

-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

**Hanover House
24 Douglas Street
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NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number- 0064317 -Session-1986-87

-Superclass- KE

-Title- RESIST FILM PROCESSING

-DESCRIPTION-

Type and Purpose A specialist module intended to introduce the principles of dry resist film processing.

Preferred Entry Level 04316 Plating and Etching of Printed Circuits

Learning Outcomes

The student should:

1. select from manufacturers data, the appropriate resist for listed purposes;
2. know and apply the spectral sensitivity of photo polymer (riston) materials;
3. know other methods in which other resists can be applied;
4. apply a photo resist onto a prepared laminated board.

Content/ Context

Corresponding to the Learning Outcomes:

1. selection to be made from a consideration of laminating temperature range, exposure requirements, resolving limitations and chemical etchant resist.
2. the correct sources for exposing photo-polymers, the appropriate safe lights conditions and positive and negative acting photo-polymers.

3. methods to include etch resists, photo-resists, plating resists, and solder resists in which photo-polymers can be used.
4. clean smooth copper surface onto which the photo-polymer resist film is thermally pressed.

Suggested
Learning and
Teaching
Approaches

This module should be taught in a properly equipped laboratory with full access to:

- (a) hot and cold running water;
- (b) switched normal lighting and reduced red/orange. At all times examples of the skills being taught should be shown as a demonstration.

Assessment
Procedures

All learning outcomes must be validly assessed.

The student must be informed of the tasks which contribute to summative assessment. Any unsatisfactory aspects of performance should, if possible, be discussed with the student as and when they arise.

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 Observation checklist.

PC The student correctly selects material on request and in practical work throughout the module.

LO2 IA(1) Short answer item test.

PC The student displays adequate knowledge of the content.

IA(2) Densitometric Tablet test.

PC The student successfully produces:

- (a) a standard tablet;
- (b) a resolution test.

IA(3) Manufactured densiometric tablet.

PC The student uses the densiometric tablet successfully and tests the resolution of the "riston" chosen using a standard resolution tool.

LO3 IA Short answer item test.

PC The student displays adequate knowledge of the content.

LO4 IA Finished product.

PC The student produces the completed article in which:

- (a) there is no creasing;
- (b) the riston is uniformly adhered;
- (c) there are no air bubbles;
- (d) there is no heat cracking or splitting of the riston.