

# Newsletter July 2016

No 2 2016

## EGGA Assembly in Seville

EGGA Assembly was this year located in Seville in Spain and offered a mixed content of interesting presentations. A separate abstract from the conference will be sent out to NG:s members later. In this Newsletter only some special and interesting products will be mentioned.

Already 10 years ago when NG performed an evaluation of various products for white rust protection of galvanized steel, we came in contact with the Spanish company Pro Coat and their transparent layers of paint. Their product is now well established on the continuous galvanizing market, and there are also several projects with batch galvanized steel where it has been used with good results.

## Post treatment of galvanized steel

There are many reasons for post treatment of galvanized steel, and it is very common in some countries. Certain conditions of moisture, temperature, pH and oxygen during storage can be very aggressive to the zinc coating, for example during delivery by sea or long travel by truck in hard conditions. Chromium-based post treatments have been used for many years but environmental regulations have already, or will in a near future, restrict the use. There are nowadays several alternative products on the market. The reason for post treatment are among others:

- To delay the white rust and keep the brightness for a longer time - a must for some types of products
- To increase the durability of the galvanized coating
- If the products have to be stored outdoors

BRUGALCOLOR® is a Cr-free Thin Organic Coating (TOC), formed by an inorganic package which produces a conversion of the galvanized surface, and an acrylic resins which forms a physical barrier above the zinc layers. The application is made by gun, over a hot or cold product. Jaume Grau from ProCoat mean that BRUGALCOLOR® is a new alternative to duplex systems. BRUGALCOLOR® has a coloured and translucent finish and the zinc surface is visible through it. It is available in different colours and shades and there are several cases and projects where it has been used with very good results. BRUGALCOLOR® is decorative, has lower cost than duplex and high corrosion resistance according to Jaume Grau. It is also available in a colour free version. ProCoat Tecnologias S.L also has another product with a little different properties compared to BRUGALCOLOR®:

- A clear surface with "Anti-Graffiti" quality
- Greater hardness and resistance to scratches
- Longer durability
- Enhanced gloss finish (also available in matt)

## Market Analysis – what does the customers actually know?

Another interesting presentation during the Assembly was the big market analysis performed by the American



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Galvanizers Association, to get more information about the market in US. There are some reasons for customers to choose galvanizing, but also for not choosing it. Where comes the views from, what is knowledge based and what is hearsay or pure misunderstanding? In the study the American Galvanizers Association have asked a large group of specifiers in US some questions about hot dip galvanizing, to get an understanding of the knowledge level. The result from the study will be presented in the summary from the Assembly 2016.



*Works visit in Seville. The plant had an open structure, so to say... The kettle had a cover, but the pre-treatment were completely open without any form of extraction, which will be a recommendation if one has HCl for pickling and the temperature is above 20 degrees C. Room temperature this hot summer day was about 38 degrees, with the result that the bath also became heated and the acid evaporated. The environment around the pickling bath was completely impossible to stay in without respirators, and hit the visitors totally unexpected. They had to hold their breath and quickly move to another part of the building.*

## Meeting with a representative of the Green Party

On June 14, Nordic Galvanizers chairman Bill Carlsson and Annikki Hirn from the Information Office met with Green Party's political secretary Emelie Nilsson in Stockholm, to talk about the Water Framework Directive and

the effects it can have for the galvanizing industry. It is a specific feeling to talk to politicians, since you want to present your case, but without arousing any negative thoughts of the politician. We were repeatedly asked "Is it a problem for you?" When we said that there is not a problem today, but it becomes a problem if zinc would be a priority substance in the WFD, it was important to present it in such a way that a priority could only take place as a result of an unfortunate misunderstanding.

### **EGGA Assembly 2017 – maybe in Stockholm?**

During last EGGA committee meeting it was suggested that the Assembly 2017 should be arranged in Stockholm. The latest Assembly in some of the Nordic countries was in Copenhagen 2008, so it felt like it was time again. The problem is that Sweden and also the other Nordic countries are quite expensive when it comes to hotels, conference centres, food and drinks. During the end of June Kimberley Warner, Events and Communications Executive at EGGA, visited Stockholm to look at the Stockholm Conference Centre and some hotels and restaurants. Stockholm Conference Centre is located in the former well known school "Norra Latin" at Norra Bantorget, located close to the Central Station and easy to reach by Arlanda Express or by train. It is also close to Clarion Sign Hotel where Nordic Galvanizers had the spring conference and annual meeting in 2015. The plan was that Clarion Sign would be the main hotel during the conference period, 13-14 June 2017. In the area there are also other, less expensive, hotels offered as an alternative. Unfortunately, when the proposals and quotations came last week it was decided that it will be too expensive to arrange such a conference in Sweden and EGGA have to look at other locations in south Europe where the cost level is lower.

### **Galvanized rebar in the bridges at Slussen in central Stockholm?**

Some weeks ago, Stephen Wilkinson, Executive Director of IZA, met with the top management of Boliden including Lennart Evrell, and they did some brainstorming. One of the ideas was about the big re-construction of Slussen in Stockholm, one of Stockholms most high-profile redevelopments. It was suggested that Boliden could pay for the zinc and IZA could try to convince the specifiers to use galvanized rebar in the bridges. If we could manage with that it would really be a great marketing of galvanized rebar.

The construction of the new Slussen in the heart of Stockholm is one of the largest urban transformation projects in Sweden in terms of scope, technical challenges and budget. Around 25 construction contracts will be procured.

Slussen has an extensive bridge area, about 40,000 m<sup>2</sup>. This is divided into 24 bridge constructions, with the number of bridge joints adding up to a total length of 2,650 metres. The load-bearing parts above the foundation level are made principally of reinforced concrete but there are also steel structures. The material that was used has proved not to be sufficiently durable. The damage to the construction has been caused mainly by the degradation of the concrete in the bridge deck panels and underlying structures, but also by setting due to substandard foundation work. The foundations of the bridge area are built on

badly erected Franki piles, has resulted in considerable setting.

Facts about new Slussen (preliminary quantities):

- Budget: SEK 12.1 billion
- Construction contracts: approximately 40, including 25 major contracts
- Demolition concrete: 32,000 m<sup>3</sup>
- Demolition steel: 3,200 tonnes
- Rock excavation: 200,000 m<sup>3</sup>
- Excavated materials: 240,000 m<sup>3</sup>
- Dredging: 120,000 m<sup>3</sup>
- Quantities of fill: 90,000 m<sup>3</sup>
- New piles: 115,000 meters in length
- Sheet pile walls: 35,000 m<sup>2</sup>
- New concrete: 85,000 m<sup>3</sup>
- New steel: 8,000 tonnes
- Surfacing: 38,000 m<sup>2</sup>

Nordic Galvanizers will work together with Boliden and IZA to marketing galvanized rebar to this large infrastructure project.



*Winter picture of Slussen. Summertime there are a lot of greenery in the area that hide the overview. Slussen has an extensive bridge area, about 40,000 m<sup>2</sup>. This is divided into 24 bridge constructions.*

### **Nordic Galvanizers study trip to Belgium 6-7 Oktober 2016**

By cooperation with the Belgian-Dutch galvanizers association Zinkinfo Benelux, we have got the opportunity to visit three very interesting plants in Belgium and Netherlands. Save the date - more information will follow!

**Galva Power** is a family company with eight divisions in Belgium and Luxembourg. Pioneers in research and development, Galva Power has launched their own brands: duroZINQ®, colorZINQ® and microZINQ® brands. Pot dimensions (L x W x D): 19 x 1,9 x 3,3 m.

**Verzinkerij Meerveldhoven** in Netherlands is not far from the Belgian border and a very interesting plant. "Meanwhile we are also one of the largest galvanizing plants in the Benelux, and one of the most progressive. So we walk in the forefront when it comes to environmental and advanced techniques. We can therefore offer many possibilities."

**Coatinc** The Coatinc company Coatinc PreGa (Precision Galvanizing) is the only supplier in the market to offer the specially-developed high temperature galvanizing process which closes the gap between galvanizing and zinc coating in the normal temperature range.