



06/2013

Technically more advanced. Successful together.

voestalpine Steel Division – the partner you can trust.

High-quality materials are the basis for our products. We strive to be the best partner for our customers and want to provide them with the best-possible solution. We focus our expertise on two aspects:

The personal aspect, with dedicated and highly competent employees
 The technical aspect, with high-quality methods, products and services

The companies in the voestalpine Steel Division and their employees understand partnership to be the following:

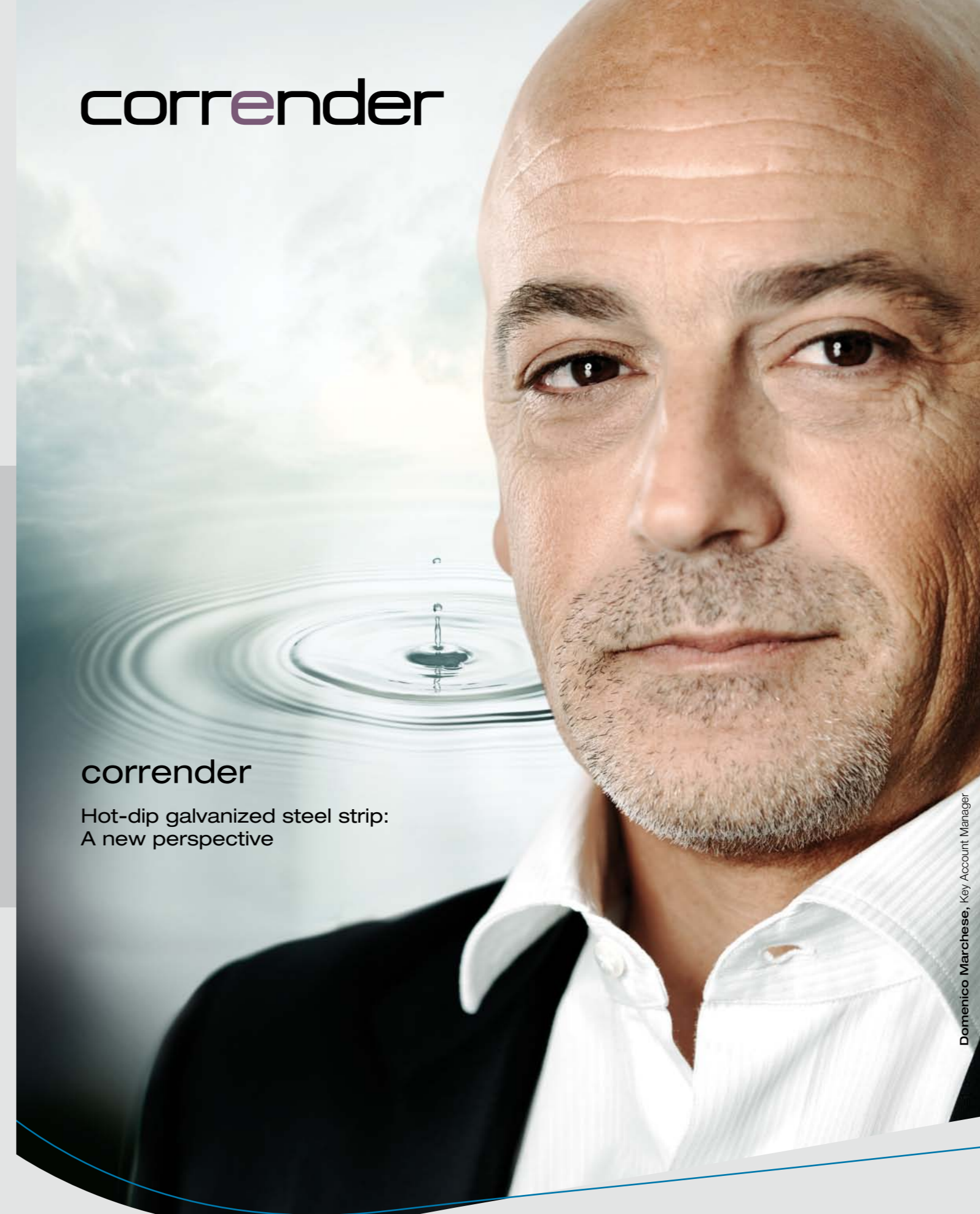
- Understanding for their customers' business
- Expertise and reliability
- Responsibility for satisfactory project completion
- Partnerships based on trust

Many years of successful partnerships with our customers prove our point.

voestalpine Steel Division
 voestalpine-Straße 3
 4020 Linz, Austria
 T. +43/50304/19-204
 F. +43/50304/59-7204
 electrical.industry@voestalpine.com
 www.voestalpine.com/stahl

voestalpine
 ONE STEP AHEAD.

corrender



Domenico Marchese, Key Account Manager

corrender

Hot-dip galvanized steel strip:
 A new perspective

voestalpine Steel Division
 www.voestalpine.com/steel

voestalpine
 ONE STEP AHEAD.



New perspectives through excellent corrosion protection

Meet the challenges of the market with significant quality improvement in your products and benefit from the excellent corrosion protection properties offered to you by corrender.

corrender The next evolutionary step in hot-dip metal-coated products

Intensive research has led voestalpine many times to new successes. The next evolutionary step has now been achieved in hot-dip metal-coated products. corrender has numerous advantages when compared to conventionally galvanized steel strip.

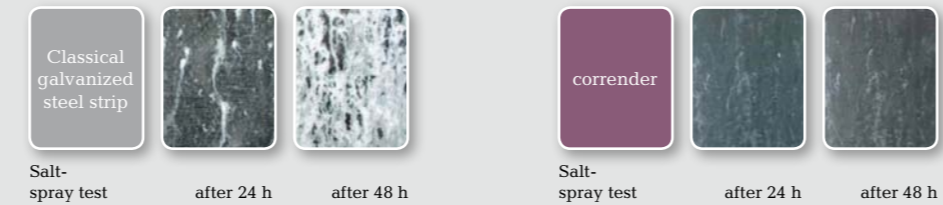
- Excellent cathodic corrosion protection
- Excellent workability
- High-performance alternative

Comprehensive laboratory experiments have confirmed the performance and potential of corrender in the household-appliance industry. As a reliable partner, voestalpine offers products that help customers more effectively meet future challenges.

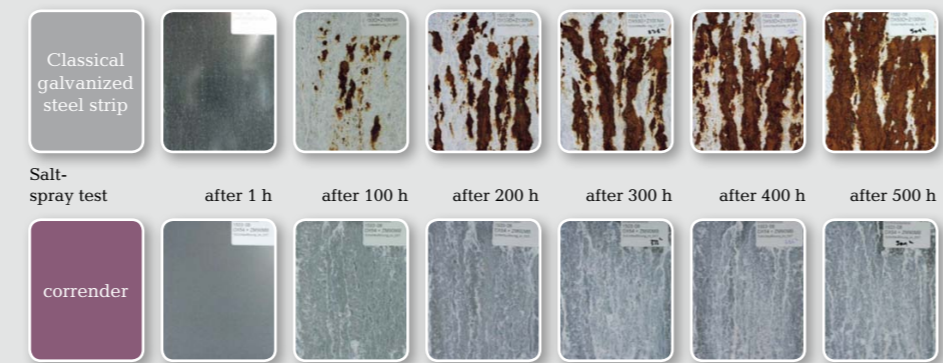
Excellent cathodic corrosion protection

The outstanding corrosion protection of corrender is significantly higher than that of conventionally galvanized steel strip.

Conventionally galvanized steel strip shows substantial signs of white rust after 48 hours in the salt spray test. Contrastingly, the corrender surface is practically free of white rust after the same amount of testing time.

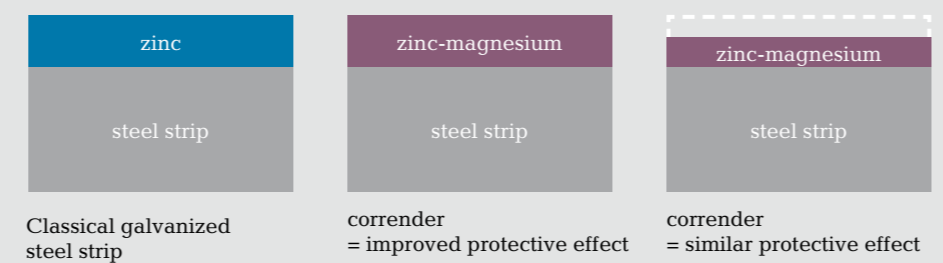


The superior protective properties of corrender become particularly apparent in tests for red rust. Because a passive layer is formed, red rust formation is delayed significantly. No signs of red rust formation are recognized, even after 500 hours.



The superior protective effect of corrender leads to two possibilities:

- Increased corrosion protection with same metallic coating thickness
- Same protection with significantly reduced metallic coating layer.



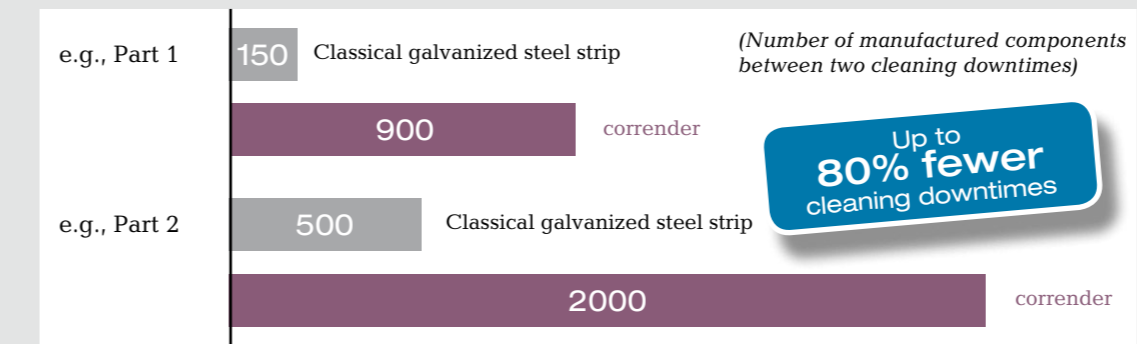
Excellent workability

corrender opens new potential for higher efficiency and thus reduces production costs. The high-performance protective coating results in excellent processing properties that lead to considerable increases in production and processing efficiency.

Fewer cleaning intervals due to less zinc abrasion

Substantially less zinc abrasion occurs during the processing of corrender as compared to classically galvanized steel strip. This makes it possible to greatly reduce the number of cleaning intervals required and thus increase production times between cleanings.

Industrial-scale tests have shown significant reductions in cleaning downtime:



Larger processing window during deep drawing

Process reliability in the press shop is increased through improved deep-drawing properties of corrender. The result is fewer rejects, especially in parts subjected to extensive forming, which leads to improved efficiency.

Perfectly combinable with multifunctional coatings

corrender can be excellently combined with multifunctional coating systems such as dryform and magicform.

The information and product properties contained in this printed material are non-binding and serve the exclusive purpose of technical orientation. They do not replace individual consultation provided by our sales and customer service teams. The information and product properties contained in this brochure are guaranteed only when specifically and contractually stipulated. All rights reserved. Not responsible for printing errors or technical changes. Duplication in part or in whole is subject to explicit written permission by voestalpine Stahl GmbH.

High-performance alternative

corrender is an interesting alternative to other products because of its excellent corrosion protection and excellent processing properties.

	zinc*	corrender	galfan
Start of white rust	Same as reference	Better than reference	Same as reference
Kinetics of white rust	Same as reference	Better than reference	Same as reference
Red rust resistance (salt spray test)	Same as reference	Better than reference	Same as reference
Red rust resistance (cyclical corrosion test)	Same as reference	Better than reference	Same as reference
Powder paintability	Same as reference	Better than reference	Same as reference
Cathodic corrosion protection	Same as reference	Better than reference	Same as reference
Weldability	Same as reference	Worse than reference	Same as reference

Legend: Same as reference (white), Better than reference (blue), Worse than reference (grey).

* Zinc is always the reference.

Make the switch. We will provide the support you need.

Since 2007, voestalpine has been making serial deliveries as one of the pioneers in introducing zinc-magnesium coatings to the European market. No other company has a more comprehensive understanding of zinc-magnesium coatings than voestalpine. Numerous laboratory experiments, natural weather testing, a significant number of real applications and joint processing trials at the customer have built the foundation for profound understanding of the product and its properties. Our professional specialists will be happy to assist you in making the conversion.