



Australian Government

Department of Education, Employment and Workplace Relations

ICPSP235C Prepare stencil using photographic indirect method

Revision Number: 1

ICPSP235C Prepare stencil using photographic indirect method

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes, skills and knowledge required to prepare photographic indirect stencils.
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Application of the Unit

Application of the unit	This unit requires the individual to prepare photographic indirect stencils.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare the work area	1.1. Work area is made clean and functional prior to the commencement of work 1.2. All equipment, tools and materials are inspected to ensure they are functional and where necessary, appropriate remedial action is taken prior to the commencement of work 1.3. Activating chemicals are prepared according to OHS requirements and manufacturer's/supplier's specifications
2. Prepare the screen	2.1. Screen is selected according to job specifications 2.2. Chemicals are applied and removed according to OHS requirements and manufacturer's/supplier's specifications 2.3. Tension of screen mesh is checked for suitability according to job specifications
3. Select indirect stencil material	3.1. Stencil material is selected according to requirements for ink type, print resolution, substrate and machine type 3.2. Stencil material is checked for faults and expiry date and suitable action taken
4. Process material	4.1. Selected material is cut to size according to job specifications with minimisation of waste 4.2. Material is placed in vacuum frame with positive positioned and intimate vacuum achieved according to manufacturer's/supplier's and job specifications 4.3. Exposure is calculated and stencil is exposed according to manufacturer's/supplier's specifications 4.4. Light source is positioned according to manufacturer's/supplier's specifications 4.5. Exposed stencil is removed from vacuum frame and treated with the necessary activator, if required, according to OHS requirements and manufacturer's/supplier's specifications 4.6. Activated stencil is washed according to OHS requirements and manufacturer's/supplier's specifications 4.7. Exposed stencil is inspected for processing flaws
5. Apply stencil to screen	5.1. Prepared screen is re-wet and inspected for cleanliness and dust 5.2. Stencil is positioned and adhered accurately

ELEMENT	PERFORMANCE CRITERIA
	according to manufacturer's/supplier's specifications
6. Dry stencil	6.1.Processed stencil is dried according to manufacturer's/supplier's specifications 6.2.Backing sheet is carefully removed and stencil checked for full adhesion
7. Block out screen	7.1.Stencil is inspected for flaws, scum and/orientation 7.2.Non-image areas of prepared screen are blocked out with filler suitable for ink type and according to job specifications 7.3.Pinholes are spotted out with suitable filler and faulty/damaged images are retouched and are taped according to ink type and job specifications
8. Store screen	8.1.Prepared screen is labelled according to enterprise specifications 8.2.Prepared screen is stored in a clean, dry environment according to manufacturer's/supplier's specifications

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- OHS in relation to operating machinery such as safely switching off machinery before cleaning is started
- communication of ideas and information by correctly labelling prepared stencils
- collecting, analysing and organising information by checking materials for faults and expiry dates
- planning and organising activities by preparing the screen prior to applying the stencil
- teamwork when maintaining the production process in association with others
- mathematical ideas and techniques by cutting selected materials to size according to job specifications
- problem-solving skills by retouching and taping damaged images
- use of technology by using the vacuum frame and other equipment to prepare the stencil

Required knowledge

- preparing the screen
- significance of mesh count
- reason the screen must be tensioned correctly
- chemicals that are used for pre-treating and degreasing
- equipment used and preparation of work area
- method of preparing activator to OHS standards
- significance of a dust-free work area when working with indirect stencils
- inspection of necessary equipment to ensure it is functional
- indirect stencil material selection
- characteristics of indirect stencils relative to ink type, print resolution and substrate
- selection of indirect stencil material
- common faults associated with indirect film
- exposing, activating and washing indirect stencils
- vacuum pressure prior to exposing the stencil
- position of light source
- calculation of exposure time for this indirect film
- effects of overexposure and underexposure
- method of activating film
- temperature of the water for washing indirect stencils
- Recognising and rectifying flaws
- applying stencil to screen and drying off

REQUIRED SKILLS AND KNOWLEDGE

- main considerations before applying the stencil to the screen
- method of positioning and adhering stencil to screen
- process of drying the stencil and removing the backing sheet
- blocking out, spotting and storing the screen
- method of rectifying flaws and scum in the stencil
- type of filler used for blocking out and their use
- pinholes spotting and the screen taping
- means by which this screen is able to be identified at a later date
- manuals, safety and other documentation that are relevant to this task and where are they kept and information that is included in these documents

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- correctly prepare direct emulsion stencils using manual techniques according to job specifications
- demonstrate an ability to find and use information relevant to the task from a variety of information sources
- prepare TWO different direct screens using manual coating and exposure techniques according to manufacturer's and job specifications, enterprise procedures and the listed Performance Criteria.

Context of and specific resources for assessment

Assessment must ensure:

- assessment may take place on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment.

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- direct questioning combined with review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate.

Guidance information for assessment

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
<i>Type of stencil material</i> may include:	storage and use of indirect stencil materials and activators commonly used within the industry relative to industry sectors.
<i>Enterprise procedures</i> may include:	tasks must be performed according to enterprise procedures.
<i>Degree of autonomy</i> may include:	working under supervision to defined procedures to ensure production requirements are met.
<i>Quality standards</i> may include:	should meet client requirements and enterprise and industry standards.

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Screen Printing
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Co-requisite units

Co-requisite units		

