MACO 4safecoating

Quadruple corrosion protection for door locks in harsh environments
Doors with acidiferous woods such as oak or the specially-treated Accoya wood pose a huge challenge when it comes to the use of hardware. For such highly-corrosive areas of application, MACO has developed door locks in the PROTECT series with 4safecoating: the high-quality TRICOAT-PLUS surface treatment on the visible parts is combined with VCI protection sleeves to provide corrosion protection for the lock cases.

EXTRA PROTECTION FOR YOUR LOCK CASES
CORROSION PROTECTION INTO EVERY LAST CORNER OF THE LOCK

The secret behind this is the Volatile Corrosion Inhibitor (VCI). This technology has been used successfully in the transport and automotive industries for many years, and MACO is now working together with the company EXCOR (1) to apply it in the door lock industry.

As soon as the VCI protection sleeve is placed on the door lock, the corrosion-inhibiting substances take effect: they spread in the sleeve in the form of a gas and form a protective molecular coat on the metal surface. This prevents direct contact between the metal and moisture, thereby putting the brakes on the corrosion process. This innovative solution protects the entire lock – including all internal components – even under extreme conditions over many years.

4SAFECOATING

MACO has combined the VCI technology, which is harmless to health, with its expertise in surface technology to protect the entire door lock:

4safe coating is that ideal solution from the PROTECT series and means:

1. Faceplate in TRICOAT-PLUS
2. Connecting rod in TRICOAT-PLUS
3. Locking elements in TRICOAT-PLUS
4. Main and auxiliary lock cases with VCI protective sleeve

This unbeatable complete package will ensure that your locks remain functional for many years. And you will also receive an extended surface warranty, including on the locking elements.

(1) EXCOR is the market leader when it comes to corrosion protection using the VCI method.
AGGRESSIVE SUBSTANCES BEGIN TO AFFECT THE SURFACE

THE FIRST SIGNS OF RUST APPEAR INSIDE AND OUT.

WITHOUT A PROTECTIVE SLEEVE, THE LOCK CASE BECOMES HEAVILY CORRODED AND ITS FUNCTION IS ALSO IMPAIRED AFTER A SHORT TIME
CORROSION BEHAVIOUR WITH VCI PROTECTION SLEEVE

The sleeve holds off the majority of the aggressive substances. Inside the sleeve, the VCI substances form an additional protective coat.

The VCI molecules take effect in the sleeve.

The VCI sleeve protects the lock case against corrosion both inside and out and ensures long-lasting functionality. Mission accomplished!

SUCCESSFUL LONG-TERM TESTING

In collaboration with Accsys technologies, the manufacturer of Accoya wood, the 4safe coating solution has proven itself in intensive corrosion tests, both under laboratory and real-world conditions. In addition, an in-house long-term corrosion protection test was successfully carried out at MACO over one and a half years. To meet even the most extreme conditions, we tested an Accoya test element directly on our natural weathering test rig on the Croatian coast.
YOUR ADVANTAGES AS A DOOR MANUFACTURER

• Complete protection of the entire door lock including the main and auxiliary lock cases

• Easy fitting – simply put the VCI protection sleeve over the lock cases

• The protective substances also reach difficult-to-access parts inside the lock cases

• 4safecoating stands up to the most stringent requirements in terms of acid and moisture content. This lowers the risk of needing to replace locks.

BENEFITS FOR THE END USER

• Additional corrosion protection for extreme influences

• Reliable functionality over many years

• Extended surface warranty on the locking elements

TECHNICAL APPLICATION RANGE

• Unique solution for highly-corrosive environments

• Developed for Z-TS/G-TS module, HO-BO

• Currently available for 55 mm backset lock cases – other versions on request

• Can be used from a faceplate width of 20 mm and above

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