

PRINT
RESEARCH
DEVELOPMENT



Standardisation in the Printing Process

As an independent institute, we can certify
your production according to DIN ISO 12647-2



Ensuring print quality through
an efficiently controlled workflow



Optimised processes mean standardised
workflows throughout the organisation



Stability due to verification
of technical press conditions





Your Verification of Quality Throughout the Printing Process

Consulting and Certification

In addition to process control itself, we offer you comprehensive support for implementing new workflows following the ISO 12647 series of standards and, of course, seminars on the fundamentals of Process Standard Offset (PSO) and printing of digital data.

The resulting outcome of process optimisation is conformity testing per DIN ISO 12647-2 (PSO paper), 12647-9 (PSO metal decoration printing) or 12647-8 (printing of digital data). As an independent institute, we can verify your working methods in accordance with these standards with a certificate of conformity. For this purpose, we use the measuring equipment of our test laboratory.



SID is a non-profit industry-oriented research institution, development partner and service provider for the graphic arts and processing industry and its associated machine manufacturing industry.

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Process Optimisation

Together with you, we examine your workflow from data preparation to the colour-accurate contract proof to the finished printed product and standardise the necessary parameters. This service takes place directly at your printing facility.

In order to keep four-colour printing with process colours stable, the solid tone densities on the printing press must be regulated so that the specified colour coordinates are achieved on the substrate. For screened images and graphics, defined dot gain values must be adhered to. If the tone value increases are within the tolerances, the desired target colour tones are achieved.

Each printing press is unique due to its characteristic dot gain behaviour. This machine-specific behaviour can be compensated for by creating characteristic dot gain curves during plate exposure. Ideally, after optimising the process in this way, jobs can be produced on different presses without any noticeable difference in the result.

Process Standard Offset

The certification according to ISO 12647-2 includes:

- The handling of supplied files
- The processing and output of files for contract proofs and print runs
- Colour accuracy
- Homogeneity and stability of colour reproduction in the printing process

Prerequisites are input and output devices profiled according to the current technological standard and stable printing conditions. After the approval of a file check and subsequent colour contract proof by SID, a print run of at least 1,000 sheets is printed, from which the print dot gain curves and the CIE Lab values of the primary and secondary solid tones are examined. If everything meets the requirements of Process Standard Offset, a test report is presented together with a certificate of conformity which is valid for 2 years

Printing of Digital Data

The examination according to ISO 12647-8 includes

- The handling of supplied files
- The processing and output in digital printing
- Colour reproduction in the digital printing process
- Homogeneity and stability of colour reproduction

The printing company receives test files with built-in errors, which are then checked for correctness by SID. The individual test forms are then printed in a run of 300 sheets. The examination covers the quality of data processing, colour accuracy of printing, uniformity and image resolution. If the examination is successful, the company receives a certificate of conformity, a test report and a seal of conformity which is valid for 2 years.