SPECIFICATIONS FOR WATER SATURATION ON ZINGA

We have experienced that the performance of ZINGA as a unique system (without topcoats) can be altered by using the technique of water saturation.

This procedure will alter the performances of the ZINGA in three different ways:
It will…

1. Accelerate the formation of zinc salts and zinc carbonates on the surface that offer a barrier protection (passive). Thus a faster consumption of the first µm of the Zinga layer.
2. **Make the coating harder**. This leads to a **better abrasion resistance**.
3. Avoid the formation of dark spots on a freshly Zinganised surface, due to rain or humididty. This will not solve the problem for 100% but it will certainly make the spots less explicit. As you know, the total ZINGA surface will gradually become darker in the course of time and the spots will partly disappear anyway.

By the way, hot-dip galvanising also often encounters a problem of blotching as a result of anomalies in the cooling process after the thermal treatment (caused by a thermal shock from 450°C to environmental temperature).

This technique of water saturation is not a must for ZINGA. ZINGA does not need humidity to polymerise, but it does tolerate humidity, unlike many other coatings!

BLOTCHING ON ZINGA

The appearances of stains or blotching on ZINGA are a well-known and at the same time a quite normal phenomenon. It is a fact that high zinc content systems such as ZINGA, often show a very natural reactivity with the environment. The higher the zinc content the higher the reactivity.

There are 3 phases in the polymerisation process of ZINGA:

1. A brand new ZINGA application shows a completely even, light grey colour.
2. After a while the ZINGA layer shows a variety of light grey and dark grey.
3. In the end the ZINGA will get a dark grey aspect.

Shortly after drying, the ZINGA can get a white colour. This is due to the environmental circumstances (humidity, temperature, atmospheric pollution, proximity to the coast, …). This white colour does not affect the quality of the system. On the contrary, it is a sign of a complementary protection: the so-called patina or passive protection of zinc salts. These zinc salts can be removed by cleaning with fresh water and a nylon brush.

If drops of rain fall on a new ZINGA layer, then the surface will show some blotching. Dark spots will become visible on the light grey surface. This does not influence the quality of the ZINGA, but if you want to avoid this, then you should spray fresh water on the last ZINGA application. This is called the water saturation technique.

The technique of water saturation implies that fresh water should be sprayed at very low pressure like a mist on the last ZINGA application until the ZINGA is completely saturated with water. Saturation of the coating can only be obtained by wetting all surfaces several times until no more water is absorbed by the coating. The colour will be uniformly dull grey.

If the ZINGA has been applied in 1 coat, then you have to wait 12 hours after touch-dry. If the ZINGA has been applied in 2 coats, then you have to wait 24 hours after touch-dry in order to give the ZINGA enough time to dry (at 20°C in a well ventilated space).
Wait at least 48 hours after water saturation before putting the treated surface in immersion.

For systems in (soil) immersion, we advise the use of Zingatarfree on top of ZINGA.

Attention:

The technique of water saturation can only be applied after the final ZINGA application.

Do not apply the technique when another layer of ZINGA still needs to be applied.

NB: The water saturation technique is not relevant for ZINGA in duplex systems!