



Quality Control Policy

September 2014

QUALITY CONTROL POLICY STATEMENT

Discovery Print, part of the DC Thomson & Co Group, is committed to the policy of providing newspapers of the highest quality, in line with industry Standards, which satisfy and exceed customer's requirements and expectations.

In order to achieve this, appropriate personnel involved in producing newspapers have implemented a Quality Management System, to ensure that Discovery Print's performance and reliability is always maintained.

This system is enhanced by the compulsory use of Standard Operating and Quality Procedures, from which no unauthorised alterations or deviations are permitted.

Discovery Print will ensure that all management and staff are fully conversant with the company quality objectives through on-going training and education programmes.

This Quality Policy Statement determines that we aim to get it right first time, every time and strive for continuous improvement.

PREPRESS QUALITY CONTROL PROCEDURES

CTP Equipment:

The Imagers, Processors and Punch-Benders are maintained to the manufacturers recommended schedule to achieve their optimum performance.

The main contractor (Agfa Gaevert) carries out regular servicing of the equipment.

Regular calibration readings are taken to maintain optimum image output.

A deep clean of the plate processors is undertaken weekly.

Plate Quality & Image Checks:

Registration:

Optimum registration is maintained via our Barensee punch-benders.

The punch-benders use camera registration for optimum alignment prior to punching and bending the plate.

The plates are checked for image positioning, development and damage/scratches then collated into sets for press recognition and handling.

Incoming Page Files:

All incoming page files are processed and output direct to our Advantage Plate Setters.

Corrupt files must be corrected and resent via the publisher.

All files are batch processed through our Asura system for image correction and optimisation.

Responsibility: All Discovery Print Staff

Plate Collection/Collation:

- Plates for each job are automatically sorted and identified for press positioning.
- Timings for final set of plates should be logged.
- Edition change ids should be checked against customer-supplied sheets.
- Where jobs have more than one edition, definitive edition change sheets are to be compiled for each edition and supplied to the Press Team Leader. The definitive list should be cross-referenced with the most current information received from customers and any anomalies queried.

Responsibility: All Discovery Print Staff



Plate Re-Makes:

- All requests for re-makes should be logged on job sheet.
- Original plates should be returned to pre press for inspection or verification. Findings should be logged on job sheet.
- All technical problems relating to re-makes should be reported immediately to pre press with samples.

Responsibility: All Discovery Print Staff

PRESS QUALITY CONTROL PROCEDURES

Criteria for Saleable Copy:

On every Start up press staff must take timed copy.

1. Pagination (Folios) & dateline must be checked all the way through the product. If there is an error in the sequence of the folios the press must be stopped immediately. If there is an error in the sequence of the dateline it must be queried. You must then complete the check & inform pre press department of the error.
2. Colour sequence of the plates must be checked using the c.m.y.k. indents on every page, if evident. If the sequence is not correct, the press must be stopped & the sequence corrected.
If in doubt, due to c.m.y.k indents not being evident, check with your Team Leader.
3. Cut-offs – The image area should be positioned centrally. Special attention must be paid when images are designed to bleed into the gutter to align with images on the following page or when running with a lap fold.
4. Catch up - The copy must be free of any ink in non-image areas.
5. Edition Changes - When an edition change occurs, you must check all the folios and idents and not just the pages that have changed. If any of the idents or folios are incorrect you must stop the press immediately. If there is an error in the sequence of the dateline it must be queried and the pre press department informed.
6. Densities - A visual density check must be carried out throughout the product before it is released. Density and presentation of the copy must comply with the following criteria to be deemed 'saleable'.

7. Densities must be uniform across the page without being excessive as to cause half tone saturation or excessive set off and rub. Conversely, text should not appear grey and washed out.

Accuracy of colour in releasing saleable copy containing low densities, in reference to optimum standards, must consider the nature of each image with particular focus on corporate identities and the impact of the front page. Bleeds and spreads should be sufficiently balanced and even/odd page density variation must not be evident.

Due to the subjective nature of 'saleable' density standards, pressroom Departmental Management will regularly review 'release' copies lodged in the quality library. Feedback will be provided. This process is to ensure that a consistent and acceptable standard is permeated throughout the organisation.

Note: Endeavours to minimise waste must not compromise the overall integrity of the product, in that improvements towards optimum, from saleable standards should be immediately forthcoming. Any continuation of minimum saleable copy standards should result in either an immediate investigation or rectification of the issue, or an authorisation from a senior manager to continue production to a predetermined point.

8. Register - This should be within a tolerance of 0.25mm. If this is exceeded the press must be stopped & the copy laid down. The register must then be checked across the width of the web and any mis-register corrected.

9. If any of these criteria cannot be achieved due to reasons out of your control, or it is not practicable to rectify the fault, you must enter the reasons into the quality report and any other reports that may be required for individual products.

Responsibility: Team Leader or designated member of the print team.

Releasing saleable copies into the mailroom.

1. When saleable copy is achieved the copies can be released into the mailroom.
2. The mailroom staff must remove the first bundle for further inspection. This will include excessive set off and copy creasing caused by mail room equipment.
3. A member of the print team will take timed and office copies. These will be checked and placed on designated shelving. An inspection of the mail room bundles will also be carried out to ensure that the copies meet the standard required.
4. **If the quality standard of the copies is acceptable, the copies can be dispatched. Two copies must be retained and labelled to identify them as the first copy of the production run for that particular product. This copy must be returned to the press office and saved as part of the 'products saved' library copies.**
5. If the quality standard of the copies is not acceptable, the Team Leader must be informed and the copies that have been produced thereafter must be checked. All copies that do not achieve the required standard must be sent to waste.
6. The team leader must investigate why sub-standard copies have been allowed to enter the mailroom.

Responsibility: Team Leader and designated members of the print team.

Quality copy:

1. A quality copy must achieve all of the saleable copy criteria.
2. Once continuous production has been achieved for 10 minutes the copy must also meet the density specifications listed in the Density Control procedure.
3. Again when continuous production has been achieved for 10 minutes, register must not deviate from the specifications listed in the Register Control Procedure.
4. All excessive folder marking i.e. trolley pressure, nip marking, forward-station set off, should be reduced to a minimum.
5. Reel stand side lays must be adjusted to ensure a neat and tidy copy is produced.
6. Ensure that all slit edges are neat and tidy with no frayed edges.

Density Control During Production:

1. Once saleable copy has been achieved, density should be constantly monitored and where appropriate, checked using a densitometer.
2. Increase or decrease ink feed depending on densitometer reading.
3. Select another check copy and read density dots, grey balance or solid area again.

4. Continue to make relevant adjustments.
5. All pages should be in spec in accordance with time criteria specified in the quality copy criteria.

Density Targets/Tolerances (Solid Tone):

K - 1.10

C - 0.80

M - 0.80

Y - 0.70

Solid Tone density should be within a tolerance of + or - 0.10

Density Targets/Tolerances (Grey Balance):

K - 0.38-0.42

C - 0.38-0.42

M - 0.38-0.42

Y - 0.38-0.42

Responsibility: Team Leader and all press operatives.

If you are unable to achieve any of the above criteria due to reasons out of your control or if it is not practicable to rectify the fault you must report the reasons via the Quality Report.

Register Control During Production:

Pre-Production

1. Ensure all plates are fitted to the press correctly and within tolerance. (take remedial action if appropriate)

During Production:

1. Each time a quality control copy is selected from the copy stream, register is checked throughout the product.
 - (i) Should you find that a particular page deviates from the quality copy criteria, firstly check register across the width of the web.
 - (ii) Should all the pages require the same movement then make the relevant adjustment from the desk.
 - (iii) Allow enough time for adjustment to respond and check relevant sheet again.
 - (iv) Should only one page position require adjustment, stop the press and re-make the plate. (subject to it being outside of tolerance)
 - (v) Repeat stage 1.
2. Extra care should be taken when a splice is imminent or has just pasted through a unit.

Folder Performance:

Pre-Production:

1. Ensure all pre start checks are carried out as per make ready check sheet.

Start-Up:

1. Ensure one member of the crew is situated at the folder. This person should monitor the folder output. (Ear protection must be worn at all times)
2. Ensure that copy stream is constant and correctly spaced before entering the pick-up station.
3. Make relevant adjustments to ensure a good pick up is achieved from the pick-up station.

During Production:

1. Once saleable copy is achieved, check copy for excessive trolley or nip marking (Adjust as necessary)
2. Check slit edges for neat cut. If you are unable to change the slitter during production, change at the earliest opportunity.
3. Check copy for excessive folder/pick-up station set off (Make relevant adjustments)

Responsibility: Team Leader

Sub-standard Copies Entering the Mailroom During Production:

1. Activate the press dump waste button and reduce speed or stop as appropriate.
2. Instruct the mailroom staff to recall and check the last bundles, including the copies in the Muller Martini grip line.
3. A member of the print team will inspect the bundles that have been recalled.
4. If within these bundles, it can be identified where the problem started, the sub-standard copies should be sent to waste and the good copies can be dispatched. The team leader must be informed of the number of waste copies so that the good copy counter can be adjusted.
5. If the quality of all the bundles is sub-standard, then the member of the print team must recall as many bundles as required to identify where the fault started. These copies must be sent to waste and the team leader informed so that the good copy counter can be adjusted.
6. The nature of the fault with the copies must be entered into the job sheet.

Responsibility: Team Leader and designated member of the print team.

Check Copy Library:

PURPOSE:

The purpose of a check copy library is to store timed selected copies of a production run.

These copies are used when any queries are made in relation to quality and integrity. **It is essential** that when discussing quality issues with the publisher, a complete set of library copies is readily available to respond to any queries.

The library copies are also used to carry out internal audits.

PROCEDURE:

1. Copies should be saved at intervals of 10,000 throughout the print run (dependent on run length).
2. These copies should be clearly marked with the point at which they were selected. i.e. 10k, 20k, 30k etc.
3. The mark should appear clearly at the top of page 1.
4. All titles should be stored on the designated shelving under its own name tag.

NOTE: Without fail, prior to leaving shift any products produced should be placed neatly on the relevant marked shelving

Responsibility: Team Leader or designated member of the print team.

Query Procedure:

When a quality query is received, the following procedure must be followed:

1. A member of the Production Management Team generates a Quality Complaint Report form.
2. This report, together with the problem copy is then passed to the appropriate manager.
3. Having determined which press and shift produced the copy, it is then passed, together with the form, to the relevant Team Leader.
4. He examines the copy and identifies where it fails to meet the criteria laid down in the Quality Management System.
5. He then investigates the query by checking the relevant press reports and Quality Report, which may identify a problem. This will also determine whether it is a persistent problem, which may require changes to our maintenance procedures, or an equipment failure, which requires attention of the Maintenance Department.
6. If these reports do not identify a problem, he must investigate how and why the sub-standard copy was produced.
7. When the investigation is complete, the Quality Complaint Report form must be completed and returned together with the copy, to the Production Management Team.
8. The Production Management Team must reply to the customer, as soon as possible.

Random Library Copy Check:

PURPOSE:

The purpose of randomly checking our own library is to ensure that we achieve consistent quality throughout the run. Obviously, when dealing with a quality query it is imperative that the library can be utilised to assist in addressing the query.

PROCEDURE:

Each week one copy from each crew is to be randomly selected from the library. This copy will then be analysed (Taking into account the time during the production it was produced i.e. 10k 50k etc).

- Density
- Folder Marking
- Set-Off
- Slitter Cut
- Reel stand Side lay
- Plate Scratches/Marking
- Creasing
- Circs & Lat Register
- Cut-Off



- Clean Solids
- Half tone Reproduction

ACTION: Should the copy be deemed to fail in reaching either our Good Copy or Saleable Copy criteria, a customer query report will be actioned. This will then require a response from the Team Leader or his representative.

Responsibility: All Team members involved in collating Library copies.

MAILROOM QUALITY CONTROL PROCEDURES

Pre-Production Setups and Checks:

1. Mailroom Equipment to be set up prior to production & adjusted in accordance with procedures. The primary aim is to produce regimented bundles presented in a uniform, stable form, free from overlaps, skew copies, tearing and any other damage detrimental to the appearance of the bundle.
2. Deviations from these agreed standards should be reported to the Press Team Leader immediately. After consultation a decision will be made to release the copies or pass the problem to the next level of management for a decision.
3. Ensure bundle sizes are to circulation specifications.
4. Strap tensions set to optimum levels to ensure bundle stability and damage-free copies.

Responsibility: Mailroom Operatives

Print Figure Accuracy:

1. The Press Team Leader will enter the print figure into the press. Mailroom Operatives should liaise with the Press Team Leader to ensure the correct information is entered.
2. Muller Martini stackers to be set up to correct turns/counts according to circulation specifications.
3. As soon as the mailroom equipment has cleared out, mailroom operatives should give confirmation to the Press Team Leader that enough copies have been printed.
4. Run waste accrued in the mailroom recorded and reported back to Press Team Leader.

Responsibility: Mailroom Operatives

Palletising/Loading:

1. Palletising bundles should be in layers of 10 or to customer's specifications.
2. All pallets should be shrink-wrapped and also contain the identity of the job, which should be clearly visible where appropriate.
3. Bundle weight must not exceed H&S legislation. (12.5kgs)
4. A qualified fork lift driver only will be allowed to transport pallets around the plant and onto awaiting trucks.
5. All damaged pallets must be stored away from the plant and made ready for waste collection.
6. Used pallets must be stacked together and not left around the plant walkways.

Responsibility: Mailroom Operatives

REPORTING & SOLVING PRODUCTION & QUALITY ISSUES

Procedure:

1. Investigate the issue using all resources that are on site, e.g. maintenance department, Team Leaders etc.
2. Any relevant information that demonstrates the fault must be saved; for example copies, plates and blankets. These samples must be accompanied by a copy of the product.

NOTE: - All faults must be followed through by the relevant department.

Responsibility: All Discovery Print Management

Plant Quality Assurance Procedure:

- Complete the quality report.
- Enter the department relevant to the fault.
- Enter the date that the fault was reported.
- Enter the location of the fault.
- Enter a brief description of the fault.
- Enter who reported the fault.
- Enter what action was taken to rectify the fault, and enter the date.
- Enter the current status of the fault.
- Enter whether any maintenance has taken place.
- Enter if any blankets were changed.
- Enter if any rollers were changed.
- Enter any further comments.

NOTE: *It is the responsibility of all Press Team Leaders to continually update the current status section of the report when required.*

Equipment Breakdown Procedure:

In the event of major equipment breakdown due to mechanical or electrical failure the following procedure must be adhered to at all times.

Production Management Team on site must evaluate the immediate implications of the loss of equipment. i.e. change tower, change press, change jobs etc. Contact relevant personnel.

Guy Forester (General Manager) 07554 667865

Please do not hesitate to contact the above names, remember two phone calls are better than none. A senior manager or director must be informed of the situation.



Appendix 1

Quality Complaint Report

Date of Query:

Query Raised By:

Team Leader:

Publication:

Issue Date:

Press:

Description:

Investigation Results:

Signed:

Date: