

Title	Assist machine operator for dry offset printing		
Level	2	Credits	15

Purpose	People credited with this unit standard are able to: follow safety requirements for the equipment being used; check documentation and confirm requirements for the job are available; handle and store substrates used in dry offset printing; demonstrate knowledge of plates; demonstrate knowledge of colour and inks; assist with make ready and printing tasks to ensure that job requirements are met; and undertake post press tasks in accordance with workplace practices.
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Classification	Printing > Dry Offset
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Available grade	Achieved
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Prerequisites	Unit 340, <i>Demonstrate knowledge of safe working practices in the print industry</i> or demonstrate equivalent knowledge and skills
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Guidance Information

- 1 All workplace practices must meet any applicable and recognised codes of practice, and documented workplace health, safety, and environmental procedures for personal, product, workplace health, safety, and environmental matters, and the obligations required under current law including the Health and Safety in Employment Act 1992, Resource Management Act 1991, and their subsequent amendments.
- 2 *Workplace practices* refer to the documented procedures for the machine and/or workplace.
- 3 All production tasks in this unit standard are to be carried out under the direction of the machine operator.

Outcomes and performance criteria

Outcome 1

Follow safety requirements for the equipment being used.

Range machine operating manual, workplace practices.

Performance criteria

- 1.1 Machine start up, shut down, and emergency procedures in the workplace are explained.
- 1.2 Hazard control measures, as circulated by the company, are described.
- 1.3 Hazards, or potential hazards in the workplace are identified and reported in accordance with workplace practices.

Outcome 2

Check documentation and confirm requirements for the job are available.

Performance criteria

- 2.1 Job documentation is checked to ensure that all specifications for the process being undertaken are complete and discrepancies are reported in accordance with workplace practices.
- 2.2 Components required for the job are checked against the job documentation and their availability confirmed.
- 2.3 Equipment requirements, as advised by the machine operator, are confirmed as available.

Outcome 3

Handle and store substrates used in dry offset printing.

Performance criteria

- 3.1 Substrate quantity (including overs) is calculated in accordance with workplace practices, and quantity issued is confirmed.
- 3.2 Handling and storage of substrates are carried out and problems arising are solved in accordance with workplace practices.
 - Range handling – clean working environment, clean hands, carrying methods, stacking, avoidance of physical damage;
handling problems – static electricity, uneven substrates;
storage – light, temperature, air flow control, relative humidity, age (substrate rotation), ease of access.
- 3.3 Substrate characteristics are related to the printing process for which they are to be used.
 - Range substrate characteristics include but are not limited to – smoothness, colour, finish, receptivity.

- 3.4 Substrate characteristics are identified in terms of those likely to cause printing problems.

Range calliper, smoothness, opacity, transparency, coatings, evaporation, strength, colour, flexibility, size, dimensional stability, texture, surface finish.

Outcome 4

Demonstrate knowledge of plates used in dry offset printing.

Range at least one of – photopolymer, silicon.

Performance criteria

- 4.1 Plate making procedures are explained for the dry offset process being learnt.
- 4.2 Plates are described in terms of their properties.

Outcome 5

Demonstrate knowledge of colour and inks.

Performance criteria

- 5.1 Primary and secondary colours are identified, and colour terms are used.
- Range additive and subtractive primary and secondary colours; colour terms include but are not limited to – hue, hue error, greyness, efficiency.
- 5.2 Inks are used to meet the requirements of the substrate, machine and job.
- Range requirements may include but are not limited to – drying properties, transparency, colourfastness, scuff, odour free, toxicity, bleed problems, substrate, gloss, colour, opacity, overprint finish.

Outcome 6

Assist with make ready and printing tasks to ensure that job requirements are met.

Performance criteria

- 6.1 Plates or sleeves are confirmed with the machine operator as being correct for the job before proceeding to secure them on the machine.
- 6.2 Plates or sleeves are positioned and secured on the machine in accordance with machine operator's instructions.
- 6.3 The inking system on the machine being used is explained in terms of its operation.

- 6.4 Ink is added to the ducts and/or reservoirs in the correct amount to suit both the image carrier and the run length.
- 6.5 Substrate is loaded into machine in accordance with workplace practices, and positioned to meet job requirements.
- 6.6 Faults found while loading substrate are identified and reported in accordance with workplace practices.
- Range faults may include but are not limited to – damaged edges, dimensional distortion, foreign matter, marking.
- 6.7 Substrate is unloaded safely, and any defects identified are reported in accordance with workplace practices.
- Range defects may include but are not limited to – marking, mis-registration, damage caused by bad stacking, drying, adhesion, splitting, crushing, drying system faults, inking system faults.

Outcome 7

Undertake post press tasks in accordance with workplace practices.

Performance criteria

- 7.1 Quantity printed is checked against job documentation and confirmed with the machine operator before wash up is commenced.
- 7.2 Correct shut down sequence is followed in accordance with the machine operator's instructions.
- 7.3 Job documentation is completed.
- 7.4 Post press tasks are carried out as required by the job specifications.
- 7.5 Inking system is washed up in accordance with workplace practices.
- Range appropriate use of safety clothing and equipment.
- 7.6 Reclaimed ink is returned to store for re-use, or disposed of.
- 7.7 Printed substrate is prepared for forwarding to the next production process as instructed by the machine operator.
- 7.8 Waste control procedures are followed.
- Range recyclable waste, non-recyclable waste, security waste.

Replacement information	This unit standard was replaced by unit standard 33185.
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This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 May 2002	31 December 2025
Revision	2	19 November 2003	31 December 2025
Review	3	27 October 2006	31 December 2027
Review	4	30 March 2023	31 December 2027
Rollover	5	27 February 2025	31 December 2027

Consent and Moderation Requirements (CMR) reference	0005
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.