

Product Application Sheet – METAL CLEANER / POLISHING COMPOUND

ROYAL AUSTRALIAN NAVY

FLEET DIESEL INSPECTORS REPORT

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| HMAS STIRLING | Report ID: |
| Chemical Trial: triple7 Metal Shine | Trial 03/2006 |
| FDI: CPOMT Neil Curran | Total Pages 2 |

Tasking:

(1) Conduct functional test on triple7 Metal Shine manufactured by Environmental Fluid Systems.

Equipment and Method of Inspection Used:

1. Atomizer
2. Cleaning cloth
3. Visual inspection

References:

1. Telecon: Russel Mead (Environmental Fluid Systems) & CPOMT Neil Curran (Fleet diesel inspector - WA).

Failure/Problem Outline:

To govern the versatility of a new product for use in the engineering branch for the RAN.

Back Ground: Previously we have used commercial products for surface preparation, in conjunction with solvent baths.

Conclusions:

I have tested the metal polish on several materials with differing success. The following materials were tested.

1. **Mild steel**, this was covered in a metal preservative and the polish cut through the preservative with little effort. We cleaned the polish off with a rag. The surface was left dry with no film ready for the application of gaskets and assembly.
2. **Aluminium**, as with the mild steel we cleaned the surface with a rag. This was very interesting as the surface appeared to shine more as time passed.
3. **Stainless Steel 304 & 316**, the application and removal was the same as with both other materials. Both grades of stainless steel were polished finish however as with the aluminium it appeared to shine more as time passed. In both cases the surfaces were just tarnished not heavily discoloured.
4. **Cast iron**, the same application and removal technique was used with good results as previously stated.

Although the product was very good on all metal surfaces tested so far, heavy deposits of carbon and grease (as you would find in cylinder heads and engine blocks), would still require degreaser and solvents to clean the surfaces. The TRIPLE 7 Metal Polish comes into its own area when failure analysis has to be preformed by allowing only the required area to be further cleaned and prepared. This would be for further testing such as non destructive testing and visual examination. In the situation for breakdown maintenance this product would be perfect as it would prepare the surface ready for gaskets and assembly reducing rectification and down time of the equipment.