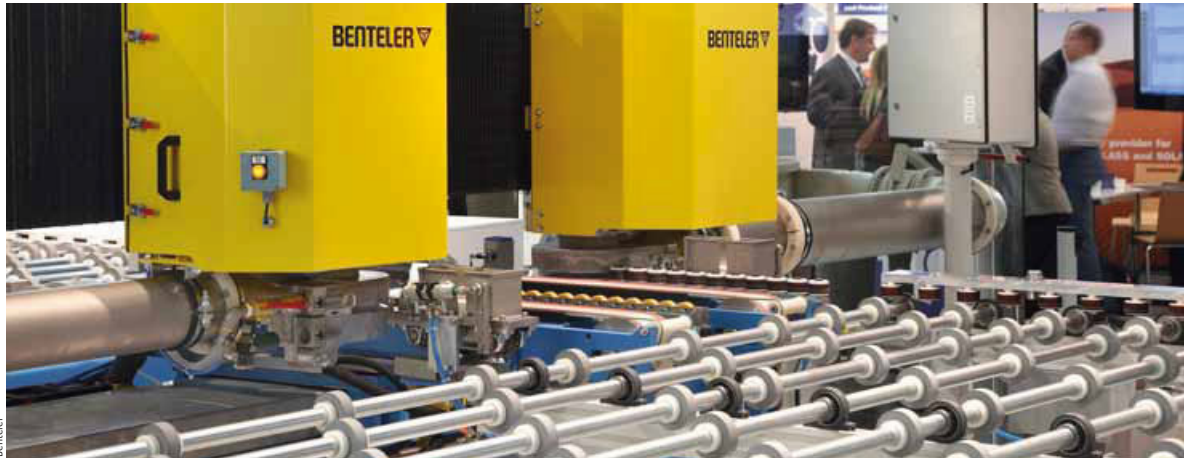


■ Benteler Maschinenbau GmbH, Germany

# Precisely ground Panels

For processing glass for the solar panel industry, the glass technology division of Benteler Maschinenbau uses Sinamics S110 drives, which have proven themselves for the simple and reliable positioning of individual axes.



Precise processing of solar glass with Benteler GEN2 and Sinamics S110

**B**enteler Maschinenbau GmbH, which has its headquarters in Bielefeld, Germany, and is a subsidiary of the international Benteler Group, has made a name for itself as a successful supplier in the automotive and glass industries. The company's product spectrum includes machines for the production of series and individual parts for the construction, furniture, automotive, and solar glass industries.

## Precise positioning of the grinding discs

For the manufacture of glass for the solar panel industry, Benteler developed the GEN2 glass-edge processing machine, which is equipped entirely with drive technology from Siemens. The glass is transported using suction belts equipped with Sinamics G120 frequency converters. Their synchronous motor control ensures that the glass is not damaged. The grinding discs, which are also driven by Sinamics G120, are automatically measured, sharpened, and compensated for in case of wear. Sinamics S110 converters are the heart of the plant; they are responsible for the width adjustment of the y- and z-axes. Together with the Simotics S-1FK7 servomotors, they ensure precise positioning of the grinding discs. Thanks to the flexible positioning-set programming in the Sinamics S110, the grinding units do not need to be reset for every process, as was previously the case with the mechanical solution. Precise corner machining is now guaranteed.

## Simple and efficient

Benteler particularly appreciates the new drive concept because the employees were able to quickly become familiar with the system due to the simple programming and commissioning. But it also allowed production to become more efficient, since the stored recipes enable a product change at the push of a button, and standardized automation greatly simplifies integration into the overall production process. "The modular automation enables variable processing of different glass types and easy transfer of the concepts to other machine technologies," confirms Andreas Lüttke, group manager of software development and electrical engineering for glass technology at Benteler. Benteler has a thoroughly positive impression of the new drive concept of the glass-edge processing machine: faster product changes, reduced maintenance expenses, and greater precision in corner machining. The company, which operates internationally, also appreciates the worldwide support from Siemens and the remote service option. ■

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[www.siemens.com/glass-solar-industry](http://www.siemens.com/glass-solar-industry)

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