

microZINQ®
an award winning innovation

microZINQ® combines technical and functional performance with resource efficiency and effectiveness in process and product – it pays off!



Materialica Best-of-Award



Deutscher Rohstoffeffizienz-Preis



Cradle to Cradle®-Zertifizierung

The first marks of distinction for **microZINQ®** were the Materialica Best-of-Award and the Industriepreis both recognizing the innovative character of **microZINQ®**. The Deutsche Rohstoffeffizienz-Preis takes the recognition one step further: it is the first time that a surface coating process has been honored with this prestigious award.

The real challenge yet is to combine resource efficiency with effectiveness in process and product: this is the reason why **microZINQ®** – like all other ZINQ coatings – has been certified according to the internationally recognized Cradle to Cradle®-standards.



Any questions about the innovative ZINQ-services?
Contact us by e-mail via info@zinq.com
or use the freecall 0800 – 9 40 30 20.



microZINQ® –
Less is more.

microZINQ®: Can less be more?

Sheet plates clinched after microgalvanizing



Without doubt, batch hot dip galvanizing (HDG) is the best method to protect your steel from rust. But: times are changing. And: customers' requirements are changing as well.

Today, clients do not only look for the best corrosion protection, they also request long-lasting coatings with less resource consumption and a broad spectrum of aesthetical and functional properties. Batch HDG coatings need to provide solutions for galvanizing advanced steel types and need to resolve issues stemming from complex geometry, cold forming, joining techniques and other fabrication challenges.

microZINQ® matches these requirements with innovation: its unique and patented batch HDG process using special binary (Zn-Al) alloys masters the reaction between zinc and steel. Independent of steel composition and thickness microZINQ® produces even coating surfaces with defined protective and visual properties.

Micrograph section for microZINQ®-coating



microZINQ® offers long-lasting, sustainable protection for steel against rust with significantly reduced input of zinc whilst assuring the highest product quality. It represents a real alternative to other surface protection means enlarging the scope of batch HDG applications significantly.



Less is more: microZINQ® offers more protection, less resource consumption, more functional properties, less environmental impact.

microZINQ® is an innovative single dip batch HDG process equivalent in performance to ISO 1461 batch HDG in environment conditions as described in ISO 14713.



Reducing zinc input by 80 % and still obtain a batch HDG coating that compares to the standards of the ISO 1461 in terms of corrosion protection? The answer is microZINQ®.

microZINQ® scores extremely well with steel products in outside use exposed to rough weather conditions and possibly more corrosive and mechanical wear and tear than average – such as guard rails and other steel parts used in infrastructural applications. Low zinc runoff rates in combination with high mechanical resistance provide for many years of protection against rust while assuring a very homogeneous visual aspect.

The same applies for agricultural applications: for stable equipment as well as for agricultural machinery microZINQ® has become a proven alternative to replace the use of stainless steel and chrome-6-containing coatings.

Thanks to the lower dipping temperature as well as the significantly lowered temperature differential in the process, protecting steel with microZINQ® reduces the stress intake for steel parts during the batch HDG treatment.

Critical joining points such as welding a tube to a sheet can be safely galvanized. microZINQ® offers the highest possible compatibility between the properties of the steel part and the batch HDG process.

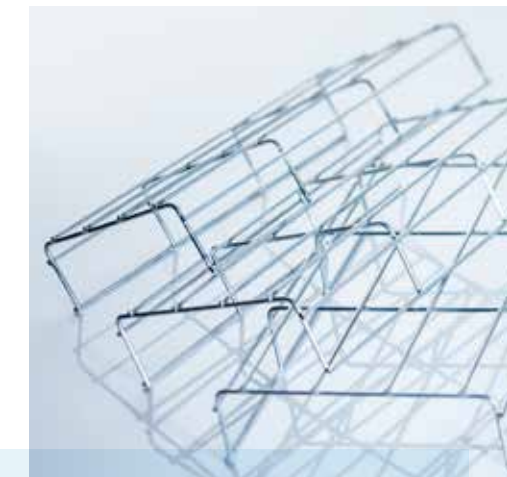


Moving parts on steel products are a real challenge for batch HDG coatings: protected with microZINQ® these parts obtain a superior fitting accuracy and remain movable after galvanizing due to the thin coating thickness and high viscosity of the microZINQ® alloy.



Long-lasting corrosion protection for vehicle underbody parts: microZINQ® offers a weight reduced, high performance zinc coating that also works for high strength (HSS) and ultra-high strength (UHSS) steel types. It protects complex geometry outside and inside with the same quality of coating and masters also the most rigid environments resisting stone-chipping and salt exposure.

Over 10 million underbody parts in use cannot be mistaken but put proof to the performance of microZINQ® under permanent dynamic stress exposure.



Cold forming after galvanizing or applying special joining techniques such as clinching: microZINQ® goes along. And that literally as microgalvanized surfaces are highly ductile and can be processed easily after galvanizing – be it rolling, bending, pressforming or clinching.

Advantages of microZINQ®

Corrosion protection	Technical functions
Long-lasting protection in corrosive atmosphere and mechanical stress	Material compatibility, surface properties, cold forming, joining
Resource efficiency	Resource effectiveness
Up to 80 % less Zinc	Cradle to Cradle®-certified

State-of-the-art microZINQ®-installation

