



HIRSCHMANN

A **BELDEN** BRAND

Ethernet in the Brewery Industry.

Food / Beverage

Israel Beer Breweries Ltd
(Carlsberg Israel):
one of the largest beer producer
in Israel.



At the beginning of 1992 Carlsberg entered the Israeli market. Carlsberg Israel is now one of the largest beer producer in the country, and currently produces Carlsberg, Tuborg, and Malty. It also imports Guinness, Weihenstephan, Baltika and Kilkenney. Using the best European know-how and expertise, a team of

Israeli engineers and experts from Carlsberg International designed and built a modern brewery with state-of-the-art technology and equipment. The installation includes computerized automatic production lines and control systems.





EAGLE FW TX/TX



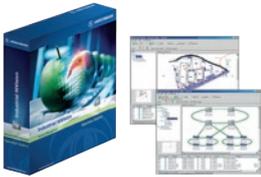
MS-2108-2



MS 3124-4



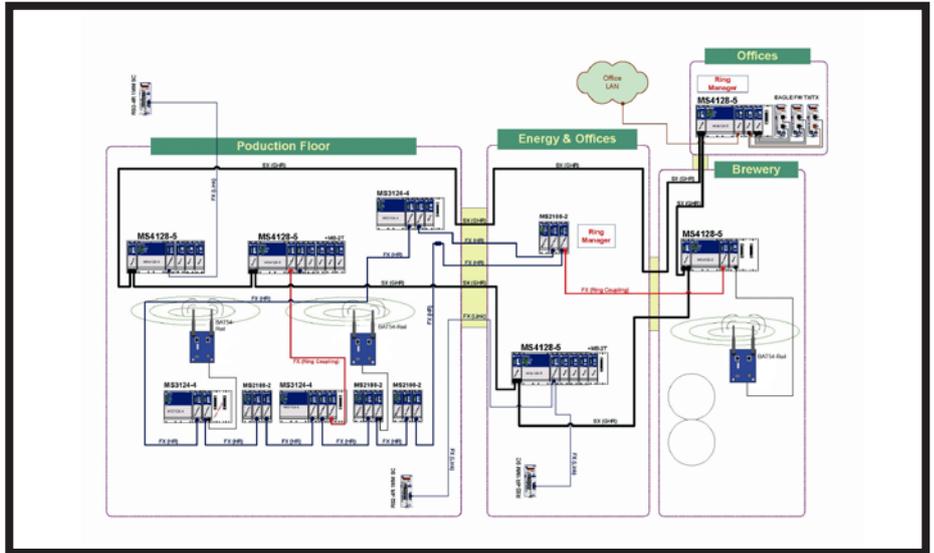
BAT54-Rail



HiVision



Brew kettles at Carlsberg Israel



Project details

As the breweries expanded rapidly during the last 10 years, the installed fieldbus systems and H1 communication technology needed to be replaced with a faster, up-to-date, and flexible communication technology. The solution was Ethernet.

Hirschmann™'s Ethernet products, in particular the Modular Industrial Communications Equipment (MICE) Switches, exactly matched the project requirements.

Project parameters

- 3x independent LANs
 - Programming and Maintenance
 - HMI, database servers
 - RTU, PLC
- Security control between LANs.
- High availability

Requirements

- Reliability, availability, and redundancy.
- Flexibility, expandability, and simplicity.
- Security (3 VLANs)
- Management, service, and support.
- Gigabit Ethernet
- Fast Ethernet
- Multimode fiber links

Solution

Network topology and product portfolio: All network devices are managed and supervised. Ring topology based on fiber and copper, Gigabit and Fast Ethernet. Star topology in areas that do not require high availability.

3 independent and discrete VLANs:

- programming and maintenance
- System A (PLC & HMI)
- System B (PLC & HMI)

Quantities:

- 5x MS4128-5 + media modules
- 3x MS3124-4 + media modules
- 4x MS2108-2 + media modules
- 3x RS2-4R 1MM SC
- 3x EAGLE FW TX/TX
- 3x BAT54-Rail
- 1x HiVision + 1x Industrial HiVision

Scope of Service:

- Assessment of the current situation
- Design-definition of requirements, future-proofing
- Implementation without downtime.
- Instant notification in the event of a fault
- 24/7 maintenance and support

Why Hirschmann™?

- Redundancy concept using HIPER-Ring Simple network expansion. Flexible ring topology, Implemented via fiber or copper, Gigabit and Fast Ethernet.
- Modularity = Flexibility:
 - MICE components are hot-swappable
 - Simple Maintenance requires fewer parts for spare stocks
 - Future-proof (changes on the production floor without network downtime)
- Industrial standard products
- User-friendly and effective management