



WHAT IS CHEMICAL HOT BLACK OXIDE COATING FOR METALS?

Chemical hot black oxide coating for metals is a surface treatment method based on a chemical reaction. It results in a very thin, durable and imposing coating on the surface of metal objects. Black oxide coating is an effective method when an attempt is made to improve the characteristics of the object treated and the appearance and characteristics of the final product as well as lower the costs.

BENEFITS OF BLACK OXIDE COATING

Compared to traditional surface treatment methods and untreated objects, black oxide coating comes with various benefits:

- A visually impressive surface differing from the outcome produced using other methods
- A remarkably affordable surface treatment method compared to e.g. painting
- A non-chipping, non-peeling and even coating resistant to mechanical wear
- Depending on post-treatment, it is possible to improve resistance to corrosion compared to untreated objects
- Reduces light reflection e.g. from parts of machinery
- The dimensions of the object concerned remain unchanged (thickness approx. 1 micrometre)
- The method requires no significant preliminary treatment or post-treatment
- Where necessary, we can deliver on very short notice, even under 24 hours
- There is no minimum size for the object concerned
- The object geometry has no effect on the surface treatment result



OBJECT AND MATERIAL SUBJECTED TO BLACK OXIDE COATING

There is no minimum size for the object subjected to black oxide coating. The maximum size only depends on the equipment used. With the exception of stainless steel and cast iron, almost any steel type is suitable for black oxide coating.

- Structural steel
- Pipes and profiles
- Machined objects
- Thin plates and other plates
- Springs and spring steel
- Welded objects

APPLICATIONS

Black oxide coating has been successfully applied to innumerable uses. Your imagination is the only limit, and there are plenty of examples of applications:

- Tools
- Machine parts
- Furniture parts
- Nuts
- Wall panels
- Fasteners
- Ferrules
- Blades
- Locks
- Weapons
- Chains

STANDARD AND MARKINGS

The most common indication of black oxide coating for metal is the mention of 'Black oxide coating' in the part drawing. The most commonly used standards include ISO 11408, MIL-DTL-13924, AMS 2485 and ASTM D769.

Additional information and counselling related to the method
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