerably reduced with up to 50% less welding time
- Higher real efficiency
- Superior weld quality
- Improved safety
- Improved cost-effectiveness

$\text{RPM Carb}$

- Protecting your MI from the daily grind
- Optimised engineered wear protection solution for Vertical Grinding Mills
- Cost-effective, high efficiency and performance
- Long-lasting & state-of-the-art grinding technology
- Economic and high efficiency grinding technology
- Hardfacing of Vertical Grinding Mills
- Stock resistant roller press refurbishment

Stock resistant roller press refurbishment

Welding Alloys has developed a cost-effective and efficient ‘Spark’ technology for the refurbishment of roller press rollers. This technology has proven itself in the cement industry and has been developed in collaboration with leading mill OEMs and experts in material science to ensure optimum performance. With MILL Carb™, we enter a new era of high efficiency production and simultaneously reduce maintenance and transportation costs. With MILL Carb™, we enter a new era of high efficiency production and simultaneously reduce maintenance and transportation costs.

Hardfacing of Vertical Grinding Mills (VRMs)

Welding Alloys has developed a cost-effective and efficient ‘Spark’ technology for the refurbishment of roller press rollers. This technology has proven itself in the cement industry and has been developed in collaboration with leading mill OEMs and experts in material science to ensure optimum performance. With MILL Carb™, we enter a new era of high efficiency production and simultaneously reduce maintenance and transportation costs. With MILL Carb™, we enter a new era of high efficiency production and simultaneously reduce maintenance and transportation costs.

End of warranty

WA Services Target vs. OEM Services

WA Services

- A fully repairable welded ceramic composite metal
- Superior wear resistance compared to competitor products
- Optimised engineered wear protection solution for Vertical Grinding Mills (VRMs)
- The microstructure of 5-layers of MILL Carb™, showing uniform distribution of the ceramic particles throughout the thickness of the entire weld deposit.

Hardfacing of Vertical Grinding Mills

Welding Alloys has developed a cost-effective and efficient ‘Spark’ technology for the refurbishment of roller press rollers. This technology has proven itself in the cement industry and has been developed in collaboration with leading mill OEMs and experts in material science to ensure optimum performance. With MILL Carb™, we enter a new era of high efficiency production and simultaneously reduce maintenance and transportation costs. With MILL Carb™, we enter a new era of high efficiency production and simultaneously reduce maintenance and transportation costs.

End of warranty

WA Services Target vs. OEM Services

WA Services

- A fully repairable welded ceramic composite metal
- Superior wear resistance compared to competitor products
- Optimised engineered wear protection solution for Vertical Grinding Mills (VRMs)
- The microstructure of 5-layers of MILL Carb™, showing uniform distribution of the ceramic particles throughout the thickness of the entire weld deposit.

Hardfacing of Vertical Grinding Mills

Welding Alloys has developed a cost-effective and efficient ‘Spark’ technology for the refurbishment of roller press rollers. This technology has proven itself in the cement industry and has been developed in collaboration with leading mill OEMs and experts in material science to ensure optimum performance. With MILL Carb™, we enter a new era of high efficiency production and simultaneously reduce maintenance and transportation costs. With MILL Carb™, we enter a new era of high efficiency production and simultaneously reduce maintenance and transportation costs.
High mechanical properties
• Welder appeal
• 10-15% savings in material consumption
• Welding time is considerably reduced with up to
 10% savings in welding time and improved weld run 
Advantages compared to stick electrodes:
• Higher real efficiency
• 50% reduction in downtime
• More adaptable, lighter and harder
• Higher wear and impact properties

GAMMA 182-O is a truly unique product developed by
Welding Alloys, which is especially suited for repair &
maintenance welding of components in cement plants.

Your ideal partner for difficult welds!

WA Wear Plates

WA Applications for Cement Plants

Our Technical ‘Spark’ Solves Your Industrial Challenges

A worldwide presence

Hardfacing of Vertical Grinding Mills (VRMs)

Through Welding Alloys technology, cement plants across the globe have benefitted from our solutions.

Our Technical ‘Spark’ Solves Your Industrial Challenges

WA Applications for Cement Plants

www.welding-alloys.com

WA Applications

For Cement Plants

Stock resistant refer press refurbishment

WB Carb™ has been specially developed for the refurbishment of roller press rollers of all sizes.

MaxLife™ RP has been developed in collaboration with industry leading mill OEMs and experts in material science to ensure optimum performance. With Mill™, we enter a new era

WA Services Target vs. OEM Services

Service

Old-fashioned design

Increased wear rate

Misaligned conditions

Long-lasting & high efficiency

State-of-the-art technology

Optimised process

Increased productivity

Commissioning Operational Phase

End of warranty

Installation

Target with retrofit

Target onsite

Lifecycle

Close collaboration for maximum performance

A Vertical Mill Tyre hardfaced with
Carb Mill™ and standard hardfacing on left side

Lifespan

The microstructure of 5-layers of
Carb Mill™ showing uniform distribution of the ceramic particles throughout the thickness of the entire
weld deposit.

MFL Carb™

Protecting your MFL from the daily grind

Welding Alloys provides a patented, proven solution that offers the following benefits:

• Provides a welded solution with unrivalled impact resistance
• Superior wear resistance compared to competitor products
• A cost effective solution to refurbish worn components
• Optimised engineered wear protection solution for grinding components
• A cost effective solution to refurbish wear components
• Superior wear protection compared to competitive products

WA Applications for Cement Plants

Scope of projects including: Pumps, crushers, grates, mill shells, rollers, etc. Write to us for case studies, unique solutions, references and our complete product range.

WA Applications for Cement Plants

Scope of projects including: Pumps, crushers, grates, mill shells, rollers, etc. Write to us for case studies, unique solutions, references and our complete product range.
Our Technical ‘Spark’ Solves Your Industrial Challenges

A worldwide presence

www.welding-alloys.com

WA Applications for Cement Plants

WA Wear Plates

- Higher real efficiency
- 50% reduction in downtime
- Wear plates less than 5mm thick
- Ultra-thin composite plate
- Hardfacing of Vertical Grinding Mills (VRMs)
- Effective wear and impact resistant applications
- A cost-effective solution to refurbish worn components
- Optimised engineered wear protection solution for grinding components
- Superior wear protection compared to competitor products

CARB Mill™

- State-of-the-art grinding technology
- High efficiency conditions process
- Optimised operational and design
- Increased wear life and decreased maintenance

WA Services

- Service and support for all Cement Milling applications
- Five different stages of service available
- WA Services Target vs. OEM Services
- Cost savings and increased productivity
- Solutions within the first cycle of operation
- Improved cement milling technology
- WA services for cement and concrete industry

Your ideal partner for difficult welds!

GAMMA 182-O

- Ultra-thin composite plate
- Hardfacing of Vertical Grinding Mills (VRMs)
- Effective wear and impact resistant applications
- A cost-effective solution to refurbish worn components
- Optimised engineered wear protection solution for grinding components
- Superior wear protection compared to competitor products

Your ideal partner for difficult welds!

GAMMA 182-O

- Ultra-thin composite plate
- Hardfacing of Vertical Grinding Mills (VRMs)
- Effective wear and impact resistant applications
- A cost-effective solution to refurbish worn components
- Optimised engineered wear protection solution for grinding components
- Superior wear protection compared to competitor products

Your ideal partner for difficult welds!

GAMMA 182-O

- Ultra-thin composite plate
- Hardfacing of Vertical Grinding Mills (VRMs)
- Effective wear and impact resistant applications
- A cost-effective solution to refurbish worn components
- Optimised engineered wear protection solution for grinding components
- Superior wear protection compared to competitor products

Your ideal partner for difficult welds!

GAMMA 182-O

- Ultra-thin composite plate
- Hardfacing of Vertical Grinding Mills (VRMs)
- Effective wear and impact resistant applications
- A cost-effective solution to refurbish worn components
- Optimised engineered wear protection solution for grinding components
- Superior wear protection compared to competitor products

Your ideal partner for difficult welds!
From quarry to shipping, always a WA Solution
Your ideal partner for difficult welds!

Our Technical ‘Spark’ Solves Your Industrial Challenges

Our WA Consumables are the key to achieving

- Reduced maintenance
- Improvements
- Reduced costs
- Increased output
- Increased safety

WA Welders are designed to

- Suit your application
-晗生

Innovative and reliable welding systems

- Designed to optimise your welding
- Suitable for a wide range of tasks

WA Services

- End-to-end service
- Lifetime support
-service

A worldwide presence

Hardfacing of Vertical Grinding Mills (VRMs)

- Through Welding Alloys technology, cement plants across the globe can extend the life of their vertical grinding mills.
- The novel WA Consumables for VRMs enable longer roller life with fewer maintenance cycles, enabling them to increase productivity, optimise mill efficiencies and simultaneously reduce maintenance costs. It is a simple solution designed to extend the life of the roller press roller.

- WA Services has proven itself during refurbishment projects.
- Shock resistant roller press with improved wear and impact resistant properties.
- World’s leading mill manufacturers have utilised Welding Alloys products for their grinding mills.

- WA Consumables for VRMs
- Performance of a vertical grinding mill.
- Increased wear life.
- Real-life test results.
- WA Services’ ability to deliver
- Service & Warranty.

WA Applications for Cement Plants

- The microstructure of 5-layers of Hardplate®
- Superior wear resistance compared to competitor products
- A cost effective solution to refurbish worn components
- Optimised engineered wear protection solution for grinding components
- A superior solution to extend worn components
- Superior wear protection compared to competitive products

Hardplate®

- Heavy duty composite wear plates
- Designed for applications where weight is restricted
- 32 kg/m
- Standard hardfacing on left side
- Retrofitted phase with retrofit target
- Target of service onsite
- Shell liners and various other products and solutions to extend the life of grinding components
- WA Services’ ability to deliver
- Service & Warranty

Hardlite®

- Ultra-thin composite wear plates
- Less than 5mm thick
- High density £ 0.55
- WA Services’ ability to deliver
- Service & Warranty

Tuffplate®

- Impact resistant wear plates
- Designed for applications where weight is restricted
- The microstructure of 5-layers of Hardplate®
- WA Services’ ability to deliver
- Service & Warranty

For more information on Hardlite®, Hardplate® and Tuffplate®, please visit www.welding-alloys.com.