



CORROSION
EXPERTISE
OWATROL[®] OIL

www.owatrol.com

OWATROL® OIL



Used for over 60 years throughout the world,

Owatrol has played an important part in interior and exterior maintenance painting for leading industrial and shipping firms. Now more than ever, Owatrol® provides many new ways to make a wide variety of tough jobs easier. No home or shop should be without it.



For info



A question often asked is the difference between a rust converter, sometimes known as a rust killer or rust reformer and **Owatrol® Oil**.

The answer is below:

Rust converter (killer, reformer)

products work in a very different way to Owatrol Oil. As with Owatrol Oil the rusted surface must be clean, free of grease, dirt and other contamination and must have any loose and flaking rust removed but that is where the difference stops.

Rust converters (killers, reformers)

work by converting the iron oxides (rust) in to a protective chemical barrier. The compounds within these products interact with iron oxides converting them in to an adherent black layer, which is more resistant to moisture and protects the surface from further corrosion.

Commercial rust converters of the sort we are talking about here contain two primary active ingredients – **Tannic acid** and an organic polymer. The tannic acid converts the reddish iron oxide into a bluish-black ferric tannate, which is a more stable layer, while the second ingredient is an **organic solvent** that acts as a **wetting agent** i.e. **it helps carry the product in to the rust pores** and provides a protective primer layer in conjunction with an organic polymer.

DRAWBACK

1 - The drawback of these types of material over Owatrol Oil is that **they do not have natural wetting properties**, thus if **the rust is very thick and heavy** then they cannot always reach the base metal meaning that **moisture and air become trapped under the protective film** leading to under rusting and thus failure of the finish coat. With rust converters we are relying on a chemical reaction, with Owatrol Oil we are not.

2 - There is one other drawback to the type of rust converter we are talking about here and that is, **they also acts as a primer**. These products tend to exhibit **decreased penetration of the rusted surface** due to the sheer size of the polymeric resin used in then i.e. the organic polymer.

OWATROL® OIL

Unlike rust converters (reformers, killers) **Owatrol® Oil has natural high wetting properties** due to its natural capillary action this means that **it can be applied to any thickness of rust** and it will find its way down to the base metal, **expelling any moisture and air** on the way thus **preventing the potential for under rusting to occur**. As previously stated rust converters work on chemical reaction with the iron oxide while **Owatrol® Oil actually works with the rust**. Rather than trying to convert the rust, **Owatrol® Oil works with it to create a strong stable layer** that additional coatings can be applied and firmly adhere to. Except for any physically loose and flaking rust, rust is in fact a strong substrate and by working with it in the way that **Owatrol® Oil** does then we use this strength to help create a solid surface.

THUS **OWATROL® OIL** HAS THE FOLLOWING BENEFITS OVER RUST REFORMERS

- 1** - **Owatrol® Oil** penetrates the rust down to the base metal to expel any moisture and air from it thus preventing further rusting and the potential for under rusting when over- coated with another finish.
- 2** - **Owatrol® Oil** creates a solid stable layer that other finishes can firmly adhere to
- 3** - **Owatrol® Oil** has natural high wetting properties i.e. it spreads and penetrates through its own natural capillary action.
- 4** - **Owatrol® Oil** has greater penetrating properties and can penetrate deeper due to the fact that it is not carrying any pigment or resins with it
- 5** - Surfaces treated with **Owatrol® Oil** can clearly be seen to be protected through the fact that once the rust has been fully saturated, the surface takes on an even sheen appearance
- 6** - **Owatrol® Oil** is easy to apply – wet-on-wet applications
- 7** - Where it is to be over-coated with a suitable finish **Owatrol® Oil** can be applied to new steel to help prevent corrosion or added to a suitable finish to create an anti-corrosive coating.





OWATROL® OIL

RUST INHIBITOR



Owatrol® Oil Protects Rusted Metal



Untreated Rust: Contains air and Moisture

Rusty iron and steel surfaces have a spongy, scaly layer of iron oxide, the result of an electrochemical reaction, which has destroyed the true substance of the metal. This highly absorbent surface soaks up and traps corrosive liquids, moisture and air, which constantly eat deeper and deeper into the raw, exposed metal.



Rust Treated with Owatrol: Expels air and moisture

Owatrol® Oil wets with great rapidity any surfaces to which it is applied. This wetting action spreads in all directions, especially downward.

Its exceptional power of penetration carries it into, through and around the deepest and most finely granulated forms of rust.

Owatrol® Oil displaces air and moisture and incorporates the rust into a waterproof protective coating, an ideal foundation for paint.

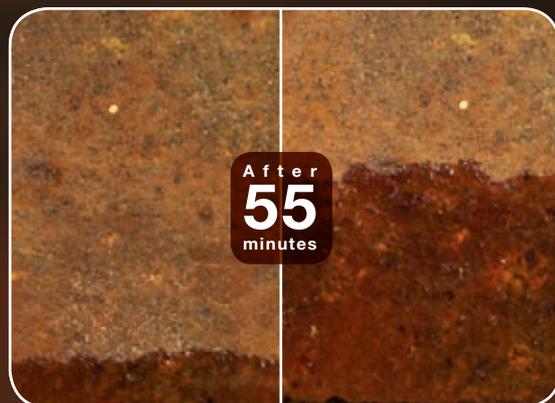
Owatrol® Oil spreads rapidly

A single drop of owatrol diffuses to an area approximately **150 times its original size.**



Owatrol® Oil

possess exceptional creeping power



& PAINT CONDITIONER



Owatrol is a versatile, deep-penetrating oil that dries to a tough, flexible finish. It can be used alone or added to condition any oil/alkyd based primer, paint, varnish or stain. High in solids, Owatrol® Oil maintains the inherent qualities of the paint, varnish or stain. Its ability to penetrate enhances the properties of wood and metal primers.

Owatrol® Oil protects the quality of the paint:

- Maintains the body, dry film thickness, hiding, and vehicle balance of paint.
- Adds extra penetration and wetting action for stronger adhesion.
- Assures a long "wet edge" during paint application, eliminating laps, brush marks, orange peel, etc.
- Promotes uniform film thickness and drying.
- Does not change the colour or lustre of paint.
- Eliminates the need for paint damaging evaporating thinners.

Owatrol® Oil gives better results with wood and metal primers:

- Wood and metal surfaces vary in porosity, depending on age and exposure. Primers are formulated for average surfaces and cannot be expected to satisfy extreme porosity requirements.
- Adding Owatrol® Oil to both wood and metal primers will always ensure good penetration on any porous surface.
- Owatrol® Oil can be added to any one part oil-based primer. For the primer coat, Owatrol® Oil should be mixed 50%/50% for best result.



Photo compares one brush stroke of quality primer (top), with one stroke of the same primer mixed with Owatrol® Oil. The difference is what makes Owatrol® Oil. such a success as a quality paint conditioner.



This is a drop of anti-corrosive priming paint not containing Owatrol® Oil. Note that it does not spread or penetrate, but remains in a thick drop on top of the rust. Rust will continue under such a paint film.

This is a drop of the same paint as shown on the left, to which an equal amount of Owatrol Oil has been added. Note the wide area of diffusion, complete coverage and penetration of the rusted surface.

For info



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