

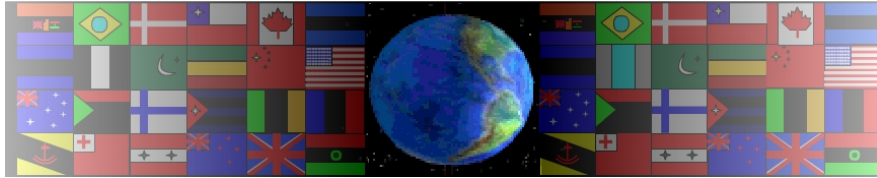
REVISION CARDS - METAL FINISHES - 11

TRADITIONAL OIL BLACKING AND CHEMICAL BLACKING OF STEEL

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On behalf of The World Association of Technology Teachers

W.A.T.T.



World Association of Technology Teachers

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TRADITIONAL OIL BLACKING OF STEEL

With steel, corrosion to the surface will always be a problem, especially if the product / component is in contact with moisture, as carried in the atmosphere. One of the most cost effective ways of preventing tarnishing / corrosion to the surface of steel, is to 'Oil Black'. This can be achieved on a small scale in schools, although strict safety precautions must be taken.

1. Clean and degrease the steel.
2. Heat to 'red' heat on a brazing hearth.
3. Use tongs to drop the steel into a container of old engine oil.
4. Allow to cool and remove the steel (now with a blacked finish).

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OIL BLACKED AND CHEMICALLY BLACKED COMPONENTS

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BLACKING OF STEEL WITH A CHEMICAL BLACKING SOLUTION

This is a process called 'Cold Chemical Blacking' and does not require the steel to be heated on a brazing hearth.

1. Clean and degrease the surface of the steel being 'blacked'.
2. Use tongs to drop the steel into a solution of 'Chemical Blacking'.
- Leave for no more than five minutes.
3. Remove from the blacking solution, wash with water, dry and drop in a 'Dewatering' solution. Leave for ten minutes.
4. Remove and wash in clean water, revealing a 'blacked' finish.

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1. Why is the 'blacking' of steel components sometimes needed? 3 marks

2. Describe the process of oil blacking OR chemical blacking of steel? 4 marks
