

**MECHANICAL
PLATING.**



**ELECTROPLATING
TECHNOLOGY**

ELECTROPLATING TECHNOLOGY-RANGE

Our GALVOTEC series offers you processing chemicals for almost all processes in the field of galvanisation. The GALVOTEC products are developed, produced and bottled by Wocklum Chemie at the Balve site.

Pretreatment:

- + Decoction degreasing
- + Electrolytic degreasing
- + Activation salts
- + Pickling inhibitors

Technical procedures:

- + Hard chrome
- + Zinc
- + Zinc-nickel
- + Chemical nickel

Decorative techniques:

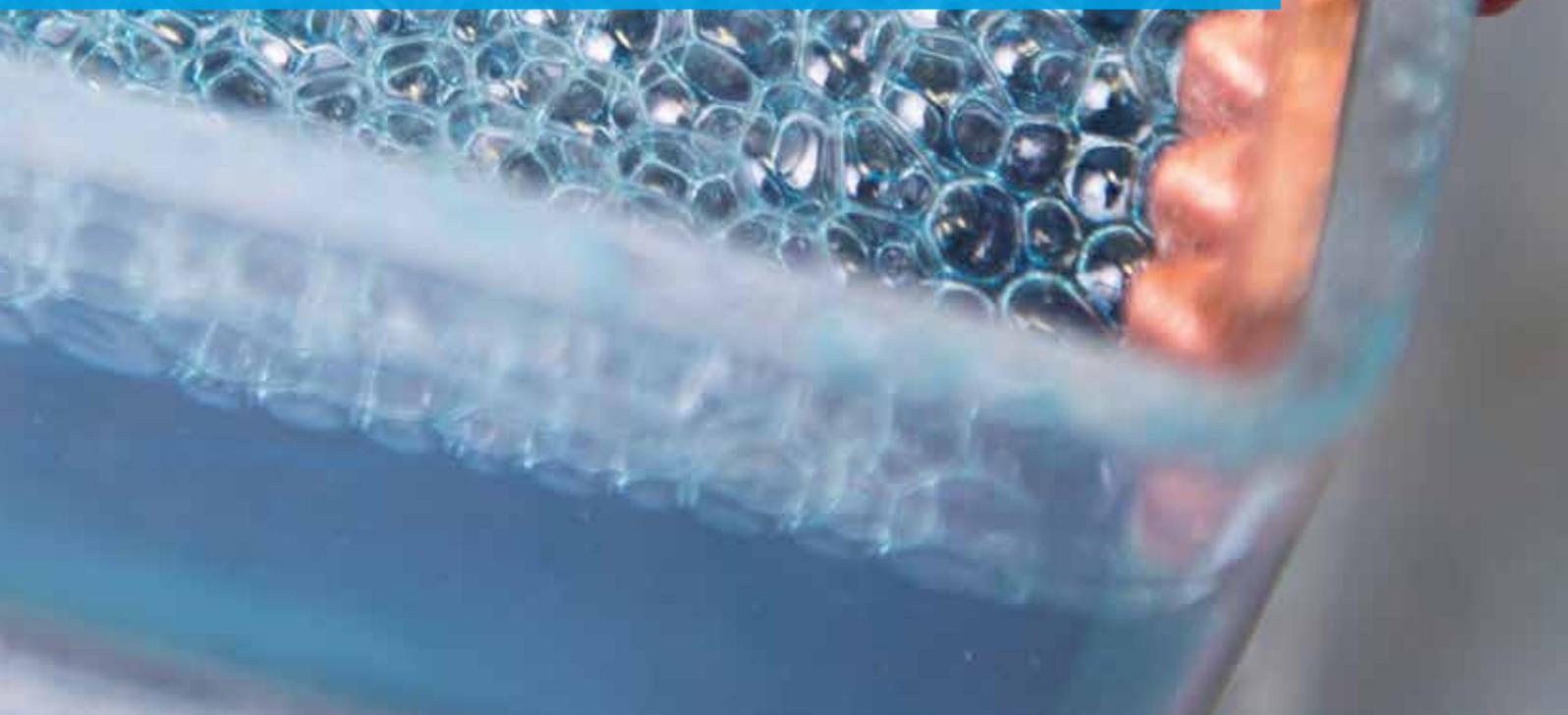
- + Copper
- + Nickel
- + Chrome
- + Tin-nickel

Follow up treatment:

- + Passivations for zinc
- + Sealer
- + Passivations for silver

Dyeing for different metals

De-metallisation





MECHANICAL PLATING

CW-GALVOTEC activator MP 4

is an etch degreaser which has successfully been used for years for the deoxidation and degreasing of high-strength, high-carbon steels due to its highly-inhibiting properties. The dosing of the activator is necessary if there is a heavy and oxide/scale layer on the substrate. For this, activator B is added to the coating bell in a concentration of approx. 50 ml/m² of surface area to be coated. After the treatment, the liquid is decanted and the bell is rinsed with water once more and decanted.

CW-GALVOTEC cleaner MP4

is used in the mechanical plating process as a degreasing agent and/or detergent as well as for copper plating. Cleaner MP4 provides a thin layer of copper on mass-produced parts made from high strength steel in order to protect them against the infusion of brittle-fracturing hydrogen in the subsequent galvanisation process and as a result, ensure the necessary substrate for subsequent layer-forming processes. Cleaner MP4 is added to the drum in a concentration of approx. 50 ml/m² of surface area to be coated. Coating takes approx. 5 min. after adding for the formation and compaction of the copper layer.

CW-GALVOTEC defoamer MP4

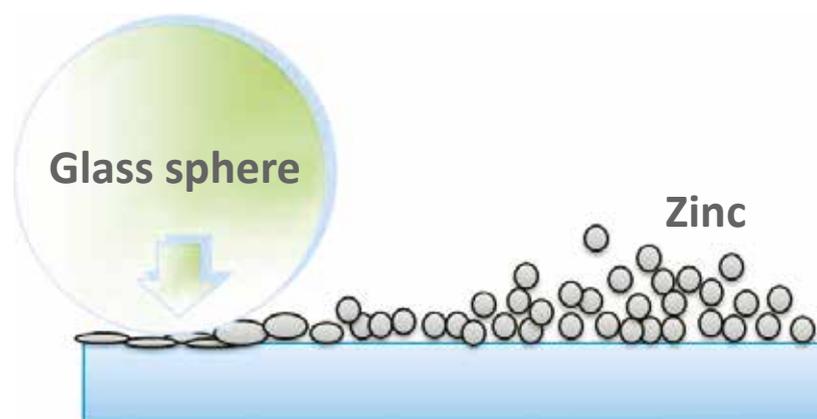
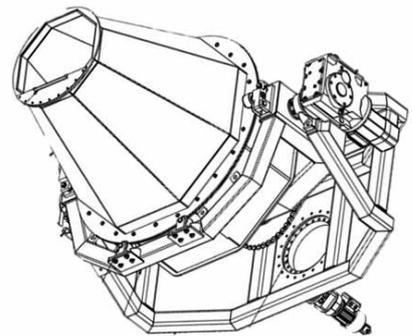
The defoamer is a highly effective preparation that is specially designed for the MP4 system and does not affect the layer forming process. The use of the defoamer is necessary as the formation of foam can be expected in certain individual process steps e.g. when activator B/BX or cleaner MP4 is used. The dosage is approx. 2.5 ml/m² of surface area to be coated.

CW-GALVOTEC promotor MP4

is used as an activator in the mechanical plating process. Here, after copper plating (with our MP4 cleaner product) and before adding zinc powder to the turning drum, promotor MP4 is added at a dosage of approx. 50 ml/m² of surface area to be coated. When zinc is first added, the addition of promotor MP4 causes the so-called „zinc flash“. This is the emergence of a thin adhesive layer which significantly improves the adhesion of the subsequently applied zinc layer, refines its microstructure and increases protection against corrosion.

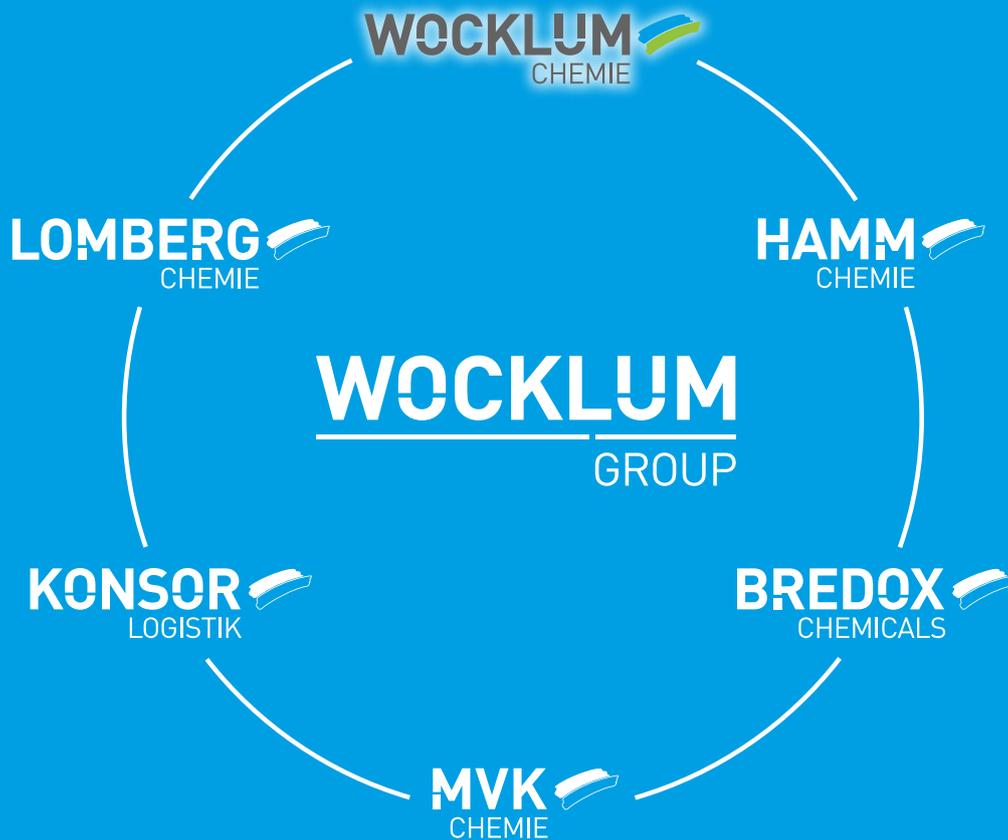
CW-GALVOTEC inhibitor MP4

Inhibitor MP4 is used at the same time as promotor MP4 and is responsible for the reaction speed and the speed of the layer formation. The speed of the layer formation influences both the duration of the process as well as the uniformity and fine coarseness of the layer, thus offering optimum protection against corrosion. Inhibitor MP4 is applied at a dosage of 2.5 ml/m² of surface area to be coated.



FIT FOR THE FUTURE

WE HAVE MANY PLANS



Contact

Hannah Camminady
T +49 2375 925-217
h.camminady@wocklum.de

Thomas Imming
T +49 151 12289714
t.imming@wocklum.de

www.mechanisches-verzinken.de