

We can make every step of your hot dip galvanizing process more efficient with improved environment, higher quality and lower costs!



**RECYCLEAN
SYSTEMS**

MEMBER OF
QIMECO
GROUP

Hot dip galvanizing technology is developed through the demands on quality, economy, environment and working conditions. We have used our experience of hot dip galvanizing since more than 25 years to develop a product range based on modern chemistry. Our intention with the product range is to satisfy the increasing demands on each step in the process. Often the effects of an additive in one step influences the following processes. Below you find a summary of what we can do to strengthen the production chain in your factory.



DEGREASING

Let the products that shall be treated choose the degreasing method! Cold rolled material is often easy to degrease, machined parts can contain fat machining oils in huge quantities that need a powerful degreaser with good separation properties. Maybe you also need to speed up your pickling process?

PICKLING

Rusty material needs a strong hydrochloric acid to be removed whilst cold rolled material is quickly pickled in weaker acid with high iron content. Other acids like phosphoric or sulfuric acids can also be used. It can be combined with the degreasing for a good result. Pickling additives can reduce the acid consumption and improve the working conditions.

FLUX

Modern flux is not just double salt. It may also contain additives to better cope with high silicon steel, higher aluminum content for shinier and smoother surfaces or perhaps most importantly avoid galvanizing due to "black spots".

GALVANIZING

Modern zinc metallurgy has developed alloys with e.g. aluminum and nickel that reduce zinc consumption as well as shinier surfaces. The right flux offers great opportunities. Additives for recycling zinc from ash and dross can provide significant savings in zinc consumption.

SURFACE PROTECTION

Increasing demands that the goods arrive at the customer without white rust require an extra step to provide long-term protection. It also significantly reduces the so-called "run off" problem by preventing the release of zinc from parts being stored outdoor. New technology offers an inorganic thin layer with excellent protection.

- Biological degreasing with eternal life, no destruction
- Neutral degreasing
- Effective acid degreasing that provides accelerated pickling

DEGREASING PRODUCTS

Biosys Power 2550: Our classic neutral degreaser that is very effective also over a long time. Removed fat and oil are biologically broken down in the bath and allows the bath to operate without dumping for many years. Rinsing before pickling is not necessary.

BriteClean: Neutral degreaser that offers a simple but highly effective degreasing over a wide temperature range. Rinsing before pickling is not necessary.

BriteClean P: Acid degreasers that in addition to being highly efficient also help to accelerate subsequent pickling. Interesting product to support a production line with limited pickling capacity. Rinsing before pickling is not necessary.

- Reduced consumption of pickling acid
- Reduced pickling mist in the premises
- Better working environment

PICKLING ADDITIVES

Inhibit C: Adding **Inhibit C** prevents pickling of the pure steel surface. It reduces the consumption of hydrochloric acid and reduces pickling mist from the bath since pickling stops when the steel surface has been pickled clean. **Inhibit C** reduces the consumption of hydrochloric acid by its function, thereby also reducing the amount of acid to be destroyed.

No Vapor: **Inhibit C** can be supplemented with **No Vapor** to further reduce the formed pickling aerosol from pickling baths. Reduces any floating oil on the surface of the pickling bath.

- Dry and wet flux salts
- New flux chemistry
- Improved flux results

FLUX ADDITIVES

Double salts: we can supply both traditional flux salts in dry form as well as water-based flux salts for dust-free and automated dosing. Contact us about your needs.

BriteFlux: A flux additive that ensures a trouble-free galvanizing also on goods that often have problems with black spots after galvanizing. Also allows for a significantly increased aluminum content. Shinier surfaces. Often radically reduces re-galvanizing

BriteFlux N: A flux additive that reduces the formation of dross and provides controlled growth of the zinc layer also at higher silicon content; Gives a shinier surface.

Recy Flu Fast: Is added to the flux bath to increase the wetting of the flux and increase the efficiency of the treatment. Adding Recy Flu Fast to the flux bath will accelerate the subsequent drying process as treated surfaces drain liquids easier.

- Improved zinc layer, reduced zinc consumption
- Increased yield
- Safer process

ADDITIVES TO THE POT

Zincoless: The product is added to the collected ashes which are then placed on the pot. By reaction, 60-70% of the zinc present in the ashes is recycled.

- Effective white rust protection
- Better looking surfaces
- Durable surfaces

WHITE RUST PROTECTION

BritSeal: A very effective inorganic white rust protection that lasts for a long time. Excellent as transport and storage protection outdoors, so you don't get a so-called "run off" effect of zinc from the goods to stormwater wells.

SERVICE AND EQUIPMENT

As usual, we continue to manufacture plants for biological degreasing, flux regeneration, pickling treatment and much more. Through our partner, Gimeco in Milan, we can provide everything from single components such as cranes, built-ins, furnaces, etc. to complete factories. If you need help checking your pot, we have a very efficient method.

Interested? Contact us!
Recycleclean Systems AB

E A Rosengrens Gata 9-11 SE-42131 V:a Frölunda Sweden
Tel: 031 866750 or email: info@recycleclean.se

**RECYCLECLEAN
SYSTEMS** | MEMBER OF
GIMECO
GROUP