Clever printing on corrugated board

A systematic approach to an individual solution

siemens.com/printing
Achieving high productivity and excellent print quality places high demands on the automation and drive system. The systems from Siemens meet all the requirements of an innovative corrugated board-printing machine.

Siemens offers SINAMICS, a highly dynamic servo drive system, for high-precision printing. The freely programmable SIMOTION Motion Control System opens up new possibilities for motion control, and can be perfectly adapted to the individual requirements of the various printing machines. This enables the full potential of the printing machine to be realized, which increases productivity. Modular mechanical engineering facilitates short innovation cycles and quick production times. The SIMATIC automation system provides all the functions required for modular machine design.

The TIA Portal offers all the functions required for efficient engineering, such as know-how protection, software versioning, team engineering, program simulation, and variable trace. Detailed diagnostics and monitoring functions for all components minimize downtimes.

Automation software is gaining increasing importance as printing machines become ever more automated. Siemens offers a software library that already contains the typical functions of a corrugated board-printing machine, such as printing length correction. A conversion to shaftless individual drives does not incur any great engineering costs.

The “Corrugated” application was developed on the basis of the SIMOTION Print Standard software application. It offers tested, fully programmed function blocks for unrestricted use, specifically designed for corrugated board printing machines. Together with the SIMOTION Print Standard, it covers the most important aspects of motion control, and it can also be individually extended.

The combination of hardware and software forms an ideal solution package for your corrugated board printing machine.

Your advantages at a glance:
• Automation and drives from one source
• Efficient engineering for programming, testing and commissioning
• Extensive software function library
Automation structure of a corrugated board-printing machine
SIMATIC Controller – the optimal control system
A comprehensive range of SIMATIC controllers is available to provide the perfect control solution for every application.
The outstanding features of the controllers are their user-friendliness, scalability and functional uniformity.
There is the S7-1200 Basic Controller for straightforward and stand-alone applications, the S7-1500 Advanced Controller for medium-sized and complex applications, the Distributed Controller ET 200SP for distributed applications, and the S7-1500 Software Controller for PC-based applications.
Fail-safe versions of all basic, advanced and distributed controllers are also available for implementing fail-safe applications.

SIMOTION – the scalable Motion Control System
Powerful, reliable, efficient machine control:
The powerful, modular and scalable SIMOTION Motion Control System ensures reliable motion control for both centralized and distributed machine designs.
In every case, you are choosing maximum flexibility, convenient engineering and quick commissioning.
SIMOTION is ideal for all machines performing motion control tasks.
The modular structure of the motion control system reflects the trend toward modular machine concepts: A large number of scalable machine versions can be created from just a small number of modules.
SIMOTION software provides all the functions, and PROFINET provides the right interfaces for inter-module communication.

SINAMICS S120 – the dynamic drive system
A perfect team:
The modular SINAMICS S120 drive is the ideal modular system for high-performance motion control applications in industrial environments. Tailor-made solutions can be achieved with the large number of coordinated components and functions – such as high-performance individual drives and coordinated drives (multiple-axis applications) with vector or servo functionality, to which the SIMOTICS product range is perfectly matched.