



Dalic Australasia Pty Ltd

Selective Area Brush Electroplating

## Carry out Certified Cadmium Plating in your own workshop

WORKSHOP KITS for Dalic Brush Plating are now available that will allow you to carry out CADMIUM PLATING repairs to OEM specifications in your own workshop. Without the need for post baking for Hydrogen Embrittlement, Saving you time and potential loss of valuable parts.

One days certification course (POA) will have your team repairing cadmium surfaces either in the workshop or out on the aircraft, on-site, in-situ.

SPECIFICATIONS COVERED:- Mil\_Std\_865D, BAC 5854, BAC 5849, BAE R15-1506, Eurocopter IMFA 276, SAE416 (QQ\_P\_416), SAEAMS 2451, 2451/4 Messier-Dowty PCS 2141 , A33/34-32-272, Airbus SRMA 330 51-21-11, Sikorsky SS8428, SS 8443 ETC.



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PO Box 336 Springwood  
NSW 2777 Australia  
Mob: +61 (0) 419704549  
Fax: +61 1300139617  
Dalic@pnc.com.au  
www.dalic.com.au



simplifying  
cadmium  
plating  
in the  
workshop

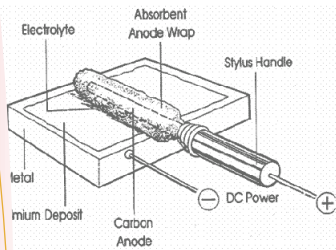
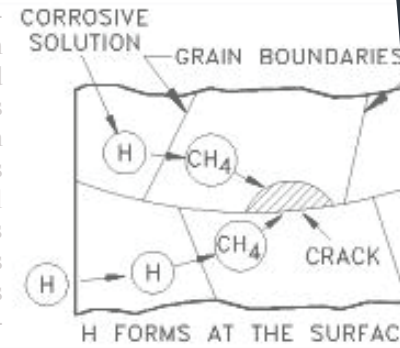
Selective  
Area  
Brush  
electro-  
plating

# Technology at work

## HYDROGEN EMBRITTLEMENT OF HIGH TENSILE STEELS

Another form of stress-corrosion cracking of high-tensile steels which can have the most devastating effects because of the catastrophic nature of the fractures when they occur. Hydrogen Embrittlement is the process by which steel loses its duct ability and strength due to tiny cracks that result from the internal pressures of hydrogen or methane gas which forms at the grain boundaries

As shown (right) hydrogen atoms diffuse along the grain boundaries and when found combine with carbon, which is alloyed with the iron, to form methane gas. The methane gas is not mobile and collects in small voids along the grain boundaries where it builds up tremendous pressures that initiate cracks thus causing the phenomenon Hydrogen Embrittlement



### SUPPORT SOLUTIONS

Because of the formulation of the Cadmium 2023 plating solution and the chosen methods of application the incidence of Hydrogen Embrittlement during the application is vastly reduced. This is to the point where it requires no post baking. Although if the process is used on a tank plated part which does require a post bake then the applied 2023 is very capable of enduring this procedure without detrimental effects. Also post applications of the gold passivation solution gives the cadmium enduring and lasting protection.



Kit Cost \$2616.52 + GST  
Contains sufficient solution to plate Approx 2000 sq in.

## Rust is a major causation of Hydrogen Embrittlement Painting can not offer sacrificial protection only cadmium

Cadmium 2023 quantity 1 litre	one
Clean & Deoxidise quantity 1 litre	one
Passivation quantity 1 litre	one
DNPS 5002 50v 30amp Reenhar with Rev & A H	one
Dual polarity cabling and connectors	set
Anode Handles with nose cap and connecting ferrules	two
PM 5 Fine carbon Anodes with special Microfilament Bonnets	two
Storage and decanting kit	one
Spray rinse bottle	one
Tapes, red Scotchbric, and Gloves	set
Workshop manual in fully searchable PDF format	CD



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### Carried out On-site

Brush Plating can be carried on-site as it does not require the usual tanks and equipment associated with tank electroplating



### Cadmium plating on the aircraft

This hand held process allows you to plate cadmium with out removing the part from the aircraft



### Certified and Specified

Specifications exist from all major aircraft manufacturers specifying Dalic Brush Plating of Cadmium without post baking for Hydrogen Embrittlement.