

***de Havilland***

**PPS 22.08**

**PRODUCTION PROCESS STANDARD**

**FABRICATION OF COLOUR ANODIZED ALUMINUM  
LABELS - BURIED PRINT PROCESS**

- Issue 2
- This standard supersedes PPS 22.08, Issue 1.
  - PPS ACN 22.08/1 have been superseded in this or previous issues.
  - This is a complete revision and detail changes have not been noted.

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Quality Assurance

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## **1 SCOPE**

- 1.1 This Production Process Standard (PPS) specifies the procedure and requirements for the fabrication of colour anodized labels and nameplates by the embedded or “buried” print process.
  - 1.1.1 This standard supersedes [PPS 22.04](#) re preparation of colour anodized labels by etch process.
  - 1.1.2 This PPS complements the engineering drawings that specify its use as an authorized instruction. The procedure specified in this PPS must be followed to ensure compliance with all applicable specifications. In general, if this PPS conflicts with the engineering drawing, follow the engineering drawing. The requirements specified in this PPS are necessary to fulfil the engineering design and reliability objectives.
  - 1.1.3 Refer to [PPS 13.26](#) for the subcontractor provisions applicable to this PPS.

## **2 HAZARDOUS MATERIALS**

- 2.1 Before receipt at de Havilland, all materials must be approved and assigned Material Safety Data Sheet (MSDS) numbers by the de Havilland Health and Safety Department.
  - 2.1.1 Refer to the manufacturer’s MSDS for specific safety data on any of the materials specified in this PPS. If the MSDS is not available, contact the de Havilland Health and Safety Department.

## **3 REFERENCES**

- 3.1 [PPS 13.26](#) - General Subcontractor Provisions.
- 3.2 [PPS 22.09](#) - Application of Self-Adhesive Metal Labels.

## **4 MATERIALS**

- 4.1 DSC 91-13 adhesive transfer tape, acrylic adhesive, nominal thickness 0.005".
- 4.2 Clear anodized 1100 aluminum alloy sheet, Brush Finish, nominal thickness 0.008" to 0.012".
- 4.3 Strippable cut masking film, Ulano Rubylith.
- 4.4 Suitable light-fast dyes to the appropriate Federal Standard No. 595 colours specified on the engineering drawings.

## **5 PROCEDURE**

### **5.1 General**

- 5.1.1 Preparation of labels and nameplates according to this standard consists of photographically masking the surface of a clear (colourless) anodized aluminum sheet followed by application of a water base dye which penetrates and fills the unmasked pores of the anodic coating in the areas which are to be coloured. Subsequent sealing of the anodic coating closes the anodic pores to permanently seal the dye into the coating.

### **5.2 Preparation of Artwork**

- 5.2.1 Except as noted in [paragraph 5.2.1.1](#), artwork for photo masking must consist of a full size positive image of the required label.
- 5.2.1.1 If necessary, artwork may be produced larger than full size to ensure clarity of image details.
- 5.2.2 Prepare artwork on transparent strippable cut masking film or as a photographic auto-positive.
- 5.2.3 Artwork must conform to the shape, legend and layout as shown on the engineering drawing for the particular label and, if possible, must include the label part number.

### **5.3 Preparation of Label**

- 5.3.1 Labels and nameplates shall be fabricated by the subcontractor so as to meet the requirements of this standard and the engineering drawing.
- 5.3.2 Dye colours used for the legend or background colours must match the Federal Standard No. 595 colour specified on the drawing.
- 5.3.3 If 2 colour labels are required, photographically mask and print the darker legend colour followed by overprinting the entire label with the lighter field or background colour.
- 5.3.4 Pressure-sensitive adhesive transfer tape (see [paragraph 4.1](#)) must be applied overall to the back of the label after sealing and before trimming to finish size.
- 5.3.4.1 The back of the label must be clean and dry before applying adhesive transfer tape.
- 5.3.4.2 Firmly rub or roll down adhesive tape over the entire surface to improve the bond between the adhesive and label.

5.3.4.3 Do not remove adhesive tape backing paper until immediately before installation of the label according to [PPS 22.09](#).

5.3.5 After preparation as above, trim labels to size according to the engineering drawing.

## **6 REQUIREMENTS**

6.1 The finished label must be in accordance with the requirements of the engineering drawing.

6.2 All markings must be clear, legible and free from visual defects.

6.3 Legend and background colours must match the FS595 colours specified on the engineering drawing and must be uniform in colour and tone over the entire label.

6.4 Adhesive transfer tape, if specified, must be trimmed flush with the label edges and must cover the entire back of the label.

6.5 Do not remove adhesive tape backing paper until immediately before applying the label according to [PPS 22.09](#).

## **7 SAFETY PRECAUTIONS**

7.1 *Safety precautions applicable to the materials and procedures specified herein must be as defined by the subcontractor performing such work for de Havilland.*

## **8 PERSONNEL REQUIREMENTS**

8.1 Personnel responsible for the fabrication of colour anodized labels and nameplates by the embedded or “buried” print process must have a basic understanding of the procedure and requirements as specified herein and must have exhibited their familiarity to their supervisor.