



TwinCAT "Flying Saw" for transport and handling systems

<http://www.kontra-handling.de>

The company Kontra Anlagentechnik GmbH in Germany specialises in transport and handling systems, in particular sawing systems for slab-shaped materials.

The advanced diagonal saws for flying processing of chipboard, MDF board and OSB board place high demands on the control technology. Kontra therefore decided to use a PC based solution with TwinCAT.

Installed on an Industrial PC, the system controls the complete machine that divides the continuous material arriving from the continuous presses or coating plants. Processing with feed rates of up to 72 m/min, depending on material type and thickness, is currently possible.

The PLC integrated in TwinCAT and the NC controller with the integrated "flying saw" functionality control the single or dual diagonal saw, the board transport via the so-called "pinch roller (from the top)" and the trimming process including compensation of lateral material movements (seesaw motion). Upstream conveying units, including the blister saw, can now also be integrated into the saw control system.

Data from the digital and analog inputs/outputs are collected via distributed Bus Terminals on the machine and transferred to the PC controller via the Lightbus. The frequency converter and the servo drive system are seamlessly integrated into the overall system and are also controlled via the modular Bus Terminal system.