

Fundamentals of sheetfed offset printing

How does a sheetfed offset printing press function, and how do certain parameters influence the print process? Which additional automation modules are available, and how do they support both effective use of the press and the efficiency of the entire workflow, as determining factors for high quality and performance? These and many other questions are answered in detail in this seminar.

Description

The basic principles of offset printing have not changed over many decades, but technical developments in printing machinery and other associated areas continue at an unrelenting pace. In this situation, the constant adaptation and optimisation of production processes is imperative. On the other hand, it can be very difficult to identify the most affected processes if you are not involved directly on a daily basis.

This workshop provides more precise insights into the fundamental design and particular functions of a printing press. The complete print process is explained step by step, in order to illustrate the ways in which individual automation options are able to optimise the print process. The focus is placed not on handling of the discussed components, but rather on how certain features can contribute to a smarter process and help to maximise the quality of your results.

Objectives

Upon successful completion, the seminar participants are familiar with the complete workflow of the print process as it relates to their production machinery. Important factors which influence and could potentially impair either printing or other aspects of the overall production workflow are known and can be analysed and evaluated.

Prerequisites

This seminar is aimed at administrative and technical managers from backgrounds outside the printing industry and offers a comprehensive introduction to the fundamental processes and workflows in a printing company.

Some of the topics covered

Factors influencing print quality in sheetfed offset

- Components of a sheetfed offset printing press, design and function principles
- Image transfer: Inking unit, cylinders, printing formes, properties of printing blankets, typical print quality flaws
- Washing system: Roller, blanket and impression cylinder washing, manual washing processes
- Sheet transport: Feeder, infeed (side lays, front lays, SIS, sensors, air settings), printing unit (sheet transport, Venturi principle, guide elements, grippers)
- Sheet travel at different speeds from slow motion to maximum speed as a practical exercise
- Print quality flaws and error analysis during the print process
- Examples of applications for measuring systems, online and inline options

Training methods

- Face-to-face training with comprehensive training documents which can also be made available in digital form at the end of the training upon request.
- Practical explanation and demonstration on Rapida presses.
- Direct presentation without translation in German, English and Spanish. Further languages subject to prior agreement.

Important notes

- 3-day seminar
- Minimum participants: 3
- Daily seminar times are from 8:30 a.m. to 4:00 p.m. (possibly earlier on the day of departure).
- The seminar costs include refreshments during the seminar, lunch in our staff canteen and transfers to/from Dresden Airport or Dresden railway station.
- Upon request and depending on the selected hotel, a free shuttle can also be organised for the daily transfer to/from the campus.
- The order in which topics are discussed may vary.
- We ask all seminar participants to bring safety shoes when attending training.

Contact for appointments

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