Bosch Security Systems
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please visit www.boschsecurity.co.uk
or send an email to uk.
securitysystems@bosch.com

Setting the standard
in corrosion resistance

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BOSCH
Invented for life

Bosch goes the extra mile with corrosion resistance with the new MIC Series models

With the increasing demand for security and safety in diverse application areas, more and more cameras are being deployed in outdoor locations that are exposed to corrosive conditions

To ensure continuous operation in these environments without loss of functionality requires cameras with specially designed enclosures. Bosch Security Systems can provide various camera systems with highly ruggedized and corrosion-resistant mechanical designs.

Corrosion is typically visible in metals but also occurs in other materials like polymers (plastic, rubber) but if not treated and maintained properly every metal will oxidize resulting in rust formation or paint defects.

The new mic family now has extended corrosion resistant capabilities

- **New corrosion-resistant aluminium alloy:** The new MIC 550 and MIC IP 7000 family of cameras are built from one of the most corrosion-resistant aluminium alloys available in the industry with low zinc and copper content. This new alloy allows the MIC family to achieve high material strength without compromising its corrosion-resistant capabilities.
- **New pre-treated stainless steel parts:** The new MIC family is assembled using specially coated stainless steel parts which prevent direct contact between the screws and the housing, thus reducing the possibility of galvanic corrosion.
- **New engineering coating and paint system:** Every aluminium part used in the MIC housing is first treated with a specially selected engineering coating. This makes the overall paint system less liable to damage during assembly or installation and prevents the possibility of direct contact between the aluminium parts and other type of metals.

Filiform corrosion starts under the paint surface in very moist environments. The new corrosion-resistant aluminium alloy, and the new engineering coating and paint system described above to prevent galvanic corrosion, also contribute to the prevention of filiform corrosion

Testing the new MIC for corrosion resistance

To ensure that these unique features create most corrosion resistant MIC possible, the MIC family has been thoroughly tested to one of the most severe corrosion-resistance standards: **ASTM B117 salt spray (fog) testing.** This is an accelerated test method to test the corrosion resistance of a material in a highly corrosive environment; the material is continually exposed to salt spray at an elevated temperature to trigger faster corrosion.

Older MIC coating after 2000 hours salt spray

New MIC coating after 2000 hours salt spray

The test was conducted for a period of 2000 hours and the effect of the salt spray was measured at a regular weekly intervals. The 2000 hours of the salt spray test has proved that the new metallurgy composition and the new protection system (coatings and paints) has resulted in what we believe to be the most corrosion resistant product available.

Use of stainless steel is strictly a customer preference (in some cases, because of cosmetics). You will find that there is no consensus that stainless steel resists corrosion better than the type of finish used for MIC IP 7000 HD.
Because of material, cost is significantly higher than MIC IP 7000 HD

A full technical note detailing the new corrosion resistant features is available upon request.