



Manufacturing

Food and Beverage

Bottling Hall Upgrade
SA Brewing

Client SA Brewing

Location Thebarton, South Australia

Value \$600,000

Duration January – March 2004

Project Overview

For over a century, the SA Brewing Company has embedded itself into the cultural and economic heritage of South Australia. Famous throughout Australia, its best known products include brands such as West End and Southwark.

Until 2004, the bottling hall operation comprised two separate lines for packaging different products. This meant there was no midway cross-over between the lines. Products on one line requiring a packaging stage on the alternative line would need to complete both lines at least once.

SAGE Automation was contracted to design, install and commission a turnkey automation and control system to reduce the impact of product changeovers and improve overall production efficiency in the bottling hall. This included relocation and integration of existing equipment (each performing a stage of the process) and control of 90 new variable speed conveyors that transport bottles between processes and packaging stages at speeds of up to 1200 bottles per minute.



Project Highlights

The increased capabilities of SA Brewing is due to a number of factors. These factors include flexibility of product paths through the bottling hall (over 50 product routes and settings), the utilisation of proximity sensors to detect mass accumulation along the conveyor and automatic adjustment of conveyor speeds to optimise buffering. Immediate rectification of faults is also possible due to the advanced diagnostics and alarming inherent in the system design.

Efficiencies realised as a result of the project

- 60% - 100% improvement in line efficiency
- Same production volume in 2 shifts instead of 3
- Line speeds now 'tunable' to achieve near theoretical V-curves
- Rapid product changeovers with product based line speed settings
- Bottle accumulation is now controllable, reducing waste
- ROI of approximately 2 years

"A fantastic achievement by SAGE within a two week shut down period"

Richard Boiwko, Electrical Engineer, SA Brewing Co.

Capabilities Demonstrated

- SCADA development and programming - CITECT
- PLC programming - Control Logix, variable speed drive control
- Electrical design and installation
- Electrical cabinets built for conveyor control and power distribution
- Best practice engineering knowledge and operation
- Efficient project management against tight timelines
- Solid partnership with customer to ensure optimum outcome
- Tangible customer value gained as a result of the project

