

-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

**Hanover House
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NATIONAL CERTIFICATE MODULE DESCRIPTOR

**-Module Number-
-Superclass-**

**0074516
XR**

-Session-1987-88

-Title-

**PAINT SURFACE COATINGS 2: AIR DRYING
SYNTHETIC FINISHES (BRUSH APPLICATION)**

-DESCRIPTION-

Type
and
Purpose

A specialist module which develops a knowledge of the materials, principles and skills involved in the brush application of air drying synthetic surface coatings.

Preferred
Entry Level

74494 Vehicle Paint Surface Preparation 1
74492 Special Vehicle Paint Application System or
75333 Painting 5: Conventional Spray Painting

Learning
Outcomes

The student should:

1. know suitable surfaces for the application of air-drying synthetic finishes by brush;
2. know paint systems for different surfaces suitable for brush application;
3. prepare and apply air-drying synthetic coatings by brush;
4. identify and rectify surface coating defects in brush painting applications;
5. apply cleaning and maintenance procedures to tools, materials and work areas.

Content/
Context

Safety Regulations and safe working practices and procedures should be observed at all times.

Corresponding to the Learning Outcomes 1-5:

1.
 - (a) Identification of surfaces and painting procedures required e.g. steel, aluminium, g.r.p, plastic, softwoods, hardwoods, veneers.
 - (b) Knowledge of preparation of surfaces to obtain 1st class finish.
 - (c) Comparison of different paint materials suitable for brush application e.g. recoating; quick/slow/hard drying.
2.
 - (a) Use of manufacturers data and selection of paint systems suitable for brush application for different surfaces.
 - (b) Identification of specified coatings as oil, water, spirit based.
 - (c) Solvents suitable to chosen paint coating systems.
3.
 - (a) Use of manufacturers' information in preparing and applying synthetic paints by brush.
 - (b) Selection and preparation of necessary brushes, tools, equipment and paint material.
 - (c) Protection of surrounding surfaces and keeping a clean working area.
4. Surface coating defects e.g. runs and sags, wrinkling, holidays, loss of gloss, crazing, flaking, peeling, bittiness, blistering.
5.
 - (a) Cleaning of brushes, tools, equipment and work areas.
 - (b) Determination of whether paint left over should be returned to tin or be safely disposed of.
 - (c) The reasons why some leftovers are safely disposed of and why brushes, equipment must be thoroughly cleaned.

Suggested Learning and Teaching Approaches

This module should be taught by lecture/demonstrations followed by student participation.

Students should make reference to manufacturers' information sheets throughout the finishing process. An example of a paint system showing the stages from start to finish would be useful.

In the application of these materials suitable practical assignments should be used.

Students should identify panels with defects and state the causes, remedies and preventative measures necessary.

Assessment Procedures

Acceptable performance in the module will be satisfactory achievement of the performance criteria specified for each learning outcome.

The following abbreviations are used below:

LO Learning Outcome
IA Instrument of Assessment
PC Performance Criteria

LO1 IA Practical identification test.

PC The student:

- (a) identifies surfaces suitable for synthetic paint application by brush;
- (b) states appropriate preparation required and consequential painting procedures;
- (c) states advantages and disadvantages of paint application by brush.

LO2 IA Written exercise involving the selection of paint systems and suitable solvent for each system and the identification of paints.

PC The student:

- (a) provides complete specifications of paint systems for 4 different surfaces;
- (b) states the drying methods (film formation) of air drying paints;

- (c) identifies coatings as reversible/non reversible.
- LO3 IA Practical exercise used in conjunction with an observation checklist and involving preparation and application of paints, selection and preparation of brushes, equipment, surrounding surfaces.
- PC The student:
- (a) selects suitable brushes and materials for three surfaces;
 - (b) prepares materials, tools, equipment for use;
 - (c) checks surface is suitable to receive paint;
 - (d) applies paint in a clear environment and in a methodical and safe manner.
- LO4 IA Written exercise on the identification and rectification of surface coating defects in brush painting applications.
- PC The student:
- (a) identifies six defects from given samples;
 - (b) specifies the cure and prevention procedures for the six chosen defects;
 - (c) assesses the finish of the work.
- LO5 IA Practical exercise used in conjunction with an observation checklist involving the cleaning and storing of tools, materials and work areas.
- PC The student:
- (a) cleans brushes, tools, equipment and returns to store;
 - (b) leaves work area clean and tidy.