

-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

**Hanover House
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NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number- 0074493 -Session-1987-88
-Superclass- XR

-Title- PAINT SURFACE COATINGS 3 : FORCE DRYING

-DESCRIPTION-

Type and Purpose A specialist module which introduces the basic knowledge and skills necessary for the preparation and force drying of surface coatings.

Preferred Entry Level 74494 Vehicle Paint Surface Preparation 1

Learning Outcomes The student should:

1. know the purpose of a range of force drying equipment;
2. prepare surface and apply coatings;
3. prepare vehicles and use force drying equipment;
4. identify and know how to rectify surface defects.

Content/ Context Safety regulations and safe working practices and procedures should be observed at all times.

Corresponding to Learning Outcomes 1-4:

1. Low bake stoving, force drying equipment. Layout and procedures for use. Advantages/ disadvantages of low bake stoving and force drying operations.
2. Surface preparatory techniques; masking materials, application and removal. Paints, use of manufacturer's recommendations regarding suitability for stoving. Application of paint with emphasis on finishing coats.

3. Vehicle preparations for stoving and force drying.
Dangers associated with stoving and force drying
i.e. damage to metal components.

Curing of surface coatings and methods of heat transfer.
4. Common surface defects including insufficient curing, faults due to excessive force drying or stoving, solvent popping.

Methods for rectifying defects.

Suggested
Learning and
Teaching
Approaches

The module should be taught in a work shop situation.

Preparatory work should be restricted to components of a reasonable size such as a car door. Common faults should be highlighted using prepared surfaces.

Safety, safe working practices, and care and use of equipment should be an integral part of all module activities. The particular hazards associated with ovens and toxic substances should be highlighted.

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 Written/graphics exercise in which the student is given diagrams for identification.

PC The student:

(a) identifies 4 different types of force drying equipment;

(b) describes the purpose of using force drying equipment;

(c) states the advantages and disadvantages of each type of equipment identified at (a) above.

- LO2 IA Practical exercise in which the student prepares the vehicle surface for painting and force drying.
- PC The student:
- (a) uses the appropriate methods to prepare the surface;
 - (b) selects and applies the correct surface coatings;
 - (c) wears all necessary safety clothing and equipment;
 - (d) uses tools and equipment safely.
- LO3 IA Practical exercise in which the student uses force drying equipment on a vehicle.
- PC The student:
- (a) prepares the vehicle for the use of force drying equipment;
 - (b) sets up the equipment correctly;
 - (c) uses the equipment to dry and cure surface coating;
 - (d) wears all necessary safety clothing and equipment;
 - (e) uses all tools and equipment safely.
- LO4 IA Written open book exercise in which the student is presented with ten defective surfaces.
- PC The student selects 5 surfaces and for each one:
- (a) identifies the defect and one cause thereof;
 - (b) describes one method to rectify the defect.