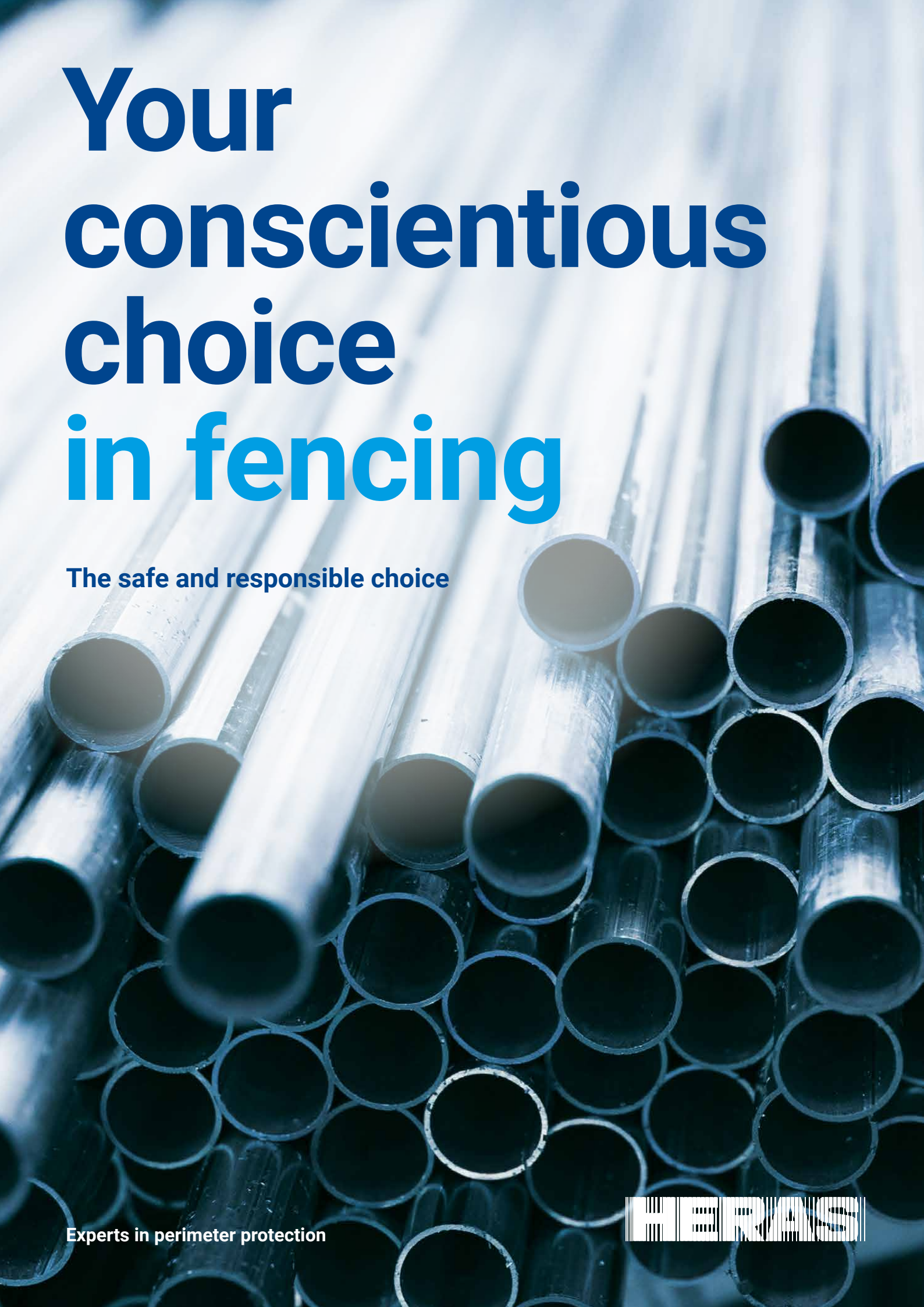
Your conscientious choice in fencing

The safe and responsible choice



Experts in perimeter protection

HERRAS

Fences with the longevity of a house. You can be confident that they will still protect your site year after year. Thanks to a specialised galvanizing process, our fencing is resilient against atmospheric corrosion / rust formation, free from sharp edges, and has greatly improved protection against surface damage. This process is more environmentally friendly, without compromising on quality.

When purchasing a fence there are many choices to make in terms of style, safety and durability. All of these are important aspects that play a role in varying degrees. Equally important is the method of galvanizing. Reliable hot-dip galvanized products are often chosen. So why make concessions in this area if the alternative - pre-galvanized products - are of equal quality, go through a more environmentally friendly process and are also cheaper?

Five reasons for more conscientious choice

Why choose a pre-galvanized fence?

1. Smooth surface, no unevenness

For certain applications, the standards require that there should be no blemishes on the product that people can be hurt by. This includes railings or fencing in playgrounds or on school yards. Our pre-galvanized fencing meets the requirements of a smoothly finished product. With pre-galvanization, zinc accumulation, droplet and membrane formation is minimised.

2. Pleasing to the eye

When fencing is raised again after full immersion in a zinc bath, significant waste zinc drips off. Sharp drainage spikes and zinc deposits are then inevitable. Pre-galvanization, on the other hand, ensures a more compact and efficient zinc layer, resulting in a smoother surface.

3. Lower purchase price

The amount of zinc required for pre-galvanizing is up to 75% lower than with full-bath galvanizing. Transport costs are reduced, because deliveries of steel products to the galvanizing plant are now obsolete. Moreover, the pre-galvanizing process reduces the production lead time because the pre-galvanized product can be coated directly. These cost savings result in a lower purchase price.

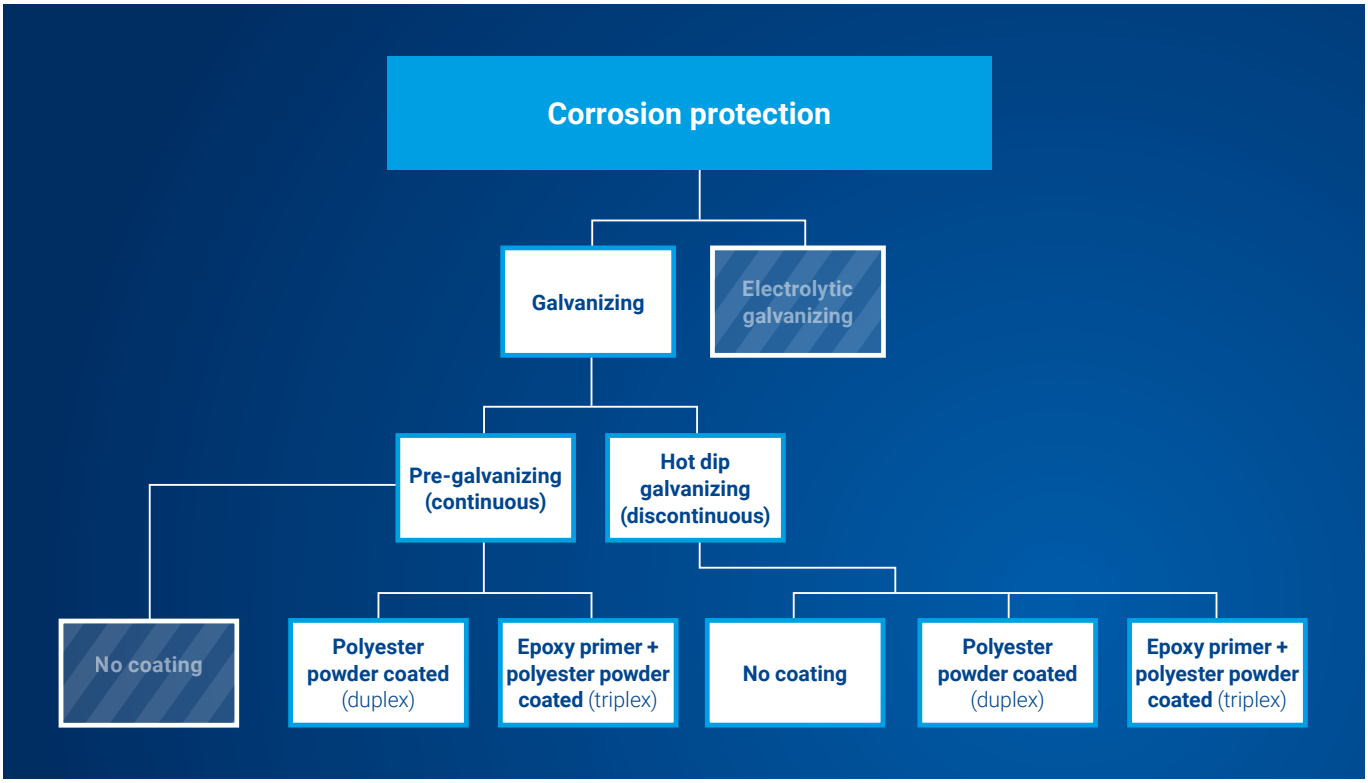
4. Sustainable alternative

By opting for a pre-galvanized fence, the CO_2 output of the galvanizing process is reduced by up to 70% compared to hot-dip galvanizing. A substantial reduction in transport movements, a reduced amount of zinc and approximately 15% less chemical consumption yield the largest part of the saving.

5. Powerful protection

Wind, snow, rain, bright sun. Fences are exposed 24/7 to changing weather conditions. In addition, the environment in which the product is installed also influences the lifespan. As a result, for example, of the presence of salt in the air of a nearby coastline, chlorine and sulphate precipitation in industrial areas and along railway lines, or the ammonia emissions from a nearby farm. Pre-galvanized products have been extensively tested for corrosion resistance and meet corrosion class 5 (C5 with epoxy coating plus polyester powder coating).

Corrosion protection



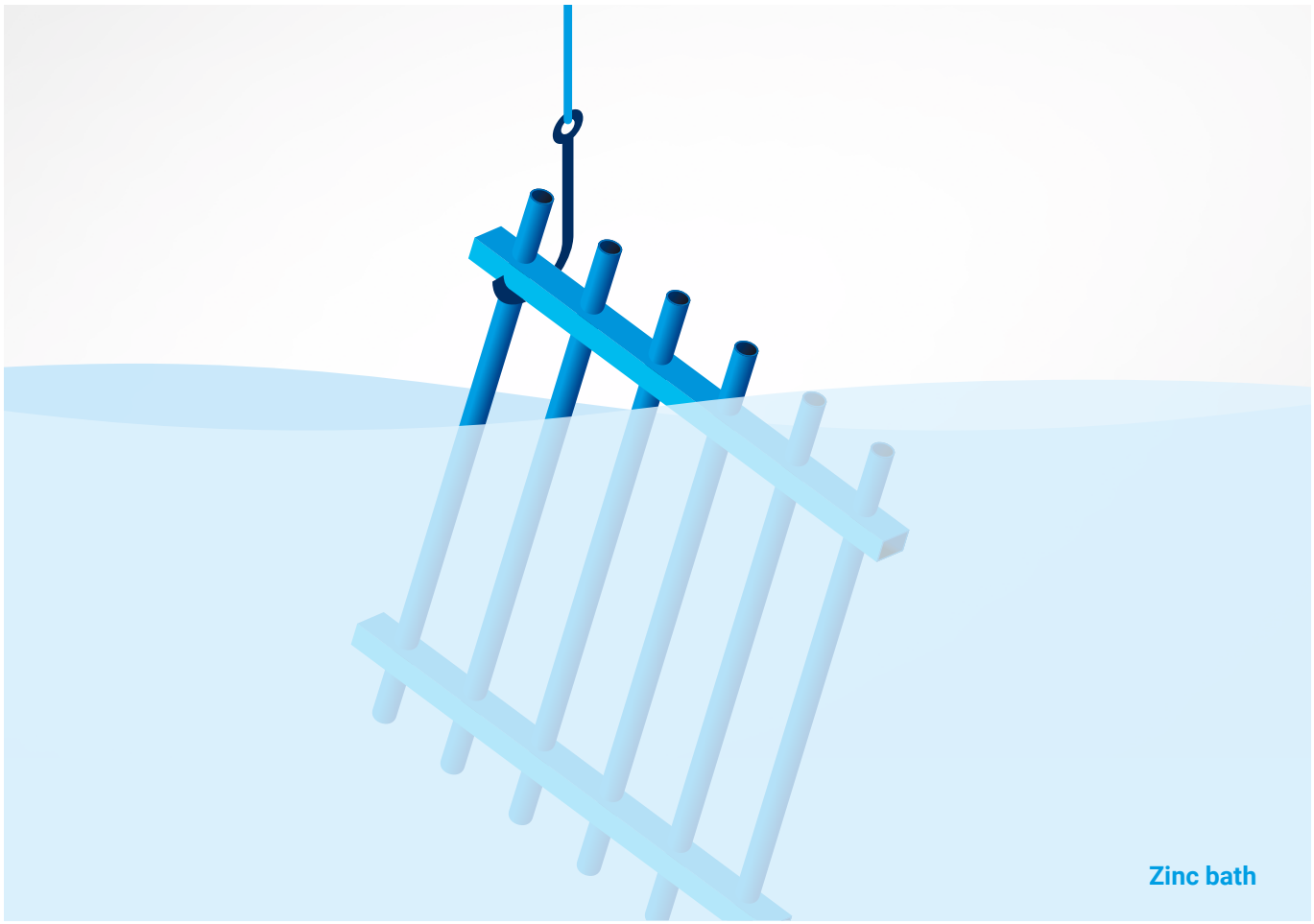
Not available at Heras

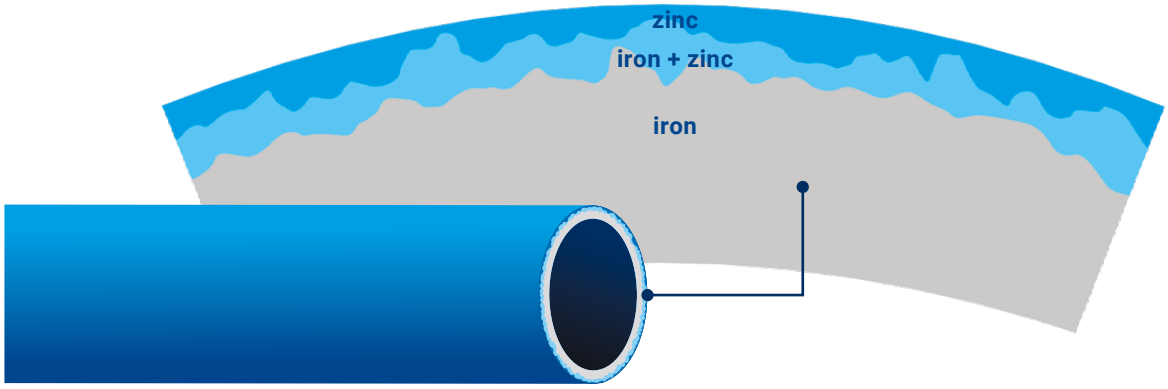
	Hot dip galvanizing	Pre-galvanizing
What will be galvanized?	The welded product	Coil
Quantity of zinc in g/m²	350 - 2000	100 - 800 (Heras is standardized on 275)
Coating thickness in µm	50 - 100 > (Heras)	15 - 20 (Heras)
Zinc on both sides?	Yes	Yes
Surface after galvanizing	Uneven surface with possible sharp edges	Smooth surface
Coating adhesion	Good	Good
Outdoor applicable	Yes (even without coating)	Yes (minimum duplex)
Corrosion class	C5 with triplex coating	C5 with triplex coating
Standards	EN ISO 1461	EN 10346

Hot dip galvanizing vs. Pre-galvanize

Hot dip

With full-bath galvanizing or discontinuous galvanizing, the ready-made fencing is immersed in its entirety in a bath with zinc and then lifted out.

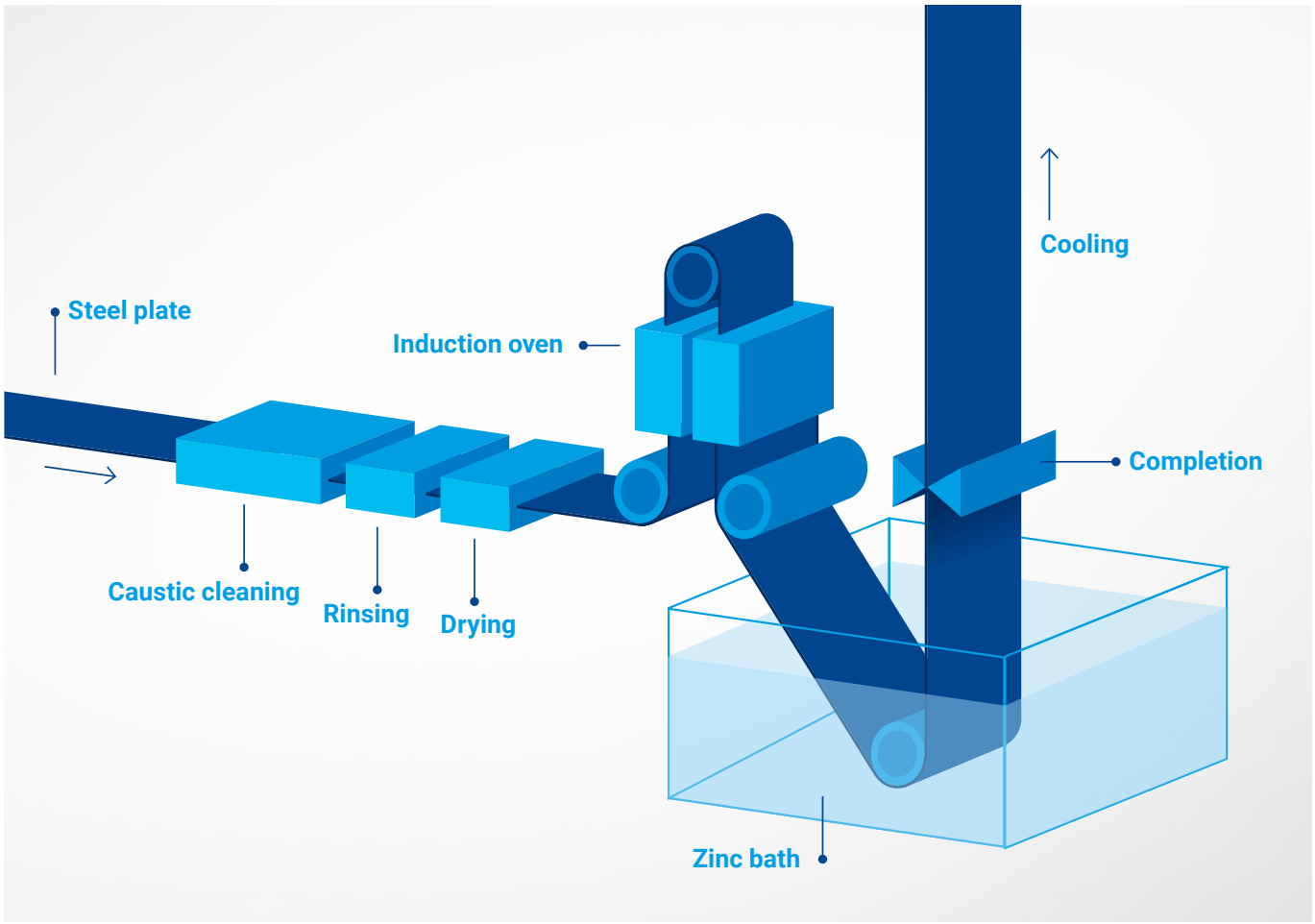


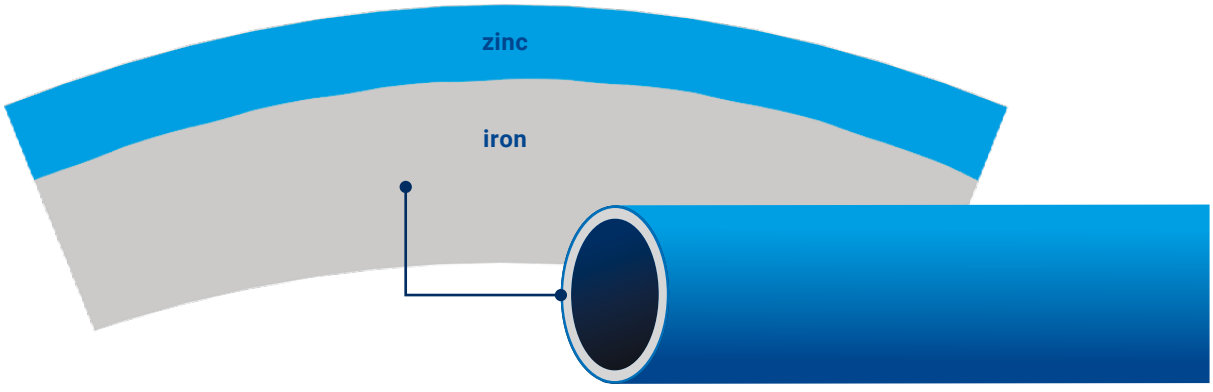


Hot dip

Pre-galvanize

With pre-galvanizing or continuous galvanizing, the steel roll is galvanized before use in manufacture. This process involves passing cold-rolled steel through molten zinc at high speed. Subsequently, this material is used to manufacture the bars or beams that comprise our products. Pre-galvanizing is possible for almost all applications, with the exception of fencing that must comply with the EN-ISO 1461 standard.





Pre-galvanize

Coating

All Heras pre-galvanized products are supplied with a polyester powder coating. This coating provides the product with a color of your choice. In addition, this coating protects the zinc layer of the product and improves corrosion resistance. Every pre-galvanized product has zinc on both the outside of the product and in the cavities. When the bar is exposed to rain, no rust will occur.

Extra protection

Depending on the volume of the product, an optional extra protective powder is available with the polyester powder coating, which prevents graffiti and stickers from sticking to the coating, for example.

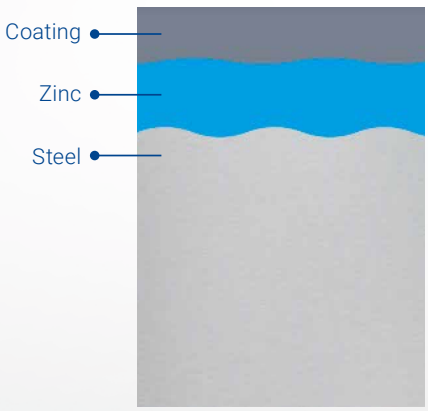
Our coatings are available in four standard RAL colors (9005 jet black, 7016 anthracite grey, 6009 fir green and 6005 moss green), but almost any color is possible on request.

Protection against corrosion

A way to provide extra protection against corrosion from the fencing is to apply a polyester powder coating. We offer two coating techniques that offer different levels of protection:

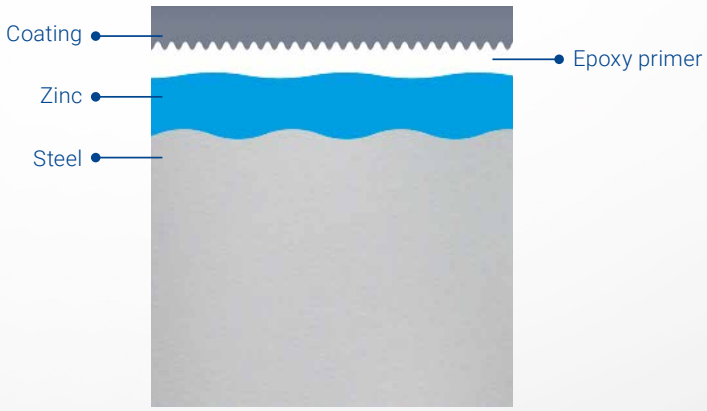
Duplex

With a duplex system, the steel is first galvanized (full bath or pre-galvanized) and then provided with a polyester powder coating.



Triplex

A triplex system is made up of 3 layers. The steel is again first galvanized, then epoxy primer is applied and finally polyester powder coated. The epoxy primer provides even better durability for the product, extending the lifetime and reducing maintenance requirements. The primer also ensures that the polyester powder coating bonds better to the product.



Influence of climate and air condition

With a fence from our total range of pre-galvanized products, you make a conscious choice.

Product type	Product	Hot dip galvanized	Hot dip galvanized and polyester powder coating (duplex)	Pre-galvanized and polyester powder coating coating (duplex)	Hot dip galvanized, epoxy primer and polyester powder coating (triplex)	Pre-galvanized, epoxy primer and polyester powder coating (triplex)
Railings	**Tangorail**			C2, C3, C4		C2, C3, C4, C5
Welded Mesh	**Zenith**	C2, C3	C2, C3, C4	C2, C3, C4	C2, C3, C4, C5	C2, C3, C4, C5
Welded Mesh	**Pallas (868 & 656)**	C2, C3	C2, C3, C4	C2, C3, C4	C2, C3, C4, C5	C2, C3, C4, C5
Welded Mesh	**Triton / Jupiter**			C2, C3, C4		C2, C3, C4, C5
Welded Mesh	**Apollo / Athena**			C2, C3, C4		C2, C3, C4, C5
Sports	**Spectator rail**	C2, C3	C2, C3, C4	C2, C3, C4	C2, C3, C4, C5	C2, C3, C4, C5
Sports	**Muga**	C2, C3	C2, C3, C4	C2, C3, C4	C2, C3, C4, C5	C2, C3, C4, C5
Noise Barrier	**Noise Reducer / HA**			C2, C3, C4		C2, C3, C4, C5

A selection from our pre-galvanized offer

Zenith

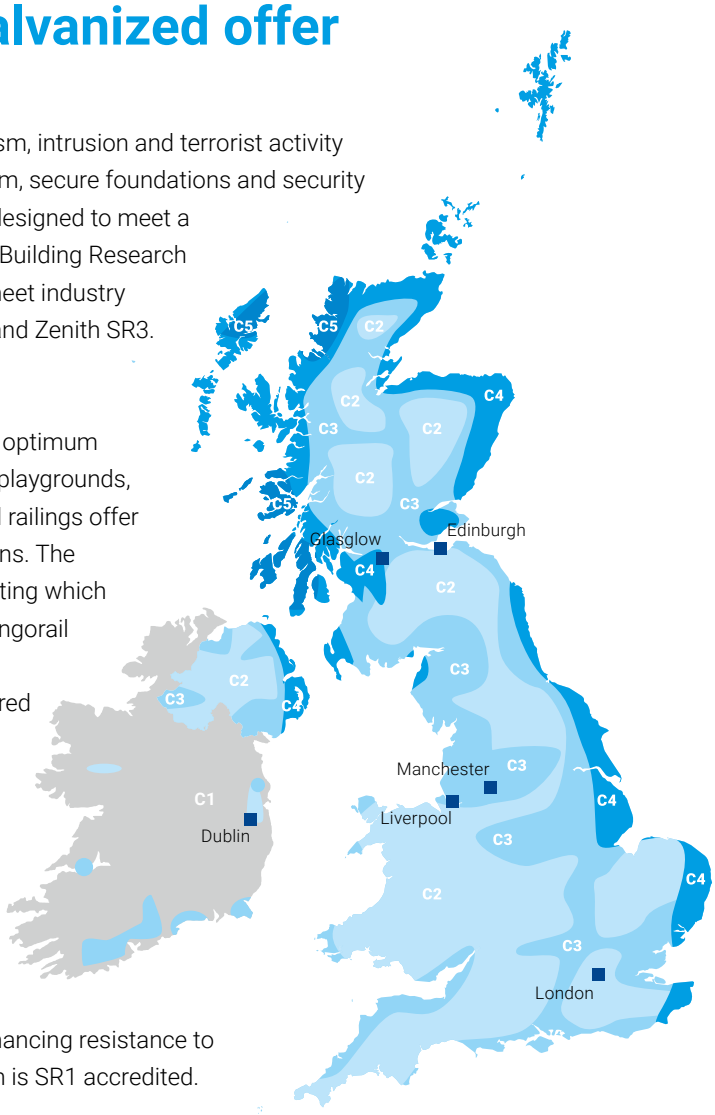
Zenith system offers a high level of protection against vandalism, intrusion and terrorist activity thanks to the combination of its anti-climbing 358 mesh system, secure foundations and security toppings, such as barbed wire. Each Zenith system has been designed to meet a range of security needs and has been rigorously tested by the Building Research Establishment to gain the necessary security ratings (SR) to meet industry standards. The Zenith range includes Zenith SR1, Zenith SR2 and Zenith SR3.

Tangorail

Tangorail is a unique self-raking railing system which provides optimum protection for a variety of applications, including: schools and playgrounds, commercial and industrial sites, and logistic centres. Tangorail railings offer a perimeter protection solution in a wide range of design options. The simple yet effective design also features an anti-corrosion coating which increases the life span and reduces maintenance. The total Tangorail range ensures safety and security for all its users. Each line of products of 1.8 meter and above has been accredited by Secured by Design (SBD) and have been given an SR1 rating.

Pallas xtra

The Pallas mesh fencing system is a modern welded mesh panel with clear visibility. The 868 mesh design means that panels are manufactured using 6.0mm thick vertical wires and 8.00mm thick twin horizontal wires. The additional vertical wires provide enhanced protection against climbing attempts. It is a secure effective form of crime prevention. Enhancing resistance to vandalism and forced entry attempts. Pallas xtra above 1.80 m is SR1 accredited.



For more information about the galvanizing processes, visit **heras.co.uk/galvanization**

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