

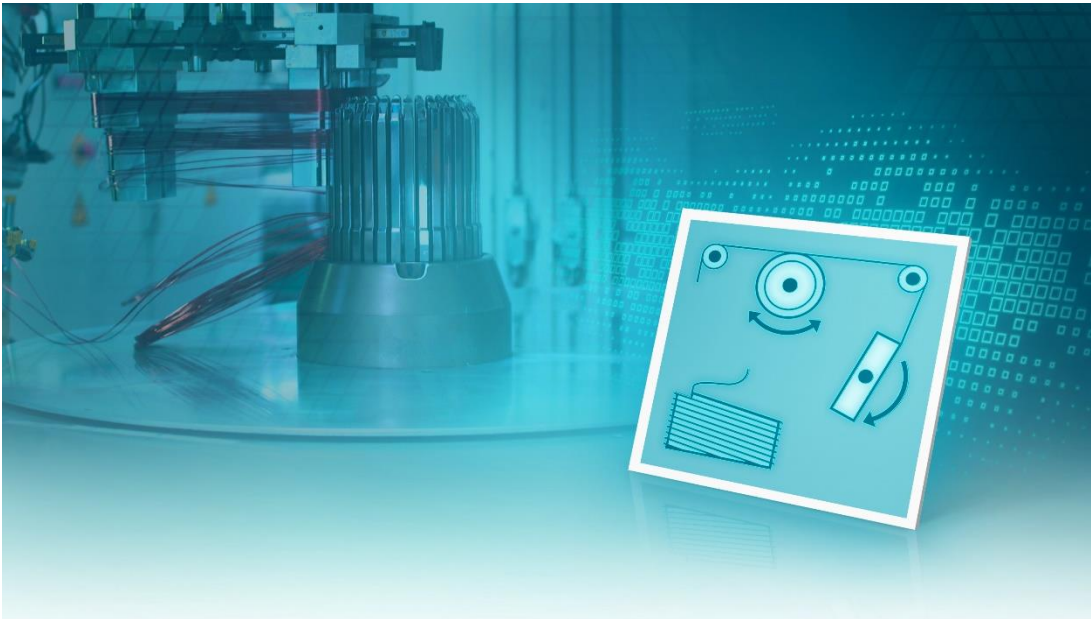
## Faster E-motor Production with Wire Brake

### Application

- **New standard library for shorter winding times at a higher quality**
- **Can be used for linear winding procedures of rectangular coils**
- **Engineering and commissioning times of winding machines are reduced**

For the faster production of e-motors, Siemens has developed a new application which optimally controls wire tension for linear winding and minimizes fluctuations in force. The Wire Brake software application for automated winding of rectangular coil former controls the tension of the copper wire. In comparison to passive systems, this enables higher winding speeds and a higher winding quality to be achieved. The functionality can be integrated directly into the machine project using the standard library "Simotion Wire Brake" which shortens engineering and commissioning costs. It contains algorithms which include the rectangular geometry of the coil former as well as the "TensionControl" components to control the wire tension brake axis and "CamGeneration" to calculate cams using reference values.

Continued growth in electrification, digitalization and electromobility is leading to increased demands on machines for the automated production of electrostators for electric motors. In addition to maximum productivity, shorter setup times for changing products, and high winding quality, this trend is also focused on plant availability and use in the powertrain. Siemens offers a comprehensive portfolio for the integrated automation of the entire manufacturing process for electric motor manufacturing and the recording of the required process parameters. The Simatic S7-1500 controller and the Simotion motion control system are ideal from simple applications to tasks in the high-end range, the Sinamics S120 booksize drives are for winding applications.



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This press release and a press photo are available at: <https://sie.ag/360kT7Q>

More information on the topic of wire winding [www.siemens.com/wire](http://www.siemens.com/wire)

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