

PYLUMINISING

B. Sadler

MPH 231

Page 24

I noticed in February's edition of MPM that a gentleman had found a firm willing to stove enamel his crankcase and covers, but wanted the term "pyluminised" explained.

As you probably know aluminium is difficult to paint with any success unless "etch primed". However, a better way to get good paint adhesion is by giving the surface a "Chromate Conversion Coating", which consists of aluminium oxide containing chromium ions. This is precisely what Pylumin does. More technical information may be supplied by the manufacturers of Pylumin, who are:

The Pyrene Company Ltd.,
Metal Finishing Division,
Great West Road,
Brentford,
Middlesex.

THE PAINTING OF THE VINCENT

R. Brumwell

MPH 231

Page 23

Aluminium

Although much of the aluminium on the Rapide is unpainted, it is sometimes necessary to apply paint for decorative or protective purposes (as on Black Shadows and Lightnings), and then a chemical pre-treatment is essential to ensure the maximum adhesion and life from the organic finish. Mechanical roughening by scratch-brushing or shot blasting does, to some extent, increase or improve the adhesion of the paint to smooth aluminium surfaces such as our timing covers, primary chaincase cover, mag. cowling, etc., but there is no doubt that chemical pre-treatment is the most satisfactory method of preparing the aluminium for painting. These cheap pre-treatments are usually simple chemical dips, followed by water rinsing and drying, which bring about some modification of the natural oxide film on the aluminium surface, One of these treatments being

Pyluminising

This is an Alkali-Chromate process applicable to aluminium and its alloys, and produces an iridescent or uniform grey/black coating. The coating is very much softer than those produced by Anodising, and although it will increase the resistance of aluminium to corrosion (where there is no risk of damage by abrasion or handling) it is almost invariably used as a base treatment for paint. Treatment is carried out by immersion for 5-10 mins. in the hot, almost boiling solution.

The equipment, although simple in the trade, is rather more than the "Do it yourself" enthusiast should attempt, but is well worth mentioning, and consists of three mild steel tanks, two of which must be capable of being heated; together with an oven for drying off. Some form of fume exhaust is necessary over the processing tank. The process has the big advantage that unless the work is so heavily covered with grease that there is a risk of the processing solution becoming contaminated with such foreign matter, **no** cleaning is required before Pyluminising.

The solution is prepared by the addition of 12 ozs. of Pylumin powder per gallon of water. After processing, the work is then cold water rinsed, hot water rinsed, and then dried off in the oven, with a temperature not exceeding 150 deg.F. With Pyluminising, adequate ventilation and fume extraction is essential, *CARE* must also be taken in handling, as the Pylumin powder is a *CORROSIVE* chemical. In all cases, painting should be carried out as soon as possible after processing has been completed.

Organic Coatings (Paint)

Providing the non-ferrous metal surface has received the Pyluminising treatment and an adequate thickness of paint is applied under good conditions, the painting of non-ferrous metals presents no particular difficulties. Some paint, are however, unsuitable for use with aluminium such as, Lead containing primers, therefore it is always best to consult a reputable paint manufacturer or dealer, rather than to apply any paint which may happen to be available and hope for the best...