

Make ready and produce single process work for reel-fed printing

Level 3

Credits 50

Purpose People credited with this unit standard are able to: check documentation and confirm that the requirements for the job are available; position/load and secure image carrier/s on a reel-fed press in accordance with workplace practices; select, mix and match inks for reel-fed printing in accordance with workplace practices; pre-set the inking system on a reel-fed press in accordance with workplace practices; carry out other make ready tasks in preparation for taking a print in accordance with workplace practices: set the register systems on a reel-fed press in accordance with workplace practices and; take a print and prepare for production run; produce single process work on a reel-fed press in accordance with workplace practices and to meet job requirements; use quality control equipment and guides in accordance with workplace practices; recognise and report problems encountered during the print run; check job is completed before wash-up is commenced and undertake post-press tasks in accordance with workplace practices.

Subfield Printing

Domain Printing - Reel-Fed

Status Registered

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Entry information Prerequisites: Unit 340, *Demonstrate knowledge of safe working practices in the print industry*, or demonstrate equivalent knowledge and skills.

Recommended: Unit 16513, *Web up a reel-fed printing press*; Unit 16512, *Set up an infeed system on a reel-fed printing press*; Unit 26310, *Undertake pre-make ready for reel-fed printing*; and Unit 26311, *Wash up a reel-fed printing press*; or demonstrate equivalent knowledge and skills.

Replacement information This unit standard replaced unit standard 2272, unit standard 16514, unit standard 16515, unit standard 16516, and unit standard 16517.

Accreditation Evaluation of documentation and visit by NZQA and industry.

Standard setting body (SSB) Kompetenz

Accreditation and Moderation Action Plan (AMAP) reference 0005

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Special notes

- 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, and its subsequent amendments.
- 2 Candidates undertaking assessment against this unit standard must provide evidence of being responsible for making ready and running the press to produce single process production jobs. Examples of single process production jobs include – one web, basic four colour process or spot colours, no embellishments or lamination, no encoding, re-passing or after-processes except a single diecutting station.
- 3 Candidates undertaking assessment against this unit standard must provide evidence of normal colour vision. Further information on the Kompetenz's training policy for colour vision can be obtained from Kompetenz, PO Box 9005, Newmarket, Auckland 1149. or <http://www.competenz.org.nz/>.
- 4 Definitions
job documentation refers to the documentation that is used in the workplace that contains the instructions and requirements for a particular production job. This may include but is not limited to workplace orders, production orders, workplace specifications, samples, lay cards;
job requirements refer to specific requirements for the job at hand. These requirements may or may not be covered in the job documentation and may include special instructions, quality requirements expected by the customer, and/or production standards as set down by the workplace;
press requirements refer to the specific requirements for the press being operated as set out in the operating manual or in accordance with workplace practices;
spot colours refer to colours that are added in a specific region of a printed sheet, used to highlight individual page elements such as logos or headlines;
workplace practices refer to the documented procedures for the machine and/or workplace.

Elements and performance criteria

Element 1

Check documentation and confirm that the requirements for the job are available.

Performance criteria

- 1.1 Job documentation is checked to ensure that all specifications for the process being undertaken are complete, and any discrepancies are reported in accordance with workplace practices.
- 1.2 Components required for the job are checked against job documentation and their availability is confirmed.
- 1.3 Availability of equipment, as determined by the job documentation, is confirmed.

Element 2

Position/load and secure image carrier/s on a reel-fed press in accordance with workplace practices.

Performance criteria

- 2.1 Image carrier/s are confirmed as correct for the job before proceeding to secure on the press.
- 2.2 Image carrier/s are positioned/loaded and secured on the press to meet the press and job requirements. Any adjustments required are carried out or reported.
- 2.3 Faults found on image carriers are recognised and reported or rectified.

Range may include but are not limited to – incorrect exposure or development, image defects, poor contact, incorrect image positioning, missing register mark.

Element 3

Select, mix and match inks for reel-fed printing in accordance with workplace practices.

Performance criteria

- 3.1 Inks are selected to suit the substrate, press and job requirements.

Range may include but is not limited to – drying properties, transparency, colourfastness, scuff, odour-free, bleed problems, substrate, gloss, colour, opacity, overprint finish, laser printer compatibility, toxicity, foil stamping.

- 3.2 Inks are mixed using colour mixing and matching systems available in the workplace.

Element 4

Pre-set the inking system on a reel-fed press in accordance with workplace practices.

Performance criteria

- 4.1 Ink is added to the duct in the correct amount ensuring colour consistency of job is achieved.
- 4.2 Ink delivery system is set and rollers are inked up to meet the requirements of the image on the image carrier.

Range duct, ink flow, duct roller sweep.

Element 5

Carry out other make ready tasks in preparation for taking a print in accordance with workplace practices.

Performance criteria

- 5.1 Web tensions are set to meet the job requirements.
- Range (depending on the press being operated) may include – web, rewind, unwind, web break detectors.
- 5.2 Rollers and/or blades on the press being operated are set and any faults are rectified or reported.
- 5.3 Drying systems on the press being operated are checked and set to meet the job requirements.
- Range may include but is not limited to – open flame, hot air, infrared (IR), ultraviolet (UV), combination dryer.
- 5.4 Auxiliary equipment is checked and set to meet the job requirements.
- Range may include but is not limited to – folder, numbering unit, encoding unit, punching unit, creasing unit, diecutting unit, perforating unit, foil stamping, silicon system.
- 5.5 End finishing units are set to meet the job requirements.
- Range may include but is not limited to – collator, gluer, rewinder, sheeter, folder.
- 5.6 Faults found in the make ready of the various systems on the press are rectified or reported.

Element 6

Set the register systems on a reel-fed press in accordance with workplace practices.

Performance criteria

- 6.1 Register systems on the press being operated are set and adjusted to meet job requirements.
- Range manual or automatic.
- 6.2 Faults found when setting the register systems are rectified or reported.

Element 7

Take a print and prepare for production run.

Performance criteria

- 7.1 Print is taken and checked against job documentation and available sample or proof.
- Range image transfer, image defects, positioning, colour, clarity of print.
- 7.2 Print is passed for production run in accordance with workplace practices.
- 7.3 Counter and delivery systems are checked to ensure that the job requirements are met, and counters are set ready for start of run.

Element 8

Produce single process work on a reel-fed press in accordance with workplace practices and to meet job requirements.

Performance criteria

- 8.1 Press start-up and shut-down procedures are followed in accordance with workplace practices.
- 8.2 Multi colour work is printed to meet the job requirements ensuring that production standards and quality are maintained throughout the run.
- 8.3 Reel stand and in-feed systems are monitored and adjusted to give continuous operation throughout the run.
- 8.4 Lubricating system is checked during the print run to maintain smooth operation of the press.
- 8.5 Image carrier condition is monitored throughout the run.
- 8.6 Inking is monitored and adjusted throughout the run.

- 8.7 Impression and image transfer systems are monitored and adjusted throughout the run.
- 8.8 Drying systems are monitored and adjusted as necessary throughout the run.
- 8.9 Rewind or finishing processes are monitored and adjusted throughout the run.
- 8.10 Print standards are monitored against the approved sample.
- Range may include but is not limited to – colour variation, registration, picking, ghosting, tracking, dot gain, set-off, ink adhesion.

Element 9

Use quality control equipment and guides in accordance with workplace practices.

Performance criteria

- 9.1 Quality control guides are used to maintain the required production standards and quality throughout the run.
- Range may include but is not limited to – quality control strips, densitometer, web viewer, approved sample, spectrophotometer, gas chromatograph, bar code scanner.
- 9.2 Product bar code tolerances are maintained throughout the print run.
- Range readability, printing tolerances.

Element 10

Recognise and report problems encountered during the print run.

Performance criteria

- 10.1 Static electricity problems are rectified or reported in accordance with workplace practices.
- Range may include but is not limited to – web breaks, web wandering, misregister, set-off, fire hazards.
- 10.2 Problems encountered during the print run are rectified or reported in accordance with workplace practices.
- Range may include but is not limited to – dirty print, set-off, ghosting, gear marks, over/under impression, slur, show-through, ink contamination, retarded ink drying, bleeds, creasing, misregister, tracking, doctor blade faults and blocking, strike-through (printing on paper), scumming, haze, hickies, catch up (lack of water on plates), piling (build up of ink on edges).

Element 11

Check job is completed before wash-up is commenced and undertake post-press tasks in accordance with workplace practices.

Performance criteria

- 11.1 Quantity printed and other job requirements are checked against job documentation before wash-up is commenced and any discrepancies in quantity are rectified.
- 11.2 Correct shut-down sequence is followed in accordance with Occupational Health and Safety requirements.
- 11.3 Job documentation is completed and amendments and variations are noted for future reference.
- 11.4 Other post-press tasks are carried out as required by the job documentation.

Range may include – prepare for forwarding to next process, file image carrier/s.

Please note

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact Competenz_info@competenz.org.nz if you wish to suggest changes to the content of this unit standard.