

## Steam Oxide

Steam Oxide is produced in a controlled dry steam furnace at an elevated temperature. The steam treatment of ferrous metals forms a thin, hard, well-adhered, blue-black oxide film, called magnetite ( $\text{Fe}_3\text{O}_4$ ). The process is often referred to as 'blueing' or 'blackening'.

The oxide layer produced is porous thereby retaining oil which lowers friction in ferrous applications, thus avoiding the problems of pick-up, cold welding on taps and 'built-up edge' on cutting edges.

The Ox process is environmentally friendly using water + heat to produce dry steam.

### Applications and Benefits

- Ferrous Metals eg HSS
- Prevents chip build-up on the cutting edges

### Improved performance with

- Cutting sticky ferrous materials
- Increased corrosion resistance

\*Not recommended in cutting applications for very soft or non-ferrous materials.

382 Settlement Road  
Thomastown Victoria 3074  
**T** +61 3 9464 0644  
**F** +61 3 9464 0773  
**E** [surftech@surftech.com.au](mailto:surftech@surftech.com.au)  
**www.surftech.com.au**

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