

# THE NEW GENERATION BALTIBOND HYBRID COATING









Save up to 33% water and chemicals

## 3 good reasons to opt for the new generation Baltibond hybrid coating



- ✓ Increase the service life of your evaporative cooling equipment
- Reduce water consumption with higher cycles of concentration
- Reduce chemical consumption with higher cycles of concentration
- Experience an economical alternative to SST 304

## 2. Increase safety

The smooth surface finish

- ✓ reduces the development of biofilm
- ✓ facilitates internal cleaning

## 3. Respect the environment

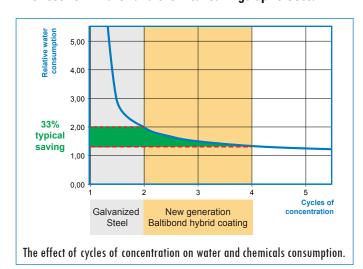
- ✓ Reduce chemical and water rejection
- Reduce water consumption with higher cycles of concentration



#### Save up to 33% water and chemicals

Compared to uncoated galvanised steel equipment, a unit protected with the new generation Baltibond hybrid coating can operate at higher cycles of concentration and extended water quality limits. You can operate with the same cycles of concentration as an SST 304L execution.

This results in water and chemical savings up to 33%.





## The latest technology

The new generation Baltibond hybrid coating is the result of a continuous process improvement. When buying BAC equipment you can count on high quality construction material that keeps up with the latest technology. In addition the new generation Baltibond hybrid coating has an easily reparable coating in case of mechanical damage.



### Circulating water quality guidelines

To ensure long service life of your evaporative cooling equipment, we recommend you maintain the circulating water quality within the following limits.

Water Quality Mesure	New generation BALTIBOND hybrid coating	Stainless Steel 304L	Galvanized Steel
рН	6.5 to 9.2	6.5 to 9.2	6.5 to 9.0
pH during initial passivation	Below 8.2 (for units with hot-dip galvanised coil only)	Below 8.2 (for units with hot-dip galvanised coil only)	Below 8.2
Total hardness (as CaCO <sub>3</sub> )	50 to 750 mg/l	70 to 750 mg/l	50 to 600 mg/l
Total Alkalinity (as CaCO <sub>3</sub> )	600 mg/l max.	600 mg/l max.	500 mg/l max.
Total Dissolved Solids	2050 mg/l max.	2050 mg/l max.	1500 mg/l max.
Chlorides	300 mg/l max.	300 mg/l max.	250 mg/l max.
Sulfates*	350 mg/l max.	350 mg/l max.	250 mg/l max.
Conductivity	3300 µS/cm	3300 µS/cm	2400 µS/cm
Total Suspended Solids	25 mg/l max.	25 mg/l max.	25 mg/l max.
Chlorination (as free Chlorine/halogen) Continuous	1,5 mg/l max.	1,5 mg/l max.	1 mg/l max.
Chlorination (as free Chlorine/halogen) Batch dosing for cleaning & disinfection	5-15 mg/l max. for 6 hours 25 mg/l max. for 2 hours 50 mg/l max. for 1 hour	5-15 mg/l max. for 6 hours 25 mg/l max. for 2 hours 50 mg/l max. for 1 hour	5-15 mg/l max. for 6 hours 25 mg/l max. for 2 hours 50 mg/l max. for 1 hour

(\*) Higher concentration of Sulfates is allowed, provided the sum of Chlorides + Sulfates parameters does not exceed 500 mg/l for galvanized steel, 650 mg/l for Baltibond/ SST 304L

Note: For Ozone water treatment application, Stainless Steel 316L execution is required. Ozone levels are to be maintained to 0.2 ppm +/- 0.1 ppm for at least 90% of the time, with absolute maximum peaks of 0.5 ppm.



#### **Extensive quality control**

The application of the Baltibond hybrid coating finish is monitored throughout the process by an extensive quality control programme. Quality control includes testing of sample coupons which are sent through the process at regular intervals.



#### Cross hatch test

A number of cross cuts are made in the coating down to the base metal. Adhesive tape is attached to the cross hatched area and pulled rapidly. Inspection of the cross hatching can verify that the bond to the galvanised substrate is strong.



#### Thickness test

To ensure uniform corrosion protection the thickness of the coating is measured at various locations on the test sample.



#### **Impact test**

A 32 mm radius impact tool is dropped onto the sample causing a 18 Nm direct impact. To pass the test, no cracking, chipping or loss of bonding may occur in the impact area.



Would you like to see the new generation Baltibond hybrid coating test sample coupons? Ask your BAC representative to show you the superior Baltibond hybrid coating quality.



