

Newsletter November 2014

No. 3 2014

Nordic Galvanizers on study tour in Germany

22-24 September Nordic Galvanizers arranged a study trip to Bremen, Germany, in cooperation with the German company W Pilling, which manufactures products for galvanizing plants. Thirty-six galvanizers and suppliers took the opportunity to look at how they work in Germany, Europe's leading country when it comes to galvanizing.

Visits Zink Power Remels

The field trip began with a visit to the big galvanizing plant Zink Power Remels. The zinc bath at the plant is entire 15.5 meters in length, 2 meters wide and 3.5 meters deep. The tonnage of the plant is impressive 100 tonnes per day. Zink Power is one of the world's leading groups in terms of galvanizing, with 37 plants located in Europe, America and Asia.

Zink Power Remels is housed in a large hall, which gives an open feeling and the ability to store large amounts of galvanized steel indoors. The pre-treatment (degreasing, pickling and fluxing) is placed in a separate part of the building, providing a good environment throughout the premises. The pre-treatment is controlled from the outside, but Zink Power has chosen not to fully automate this part of the process, since they considers that the operators' knowledge and selection of pre-treatment parameters are crucial for a good result.

The equipment at the kettle has the possibility to shake and vibrate the steel mechanically, in order to improve the result during galvanizing. Because the zinc bath is very large, it is possible to hang a lot of steel in each dip, and we were surprised a bit that both small and large details was galvanized at the same time.



The big pot at Zinc Power Remels is entire 15.5 meters in length, 2 meters wide and 3.5 meters deep.

W Pilling - large on zinc pots!

W Pilling is one of the dominant companies in manufacturing of zinc pots. They have a plant in Riepe, about an hour's bus trip from Bremen, and arranged a very interesting works visit. The kettles are usually manufactured of 50 mm plate, which are purchased from special steel producer that can guarantee a very high quality. Each pot is tailor made to a specific customer order. To avoid seams in the corners and the bottom the welds are placed in a specific way. The filler material used in welding is developed by W Pilling themselves to guarantee a good result.

NG on the Steel Construction Day

The Swedish Institute for Steel Construction, SBI, organized the conference "Steel Construction Day" at Nacka Strand Exhibition Centre on 23 of October. Nordic Galvanizers participated with a small exhibition stand, and received a lot of questions about galvanizing, both in terms of environmental impact and issues related to CE marking of galvanized steel. Our "Handbook in Galvanizing" was as usual very popular.

"Overflatedagarna" in Bergen

The Norwegian Surface Treatment Conference "Overflate" is organized every year in early November. The conference is focusing on offshore, and corrosion protection by painting is very established in this industry. It also became very clear that the company Statoil holds a key position for the industry in Norway.

The NORSOK standards are developed by the Norwegian petroleum industry to increase cost efficiency and combat that the various oil companies have their own specifications. NORSOK M 501 is about surface preparation and coatings.

"Offshore is a very corrosive environment," said one of the speakers, who talked about platform construction, also including installations in Asia. Maintenance is required already after a short time, and it was noted that the number of hours of unperformed maintenance that would need to be done is enormous. Around 1500 hours per employee lags behind! It was not clear which parts that are included in the maintenance, but it was obvious that corrosion accounts for a significant part. It would definitely be relevant to use galvanized products, and primarily duplex. However, traditionally the structures are built and and corrosion prtotected on the platforms, which means that a shift in production is needed if galvanized steel should be a realistic alternative. Companies that manufactures paint for corrosion protection painting were the main sponsors of the conference, and it is obvious that there is a long-established partnership between the painting industry and offshore operations.

Currently there has been a decline in profitability of the offshore industry, and there was a lot of discussions about

the need for streamlining in order to avoid reduction of investments in developing the industry. The OPEX (Operating Expenditures) is way too high and a change is needed for a continued competitiveness in the industry.

Two of Nordic galvanizer members, NOT - Norsk Overflate Technology and Vik Ørsta exhibited at the fair, which was organized in conjunction with the conference.



Jarle Bjørdal with colleague exhibited for Vik Ørsta.

Geir Ove Salte from NOT brought a spectacular motorcycle to his stand.

"Norsk Ståldag" in Oslo

On 6 November, the Norwegian Steel Association held its annual conference in Oslo. Nordic Galvanizers were invited to inform about galvanizing of structural steelwork that will be CE marked according to standard EN 1090. Also at this conference the downturn in the offshore market and its influence on the Norwegian industry was discussed.

More information about CE marking

It is obvious that there still are uncertainties about what applies to CE marking and what companies that have to be certified to EN 1090-1. However, "Boverket" in Sweden, which is the responsible authority in this matter and also is active in the European committee in which guidelines around the CE marking are produced, is very clear about the rules. It is the manufacturer who sells the product to the market, that is responsible for the whole production phase and should CE-mark the product. There has been an example circulated where a galvanizer buy a beam that already is CE marked by the manufacturer, where it was assumed that it would be enough for the galvanizer to only take responsibility for the galvanizing process. In the example above the galvanizer then issues a CE certificate for the galvanized beam, and it was suggested that this would be a situation that motivates 1090 certification for galvanizers. In this case, two CE certificates would be given to the client, one of the beam which covers everything except the durability, and one that includes galvanizing. When Boverket heard about the example above, they answer as follows:

A company who act as manufacturer is responsible for ALL production control throughout the whole chain backwards. Different parallel declarations of performance issued by various manufacturers are NOT allowed. The original manufacturer is, moreover, not producer of the beam in legal sense after it has been galvanized. The previous declaration of performance is irrelevant to the changed product. The galvanizer must proof that all production control carried out at the manufacturing sites is accurate, not only in his own plant. Furthermore, the galvanizer has

to establish the declaration of performance that he shall provide to the purchaser of the product. Of course the galvanizer can agree with the original steel fabricator of the beam for use of his data in his declaration of performance for other characteristics than durability. But that does not apply to production control, where the manufacturer, in this example the galvanizer, take full responsibility. To perform what is described in the example, it is not enough

to have a 1090-1 certificate for galvanizing only. A 1090-1 certifying of the entire manufacturing process is needed. However, it seems that more and more of them we have been in contact with now seems to understand what Boverket means and why galvanizers can not be certified to ISO 1090.

"Approved Galvanizer"

Since the authorities have decided that it not is possible to certify a sub-process (eg galvanizing) to EN 1090, and to facilitate for steel fabricators (customers) in their EN 1090-1 work with DoP, production control and CE-marking Nordic Galvanizers will develop

its own voluntary certification / accreditation for galvanizers who are suppliers to steel fabricators that will CE-mark their products. This will be based on the EGGA's document "Galvanizing to EN ISO 1461 and CE-marking of structural steel work to EN 1090". This document comprises two checklists that refers to the sections in EN 1090 part 1 and 2 which shows the responsibilities for the galvanizer and the steel fabricator regarding durability of the product. In this matter NG has initiated a cooperation with the certification company Nordcert AB. Nordcert has worked in steel constructions during a long period and have good knowledge of the demands that applies for a construction to be CE-marked.

To do this in the right way for our industry, we will prepare a control system together with Nordcert, where they, after a revision, approves companies and issuing a certificate to galvanizers who meet the relevant requirements of EN ISO 1461 and EN ISO 14713- 2 and the for galvanizers relevant requirements of EN 1090. The working title for our certification is "Approved Galvanizer" and will guarantee that the galvanizer is familiar with the requirements for hot dip galvanizing and have its system for example traceability in place, but without giving the impression that the galvanizer can take responsibility for the entire manufacturing process. The work to develop the system for "Approved Galvanizer" is now in operation together with EGGA and Nordcert, and we hope to be able to start to certify our members in the beginning of 2015. Nordic Galvanizers becomes a bit of test pilots for this type of certification, which also will be implemented in several of EGGA's other member countries. It is intended that the system should be EGGA-based and thus applicable and well-known also for foreign customers.

How is the galvanizing market today?

According to EGGA it has been quite good times for the galvanizing companies in England and Ireland, while the German galvanizers have had a tougher situation. In the Nordic countries it is still hard competition and low prizes, but from Norway a slight increase has been reported, which of course is very positive!