

Revision of the galvanizing BREF

Revision of the BREF (Best Available Technique Reference Document) i.e the document with requirements that all galvanizing industries have to follow in the future, is an important issue for the moment. The document is based on data collection from a number of plants in each country in Europe. The deadline for submission of questionnaires to the responsible authority is 16 February 2018 – but we expect Member States to set earlier deadlines as they have to check questionnaires and agree confidentiality claims before submitting to EIPPCB (The European IPPC Bureau).

It is important that those from NG that shall participate in the data collection look at the document and prepare the response – but await further information and advice from EGGA/ National Associations before completing the questionnaire (Murray has proposed to hold a series of online workshops for association staff to assist and guide respondents). The BREF was also one of the main topics at EGGA committee meetings that were held in Berlin 15-16 November.

Revision of EN ISO 14713-2

Revision of the standard is ongoing in the ISO working group ISO/TC 107/SC 4. There was a standardization meeting held the day after the committee meetings in Berlin, with a lot of people both from the galvanizing and the steel industry participating. It is obvious that what is written in the standard is important for many companies, and there was a lot of discussions. (ISO working group ISO/TC 107/SC 4)

Workshop regarding galvanized rebar

EGGA Rebar Workshop was held in Brussels 27 of November and gave a good picture of the current status in that area. Galvanized rebar works very well in some types of concrete, and gives products with very good quality. That is why there are so many good examples of products where there never are any problems, for example the Finnish pontoon producer Marintek, who produce concrete pontoons with galvanized rebar. The pontoons are designed for boat mooring in modern marinas and landing stages, fully and heavily reinforced pontoon units which are seaworthy, very strong and maintenance-free with a high loading capacity and very long service life.

But in projects where it is unknown what type of concrete that will be used, it is risk for hydrogen gas formation from the galvanized surface during hardening of the concrete, which may cause bubbles on the concrete surface. Bubbles and bad surface quality is something that have caused a lot of problems in for example German bridge projects. In large infrastructure projects the concrete is often purchased by provider offers, of which the most advantageous is chosen. For this reason, the project management cannot control the type of concrete that will be used. Galvanized reinforcement works well in chromium-reduced concrete. An alternative solution is to use a sealing on the rebar after galvanizing. With the right sealing galvanized rebar can cope with all types of concrete.



All-Concrete Pontoons are of exceptionally strong construction with a 50 year design lifetime. Aci Cres Marina, Croatia (Photo: Marintek)

Visit to the European Parliament

A visit to the parliament was performed 28 of November. From NG Annikki Hirn and Henrik Steen-Jørgensen attended. The galvanizing industry don't have any critical issues for the moment, so the meeting was just for familiarization and to give a short information about our industry.



At the European Parliament!

Final sprint at the Info office

To get value of the last money left in NG:s budget for 2017 we now update some of our fact sheets and brochures. Next year we will participate in two new projects performed by the research institute Swerea KIMAB. One is "Best maintenance of galvanized steel" (Scope: Evaluation of repair methods to extend the life time of old galvanized structures and study about how the steel in the hot dip galvanized parts can be reused).

The other project is about corrosion of rock support. This is a continue of an earlier project which was started in 2010 and ended in 2013. Since there is more specimen left out in the rock, we got the question if it would be of interest to evaluate also these, which now have been exposed for 8 years. The technical lifetime requirement for rock support is 150 years. The higher the chloride content is (> 200 mg/l) the larger is the risk of severe corrosion. According to earlier studies the chloride content in tunnels under Stockholm could be above 500 mg/l. There are two main exposure situations for rock support; permanent roof bolt, which is bolts placed in drilled holes in the rock, with aim to raise the strength, and air exposed bolt: structure fixed in the rock, where other devices are

attached. The rock support is fixed and protected against corrosion by concrete. In the earlier part of the project duplex coated products has done very well. Duplex is the most commonly prescribed (and used) in this type of environment today. In the new part of the project we will get information about how galvanized, duplex treated, and also other materials have survived in the environment for 5 more years.

Steel with low reactivity

The project to study steel with low reactivity, which we informed about in last newsletter, has not started yet due to problems to find the right steel, but the steel supplier is working on it and the last material is on its way to the galvanizer now. The problem has been discussed within EGGA, both at last committee meeting in Berlin and in the standardization group. According to information at the standardization meeting the problem occur mainly (only?) if the silicon content in the steel is very low (<0.01%) and the aluminium content is above 0.035%. A check with the steel supplier gave the following info about Si and Al in 1300 charges of steel:

Si: Average: 0,007 Min: 0,004 Max: 0,021

Al: Average: 0,049 Min: 0,015 Max: 0,077

So, the silicon content was very low and the aluminium content quite high - maybe that is the reason for the low reactivity instead of the surface roughness that we have imagined? We have to wait for the result from the study, which will be very interesting!

The common symbol for hot dip galvanizing

As you may have seen in the latest number of the newspaper "Ytforum" EGGA has developed a common symbol for hot dip galvanizing. The interest to do that has increased since we feel a higher threat from other types of products and surface treatments, for example Magnelis. The intention is to create a recognition for hot dip galvanizing specific, different from other methods to add zinc to steel, such as electroplating, painting with zinc-rich paint or continuous galvanizing. Initially, it is thought that the symbol will be used by EGGA's national associations in technical and marketing literature, on websites etc. All batch galvanizing companies that are members of Nordic Galvanizers have the right to use the symbol if they want. From NG:s side we will use it on all new material and material that we reprint. Of course, it takes a while before a new symbol like this gets through the market - but the more it is used the more well-known it will be.

If you want to use it, contact us and you will get the files by mail. We will also put it on our members part of the web, easy to download. (To reach this part of the web: Link For members - username: varmzink, password:3583zink.

How is the business?

NG had the last board meeting for 2017 by telephone 11 of December. From the different countries the following information about the business was reported:

In Denmark it has been a decrease in activity during this autumn. One of the large market segments, wind power, has had a problematic period and it has been discussed to move the production to other countries than Denmark.



EN ISO 1461

This is what it looks like - the symbol for for batch galvanizing.

That will influence on the demand for galvanizing in Denmark and has already shown an effect. The market does not look positive for the coming months either.

From Finland it was reported that it has been a good year, also through the summer. The activity during the autumn has been a bit lower but it is still ok. The Finnish company Caverion Oy had an Approved Galvanizer audit in beginning of December.

Also in Norway the activity has been good during 2017 and the forecast for 2018 is positive, even if it always is difficult to tell that far in advance.

In Sweden it has been a good year for many of the galvanizers, a bit depending on type of customers and location.

The zinc prize

The zinc prize is still on a high level and there is no indication on any large change in short term. A clear indication that it is difficult to meet the demand for the zinc market is that global zinc production, including China, has declined, even though the zinc price has doubled over the past two years.

- Historically, such price increases have led to increased supply by Chinese swing manufacturers, as with primitive equipment and at the price of major negative environmental impacts, zinc has recovered when prices have been high. Today, China's authorities are fighting down on such operations, which led to significantly higher production costs for these producers" said Ola Södermark at Kepler Cheuvreux (European financial services company specialized in advisory services and intermediation to the investment management industry)

Consequently, Kepler Cheuvreux also raises zinc price forecasts for the years 2018-19 from 2800 to 3000 dollars / ton. In the long run, the zinc price is expected to remain around \$ 3100 a ton, which is slightly lower than today's prices.

Thank you....

With this last newsletter for 2017, we want to thank all of you for a good cooperation during the year and wish you a nice Christmas weekend and a happy new year!

