



RUST PROTECTION

Paint systems for maintenance of metal structures





A UNIQUE

CONCEPT

What makes our systems unique is the way we combine the surface tolerant ISOTROL PRIMER with special pigmented alkyd top coats or 2-component paints.

This gives us the best of traditional systems, replacing red lead paint, with high wetting and penetrating properties. As well as the best of modern paint technology where chemical reactions are used for fast hardening and highly resistant top coats. This enable us to paint EVEN ON RUSTY surfaces.

OUR STORY

... SO FAR

For more than 40 years, unique combinations of Isotrol paint system have been developed to meet the increasingly complex demands of the market. Longer lasting protection, more sustainability and faster applications...



Unique concept

Our rust protection systems are unique. With the combination of a surface tolerant oil alkyd primer with exceptional penetration properties and highly durable top coats our systems can be applied in the most extreme conditions with good results.



Long lasting protection

We have developed special systems through extensive testing for all kind of objects. Be it complex constructions, surfaces exposed for chemical or mechanical wear or rusty surfaces where sand blasting is not an option, Introteknik have the solution.



Cost effective maintenance

Due to the simplified cleaning methods used for the range of Isotrol rust protection systems they can save up to 50% of the total cost when compared to competitive rust protection products.



Fast application

Without the need for sandblasting time is saved. And with our latest development of a system where the top coat is fully hardened and ready for stresses and wear after 4 hours we can keep down-time to a minimum.



Introteknik AB is a Sweden based company focused on developing paints and rust protection systems for maintenance of metal structures and roof sheets. In addition to producing our own paints we cooperate with leading European manufacturers as Tikkurila Oy and Akzo Nobel. This give us the opportunity to locate our resources on developing our unique products that can be applied on rusty surfaces. And get cutting edge paint technology from our partners. Each focusing where they excel.

Our systems are tested both in lab conditions and in field tests to ensure compatibility of paint types and to increasing our knowledge of what system are suitable for which applications.

Lars Kjellberg

CEO Introteknik AB

SIMPLE FACTS

save up to
50 %

REDUCED PAINT RESIDUE

When doing maintenance a significant cost can be to avoid spill of old paint in the environment. We minimize the paint removed, and collected.

FASTER PRE-TREATMENT

Since water blasting many times cover the need for washing one less step in pre-treatment is needed. And time for total application is saved.

COST SAVINGS FROM WATER BLASTING

While it is impossible to give a definite number to cost savings our experience has given us figures between 30-50 %.

BENEFITS OF WATER BLASTING

To understand why the Isotrol Systems give such a great advantage over other comparable paint systems one must know the difference in cleaning methods. Most conventional systems require sand blasting to a cleanliness degree of Sa2½. This means heavy equipment, lots of grit material and

paint residue to collect. Which means time and costs. Then comes the and abrasion of the metal surface before painting. That's why we try to keep as much of the old paint as possible. And use water blasting, and in some cases steel brushing. Removing only loose rust and paint with poor adhesion.

GETTING THE RIGHT PROTECTION

THE DIFFERENT ISOTROL SYSTEMS

Our systems includes the unique ISOTROL PRIMER. Its penetrating and surface tolerant properties enables them to be applied on rusty surfaces without the need for sand blasting. It fills and saturates pores in rusty surfaces and cracks in old paint coats making our systems the first-hand choice for rust protection maintenance.

OIL ALKYD SYSTEM



Our oil alkyd system is ideal for complex constructions like riveted bridges, cranes with lots of crevices or where surface tolerance is the main concern.

HYBRID SYSTEM



It combines the best of two. Highly penetrating fat oil primer with durable 2-component top coats. Ideal for surfaces subject to chemical or mechanical wear.

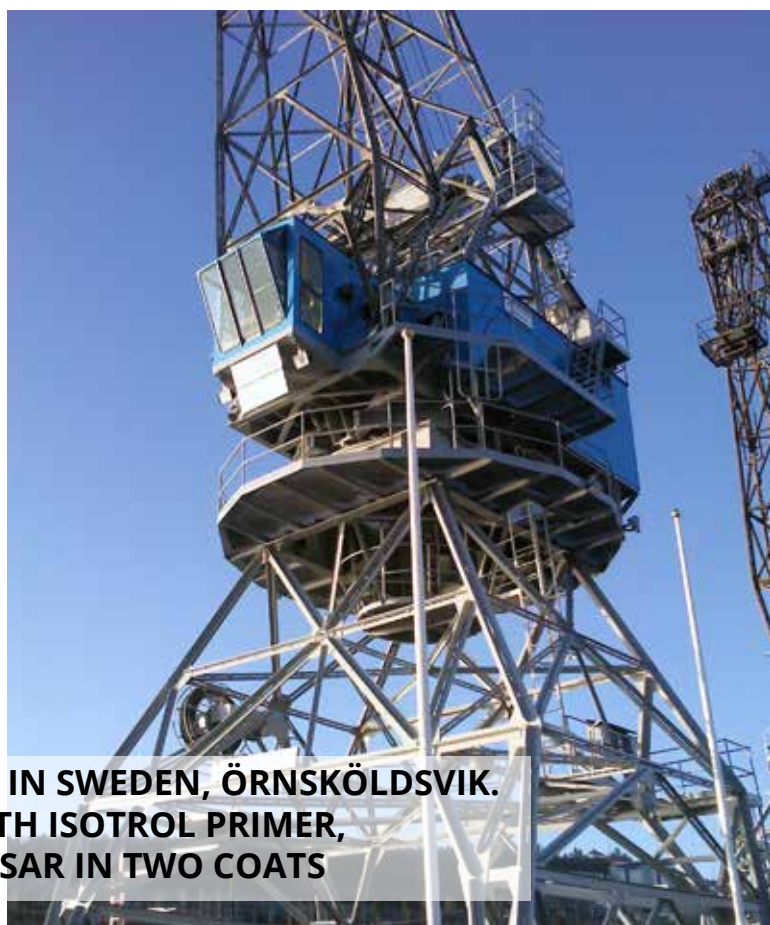
ISOTROL RELEST®



The flexible top coat hardens in 30 min and can be fully loaded after 4 h. Highly resistant against impact, chemical and mechanical wear. Applicable up to 10 mm thick!

ISOTROL ALKYD SYSTEM for complex constructions

Evaluation after 25 years of two reference bridges has shown that for complex constructions our oil based system performs better than a 2-component epoxy system.



**MARINE CRANE IN SWEDEN, ÖRNSKÖLDSVIK.
RE-PAINTED WITH ISOTROL PRIMER,
ISOGUARD PANSAR IN TWO COATS**

PRIMER

ISOTROL PRIMER is a highly wetting surface tolerant oil alkyd. This means it can be painted on rusty surfaces. It will fill out pores in the rust or cracks in old paint coatings, crevices or welding's creating an ideal surface for further painting.

Filling out any pockets where air and moist can get trapped under the primer. Replaces old red lead and has shown to increase adhesion on underlying paint coats.

TOP COAT

ISOTROL FINISH is an alkyd top coat with good colour retention and gloss surface. Higher gloss means less dirt and dust accumulation, and easier cleaning. Can be tinted to almost any colour in the NCS and RAL system.

INTERMEDIARY

ISOGUARD PANSAR is a oil alkyd reinforced with micaceous iron oxide flakes. For new metal surfaces it can replace ISOTROL PRIMER as primer. The iron oxide flakes create a barrier for water penetration ensuring the metal will be protected. Can be used as primer, intermediary and top coat or can be overpainted by ISOTROL FINISH or ISOGUARD ALUMINIUM.

REINFORCED TOP COAT

ISOGUARD ALUMINIUM is similar to Isoguard Pansar but with aluminium pigment in addition to iron oxide. And will give an even more durable surface. The aluminium pigmentation reflects UV-rays that degrade the paint if exposed to sunlight. Only available in aluminium grey colour.

ISOTROL HYBRID SYSTEM

2-comp on rusty surfaces

Our hybrid system makes maintenance in aggressive environments possible without sand blasting. The hybrid system has been long term field tested for 10 years.



FUEL TANKS FOR BRITISH PETROLEUM RE-PAINTED WITH ISOTROL PRIMER, ISOMASTIC AND TOP-COAT TEMADUR 50

PRIMER

ISOTROL PRIMER is a highly penetrating surface tolerant oil alkyd. When used with Isomastic after applying Isotrol primer the excess paint is wiped off. Left to dry before applying the top coat.

This enable high grade rust protection on surfaces that are not possible to sand blast to the cleanliness degree conventional systems require.

INTERMEDIARY

ISOMASTIC is a 2-component epoxy mastic with micaceous iron oxide and aluminium flake pigments to ensure a strong barrier coat against water and moist. On newly produced or sandblasted (Sa2½) metal objects it can be applied as a primer. Can be used as a one coat paint.

TOP COAT

TEMADUR 50 is a 2-comp polyurethane. Good colour and gloss retention make it an ideal top coat. Can be tinted to almost any colour in the NCS and RAL system. Highly resistant to chemical wear and are certified for inward use as ship paint MED (Marine Equipment Directive) certificate no VTT-11167-15-14.

A REVOLUTIONARY SOLUTION

We have developed this system for more than 15 years. To ensure compatibility of this novel combination of oil alkyd primers with epoxy mastic we have had independent bodies do extensive testing. As always we are pushing the limits and re-inventing rust protection maintenance.

ISOTROL RELEST® A unique system

Resistant against impacts, chemical and mechanical wear. Single application of coats up to 10 mm thick with a 30 min drying time enable short maintenance production stoppage.



FLOTATION CELLS AT AITIK QUARRY, BOLIDEN, SWEDEN. PAINTED INTERNALLY WITH RELEST® PROTECT 352 PUR-GUARD

PRIMER

ISOTROL PRIMER is a highly wetting surface tolerant oil alkyd. It is only used when the surface isn't sandblasted.

The top coats flexibility seals slots in the construction, and Isotrol Primer will fill out holes and crevices ensuring no air or moist get trapped beneath the paint coatings.

INTERMEDIARY

RELEST® Marine 377 2K-EP-Primer ZM is a low solvent zinc pigmented 2-comp epoxy primer. Give a great rust protection. If applied on sandblasted structures or newly constructed metal objects it can be used as a primer.

TOP COAT

RELEST® Protect 352 PUR-Guard is a solvent free 2-comp polyurethane with very fast hardening time. Can be applied in extremely thick coatings, up to 10 mm if necessary. The flexibility of the paint means it is highly impact resistant and work as a shock absorber.

USED IN HEAVY INDUSTRY

The paint was developed by BASF for the German train transport section. And is approved for salt carriage, stone grit etc. Can replace rubber lining in flotation tanks. Due to the fast hardening time it can be fully loaded already after 4 hours. This make it a great protection for loading bays or similar.

PROTECTING WORLD HERITAGE

Isotrol used for preservation of historical objects

UNESCO currently list around 1000 objects on the world heritage list. For many of these objects ISOTROL OIL ALKYD SYSTEM is ideal. Both for rust protection, but also to minimize application damage.

The pre-treatment cleaning with water blasting, is gentle and keep the original materials intact. Recommendations by the Swedish National Heritage board is that old red lead should be replaced with ISOTROL PRIMER. And that existing or used red lead should be encapsulated with ISOGUARD PANSAR as intermediary or top coat.



ENGELBERG IRONWORKS, ROOF SHEETS PAINTED WITH ISOTROL SYSTEM

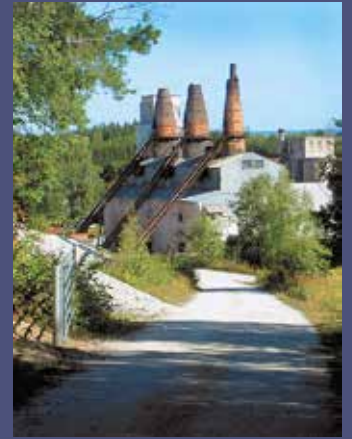
THE SCANDINAVIAN HERITAGE

Examples from the Nordic region



MONUMENT FENCE

Krohgstøtten monument in central Oslo. The inauguration was in May 1833. When re-painted it was treated with Isotrol Primer and Isoguard Pansar.



LARSBO LIMESTONE PLANT

The oldest furnaces in this old plant is from early 19th century. And was in use up until 2001. The chimneys are protected with Isotrol.



MINING SHAFT ROOF COVERING

At the largest silver mine in Sala, Sweden. This building dedicated to the queen of the time protects one of the shafts.

Some of the Swedish world heritages protected with the Isotrol System are: *The Naval City of Karlskrona, Engelsberg Ironworks, Great Copper Mountain in Falun and Grimeton Radio Station.* And in addition to world heritage we have provided paints for many of the royal castles, churches and official buildings that make up the Swedish cultural heritage. Both industry, civic buildings and infrastructure.



STRÖMSHOLM CASTLE

This is one of many castles and culturally important and beautiful buildings we have protected throughout the years.



**THE STORY BRIDGE IN BRISBANE
ONE OF MANY BRIDGES WHERE ISOTROL PRIMER
HAS PROVIDED EXTENSIVE COST SAVINGS.
ESTIMATED 2.5 MILLION AUD (1970-1980).**

PROTECT YOUR INFRASTRUCTURE

WITH ISOTROL RUST PROTECTION

MAINTENANCE IS OUR SPECIALTY

Many paint manufacturers can compete when it comes to producing paint that performs well in controlled laboratory test conditions. But we know from experience that reality is nothing like those controlled conditions.

That is why we built our systems from practical experiences and the performance of our systems are confirmed by actual applications!

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