

Customer: **Corrugated Board Printer**

Application: **Corrugated Board Printing**

Products Used: **PositionServo and SMD**



PositionServo Simplifies Corrugated Board Printing

Lenze-AC Tech PositionServo drives, Lenze servo motors and smd Series AC inverter drives have all been utilized in the latest generation, specialty printing machine for corrugated board.

Cardboard material is auto-fed into the printing machine at high speed and passed through five sets of rollers positioned above and below the board. The rollers at the top deposit the printing ink, one color at a time. The lower set of rollers control the pressure exerted on the material as it is passed through the printing process.

The thickness of the material ranges from 1 to 3mm for solid board and 1.3 to 8mm for corrugated board, for both types of card the position of the roller is critical to the print finish and smooth throughput. Four **PositionServo** drives and **Lenze servo motors** are used. The first two drop the roller's position and allow a new sheet to be fed in; the second pair is used for fine control while the machine is actually printing.

The **PositionServo's** 64-bit processing and 2 microsecond reaction time allow tiny, fast incremental position changes during printing. This creates a displacement effect, compressing the card as it passes through, creating smooth surface finishes, ironing out any material inconsistencies in the raw board, and ensuring a consistent print finish.

The entire process is PLC controlled and high-resolution linear encoders supply positional feedback; hence the servos have a simple, but high accuracy task to perform. **Lenze-AC Tech smd 15kW AC inverter drives** are also used to control the drying fans that make sure the ink is fixed after the application of each print color.

Product Benefits:

- Tight positioning control
- Linear encoder compatibility
- Simple set-up and programming
- Global sales and technical support
- Lenze-AC Tech, one source for servo drives, servo motors and VFDs

PositionServo

