

Overview

Most print work requires multiple pages or images to be imposed; conventionally on a 'sheet' but for digital operations as part of a manipulated (by software) file. This may range from '2-up' for a simple leaflet, '64-up' for a large magazine and even more for a book. Where more than one colour printing is involved, the imposition must be repeated exactly for each colour separation. The final stage before printing is the creation of an image carrier.

This standard covers the work involved in identifying the number of colours in a job, the separation of colours where that is necessary, the imposition of pages or images and the output of an image carrier.

[The sequence shown in the performance criteria presumes that the files may be sent to a RIP and there will be an opportunity to preview the files before final output to the image carrier. Where the files are sent directly for output to an image carrier, the sequence set out above may need to be interpreted in a different order]

Performance criteria

You must be able to:

Identify colour separations for printing

1. check that the job details you have are complete
2. identify the number of colours that will be needed to meet job requirements
3. identify with accuracy whether the colour used in the digital artwork file are defined as 'spot' or process colours
4. identify the colour space(s) used in the digital artwork
5. bring any conflict between the artwork colours and the intended printing colours/method to the attention of your manager or the customer immediately
6. follow the directions of relevant people straight away when artwork needs to be changed so that colours will separate correctly for the printing process to be used
7. carry out the work yourself or pass it to the person who will carry out the work as per directions given
8. check whether any knockouts and overprints have been set in line with requirements and, if not, follow the directions of your manager or the customer
9. identify or create files that can be used to output or print jobs to the image carrier

Create impositions for printing

10. identify the printing and finishing machines that are required for production
11. identify the imposition requirements that allow jobs to be produced in the most efficient way, taking into account press and substrate size
12. identify existing, or create new, imposition schemes which are approved by your company and suitable for each job
13. set up impositions to the approved specification, using the imposition template where one exists
14. incorporate relevant marks in impositions to aid printing and finishing processes, including trim and bleed marks, register marks, folding marks, grip and side-lay and any mechanical or digital quality control aids required by your company
15. save imposition templates so that they can be easily identified and used again when required

Output image carriers for printing

Produce imposed digital files (separations) for printing

16. send or print approved output files to the correct destination device to create imposed separations
17. check that all elements appear on the appropriate separations
18. check that fonts and images meet job requirements
19. check that imposition marks required for the job appear on appropriate separations
20. check that image carriers are fit for purpose
21. obtain approval for this stage of the production work in line with organisational procedures

Produce imposed digital files (separations) for printing

Knowledge and understanding

You need to know and understand:

The law as it affects printing

1. copyright and ownership of images
2. forgery
3. obscenity
4. incitement
5. data protection

Health and safety

6. your duties and responsibilities for health and safety as defined by any specific legislation covering your job role
7. workplace health and safety procedures
8. manufacturers' and suppliers' health and safety instructions/advice

Security and storage

9. how to safely handle customer material
10. computer system security and virus protection
11. the secure methods of archiving digital and conventional artwork

Communication requirements and processes

12. how to communicate with colleagues
13. how to communicate with customers

Workplace policy and practice

14. workplace objectives, priorities, standards and procedures
15. the range of work carried out in the workplace
16. the working practices existing in the workplace
17. the key job roles within the printing and graphic communications industry and their main purposes
18. the identification and assessment of printing options
19. the stages in the printing process from pre-press to printed product

Time and resources

20. the different types of resource, including labour, materials, machinery
21. the relationship between resource usage and profitability

The operation of equipment

22. the operation of software, hardware and pre-press equipment

Printing

23. the principles of layout and imposition, including the use and placement of marks and control guides
24. the principles of colour separation
25. the differences between 'spot' and process colours
26. how to identify knockouts and overprints and actions to take to rectify them

Digital imaging

27. colour theory, including additive and subtractive systems such as RGB and CMYK gamuts
28. digital file management

PRODPP121 (SQA Unit Code - H9KK 04)

Produce imposed digital files (separations) for printing



Developed by Proskills

Version Number 2

Date Approved October 2014

Indicative Review Date April 2019

Validity Current

Status Original

Originating Organisation Proskills

Original URN PRODPP121

Relevant Occupations Originators compositors and print preps; Printers; Printing machine minders and assistants; Printing Trades; Bookbinders and print finishers; Graphic designers

Suite Pre Press

Keywords digital, print, pre-press, pre press, digital files, separations
