ISO 12647-3 CERTIFICATION

Certification

ISO 12647-3 STANDARDISATION

Proposal version 1.0

CHENNAI

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1. WAN-IFRA CERTIFICATION:

WAN-IFRA is well known for its activities to increase and standardise newspaper production. For many decades WAN-IFRA representatives are active in ISO standardisation committees (e.g. TC130) relevant for newspaper printing processes.

WAN-IFRA is carrying out ISO 12647-3 quality certification since 2005. The performed quality analysis is primarily based on worldwide accepted standards for newspaper production. Newspaper printing companies can use this certification to guarantee their customers that they print high quality consistently and in accordance with the relevant international standards in the newspaper industry. The Certification assures the readers and advertisers that the printed newspaper has been produced by the best possible technical processes.

The certification covers product and process quality benchmarking to standards **(ISO 12647-1, ISO 12647-3, ISO 3664, ISO 5-3, ISO 5-4, ISO 2846-2, ISO 12635)** relevant for high quality newspaper production. Only if in depth quality assurance mechanisms are installed and maintained consequently in all relevant process steps, high quality can be maintained over a longer period.

The objective of the certification is to optimise the reproduction processes at the prepress and press of a newspaper printing company. To obtain the certification, the printer must prove that they can print consistently high quality over a period of 6 months. In addition to the printing tests, an on-site audit is carried out by a WAN-IFRA consultant to check the quality assurance mechanism.

It is possible to obtain certification for all 3 technical categories.

Category 1: Cold-set offset on newsprint
Category 2: Heat-set-offset (or UV) on newsprint
Category 3: Heat-set-offset (or UV) on SC or LWC paper

On successful completion of audits and evaluations (6 test runs), if you secure a minimum required point from maximum points, you (company) will be certified for ISO 12647-3 with following conditions.

- This ISO 12647-3 certification is valid only for 2 years from the date of certification.
- Certification must be renewed and re-certified after 2 years by repeating the printing tests and QC audit successfully.
- Renewal of certification may not require all the procedure like first time certification. Eventually, Certification renewal project cost will be less than first time project cost.
- Pre-audit may not be required for re-certification unless specifically requested.
- Need to renew the certification within 6 months from the date of expiry of certification.

2. PROJECT METHODOLOGIES

The certification project focuses on a newspaper printing plant's ability to produce quality newspapers with a certain process (e.g. cold-set offset).

The project involves three stages for publishers, who are participating in the certification project for the first time.

A) Preliminary QC audit, recommendations and execution advice by WAN-IFRA consultant.

B) Six-month quality evaluation program

C) Final on-site audit by WAN-IFRA consultant

D) Certified if compliance to ISO 12647-3 is achieved in all aspects of the quality standards

For re-certification projects, the preliminary quality audit may not be necessary as you are already implemented the standards. Still if the company specifically request for pre-audit, it can be conducted. However, 6 months quality evaluation and post-audit is mandatory for re-certification.

Initially, WAN-IFRA consultant will visit the printing plant to evaluate the conformance of work flow, Pre-press, CTP and Press department to ISO 12647-3 recommendations. Non-conformities will be noted, and recommendations will be advised to correct them in a due course of three to six months. A Press will be finger printed to study the characteristic of the Press. Based on the deviation measurements, alteration in the Press parameter will be recommended to achieve the conformity of ISO 12647-3.

Second stage, a test element (WAN-IFRA cuboid) will be provided to the printing plant, which must be printed as part of the daily edition and the copies must be sent to WAN-IFRA once a month for a period of 6 months. WAN-IFRA will evaluate the copies and check that the printed output satisfies the requirement of the quality standards. A monthly evaluation report will be sent to the printing plant

Finally, WAN-IFRA consultant visits the printing plant again to evaluate the color reproduction workflow and to ensure that the recommendations are carried out. The consultant will also ascertain that the printing plant has a quality control mechanism in place, the staffs are aware of the quality control procedures, quality reports are maintained, and the production staffs are trained to use quality control equipment.

3. CERTIFICATION PROCEDURES

3.1 Project steps

The project will comprise the following steps

A. Preliminary quality audit

WAN-IFRA consultant will visit the production facility to do a preliminary audit of the entire color reproduction workflow and PRESS capabilities to conformances to ISO 12647-3 and suggest recommendations for those areas that are not in conformance or needs improvement and new implementations. The preliminary audit will be done at the start of the project for two days. Pre-audit is only to give you the idea for level of implementation of standards. This **pre-audit score will not impact or affect final certification eligible score.**

B. Evaluation phase

Altogether, six monthly (5 months evaluation and 01 post-audit at site) evaluations should be made to ascertain that the printing plant is able to print consistently as per the set standard. Some cases we do ask for fort-nightly evaluation.

Based on the pre-audit checks at your print site and PRESS , WAN-IFRA will ask to print the cuboid in live edition either monthly or fortnightly. Results of the printed cuboid will be evaluated for conformances of ISO 12647-3 and WAN-IFRA standards.
One test print of the WAN-IFRA Cuboid will be done during pre-audit and final on-site (post-audit) visit of the consultant.

If your company had participated or participating in **ICQC 2018-2020** and passed any or all the test run month, it will be considered as many successful evaluations for ISO 12647-3 as well.

A report on each test print will be sent back to the project manager at the client via e-mail within a short time after receiving and evaluating the test prints. The evaluation criteria and instructions for printing the Cuboid will be sent separately.

The **general print quality (GPQ)** is judged from the samples sent to WAN-IFRA. The WAN-IFRA consultant checks the first 16 pages of two samples regarding general print quality. The evaluation results of GPQ will be part of the final report.

The monthly copies must be sent to
WAN-IFRA Research and Material Testing Centre
C/O PII-RIND. 2nd Main Road, Taramani CPT Campus
Taramani, Chennai, Tamilnadu, India 600113
Tel: +91.44.4211 0640

C. Final on-site audit

The final on-site audit of the printing plant will be conducted at the end of the monthly evaluation period. During one-day visit, the consultant evaluates the production workflow and the production equipment (CTP, Presses and QC equipment) and check for all the recommendations are in implemented as per standards.

All the CTP and production lines, which fall into the selected certification process category, must be available for the audit test print. The auditor selects one tower for executing the test print randomly. The test prints will be evaluated, and a report will be generated.

Apart from evaluating the workflow and equipment, the consultant will also ascertain that a well-maintained quality control mechanism is in place. This will be done by a review of quality methods/reports/handbook, acceptance of the mechanism or listing of necessary improvements.

D. Final report

A final report summarizing all test print results and audit findings will be generated. If the overall result of the test prints and the quality assurance mechanisms audit is **positive**, then the Certificate for ISO 12647-3 conformance is granted for a period of two years. Executing the project does not automatically lead to a 2-year certification. However, WAN-IFRA consultant will guide and recommend during the phases of pre-audit and evaluation months.
A successful certified company will be awarded in the INCQC award ceremony , which will happen during "World Publishing Expo" and "World Publishing Conference" at Germany.

3.2 Key Quality Indicators

Quality evaluation of test print(s) includes analysis of key quality indicators such as:

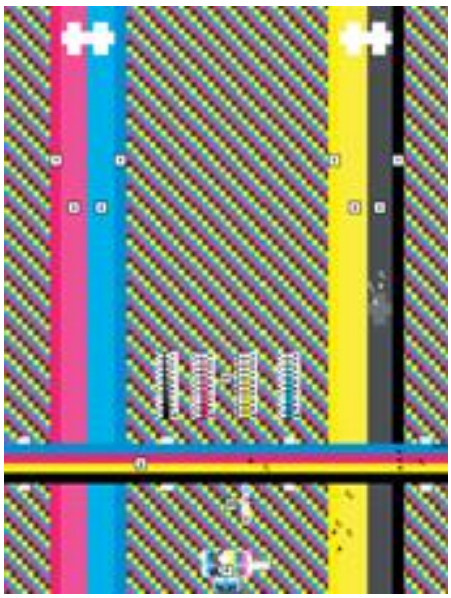
1. Accuracy of tone values on plate
2. Screening (frequency, angles, resolution, dots)
3. Tonal range
4. Paper colour
5. Maximum black colour
6. Diagonal colour register accuracy
7. Colour gamut (primary colours, secondary colours, tertiary colours)
8. Grey balance (high, medium, low)
9. Dot-gain at 40% and 70%
10. Mid-tone spread
11. Ghosting
12. Starvation
13. Print through
14. Constancy of paper and ink during production

A detailed list of standards and tolerances will be supplied as project preparation and the following issues and conditions are reviewed on-site for ISO 12647-3 conformance:

1. Data preparation (ICC profile, TAC, Maximum black)
2. RIP-settings
3. Image setter or Plate making accuracy
4. Measuring tools and Conditions
5. Maintenance methods
6. Process and quality control implementation –
    a) Documentations & Checklists:
    Density standards, quality reports for CTP and Press, quality check on materials, staff training to use QC equipment, SOP, Standardised procedure, Device calibration, etc

    b) Press Capabilities:
    Primary and secondary color reproduction, Color space and color register capabilities, Color register deviations, Mid-tone spread, Grey balance, Starvation, Ghosting and doubling/Slurring, Highlight and shadow reproduction, Consistency of density and register across presses and printing units, etc.

3.3 Certification test elements and test forms



The Cuboid test element will be used during the six test prints that are sent to WAN-IFRA for evaluation. This digital element will be made available as a PDF-file in CMYK colour space. Further instructions regarding reproduction and placement of the test elements will be made available to the certification candidate representative.

The test forms will be provided during the site visit for testing the capabilities of PRESS