

# SIMOTION SimoRoll

## Solution for electronic roll feed

Automating your roll feed systems is now even easier and more cost-effective: With our SIMOTION SimoRoll solution you can rely on functional modules and experienced expertise – perfectly documented and pre-tested.

### Benefits:

- **Maximum flexibility:**  
Due to scalable products, systems and solutions.
- **Increased productivity:**  
With intelligent feed automation that replaces high-overhead and expensive mechanical designs.
- **Flexible and modular machine concept:**  
With one runtime software and freely selectable hardware platform.
- **High-speed motion control with high dynamic response:**  
Production downtimes are minimized.
- **High availability:**  
Complex components are replaced by intelligent feed units.
- **Open application-based solutions:**  
Can be individually adapted by the OEM.

Product Brief • 2006/2007

# metal forming SOLUTIONS



Would you like to cost-effectively produce large quantities at maximum cycle rates as well as a wide range of small batches of components? Then we have the perfect solution for you:

With the SIMOTION SimoRoll application, your roll feed flexibly adapts to changing production data and simultaneously minimizes unnecessary production downtimes.

The highlight: The SIMOTION SimoRoll application can either be individually integrated in the control system of the press or in combination with SIMOTION SimoPress and SIMOTION SimoTrans.

With SIMOTION SimoRoll you benefit from considerably reduced engineering overhead – from the design phase all the way to commissioning.

# SIEMENS

# SIMOTION SimoRoll

## Easy, fast and cost-effective

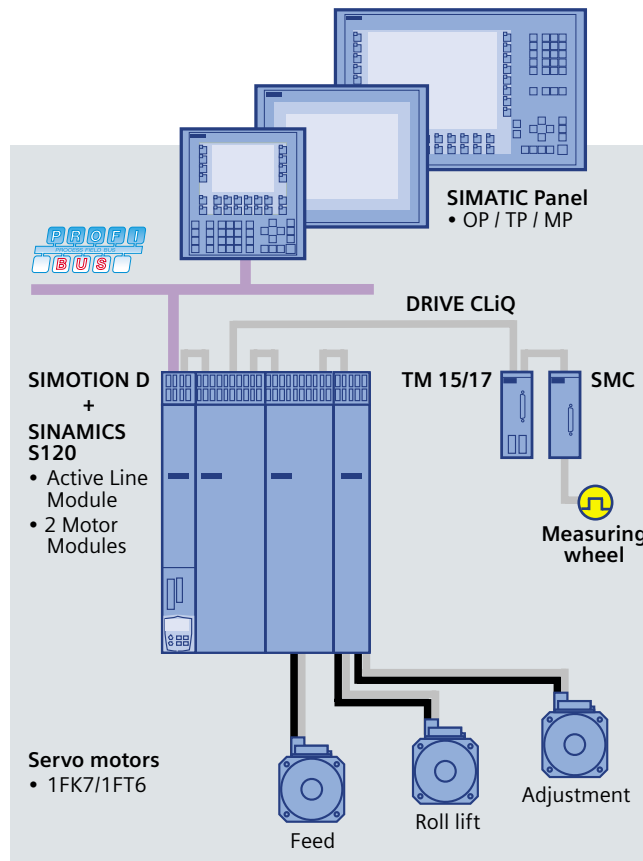
### Areas of application

Together with the platform-independent SIMOTION motion control system and the modular SINAMICS S120 drives family for complex drive tasks, the **SIMOTION SimoRoll** application offers solutions for:

- Single-axis roll feed,
- Zigzag roll feed, with feed in direction of the path and a cross traverse coordinated with the feed movement,
- Double roll feed, consisting of one drive each in front of and behind the press that are operated in angular synchronism to permit optimum adaptation to the respective application.

The **SIMOTION SimoRoll** application stands out due to its material-friendly motion control, by the use of particularly favorable jerk and shock characteristics. This can only be achieved when motion sequences with high dynamic response are applied to avoid unnecessary production down-times.

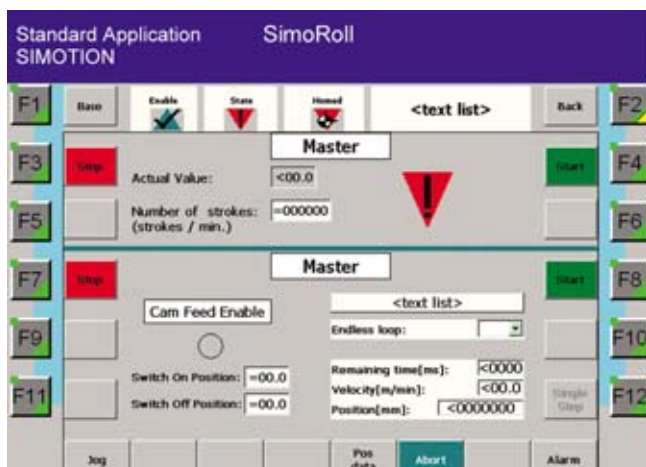
Since the roll feed is frequently designed as a stand-alone, electrically driven machine unit, the flexible feed automation replaces expensive mechanical designs. This increases the flexibility of production and in most cases the productivity of your plant, too.



Example of automated electronic roll feed

### SIMOTION SimoRoll highlights

- Relative positioning (incremental dimension) to permit cycle-exact feeding of the material.
- Input of the feed movement (motion profile generation) using program blocks.
- Special positioning algorithms to prevent slips during simultaneous positioning time optimization and measurement of the capacity utilization.
- Roll lift, automatic belt infeed and end-of-line monitoring.
- Mode selection.
- Roll diameter compensation.
- Specification of maximum speed and of a speed override.
- Transparency thanks to comprehensive diagnostic tools and prompting through wizard.
- Additional setpoints, depending on the stroke rate and feed length, can be generated.
- Coupled master axes.
- Roll follow-up mode.
- Fully documented, pre-tested sample project.



Example of HMI Screen

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