



Causes for Off-Colored Black Oxide Finishes

Some of the troubleshooting issues that may need to be addressed

1. Loose Red Film

- a. immersed, the parts may have a loose red oxide film over the black oxide. The red oxide film is easily wiped off revealing the desired black oxide finish. When this happens, more heat is required to prevent a drop below a rolling boil for more than two minutes when a load is introduced, or the weight of each load must be reduced.
- b. The same type of loose red oxide {which wipes off} can develop over the black oxide if electric heaters or hot gas flues are used which scorch the solution. This can be overcome by adding a stirrer to the solution to increase movement during heating or by an increase in the number of electric immersion heaters. If the tank is heated with a hot gas flue, the area of the flue running through the solution should be increased.



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