

Silo AG Wil, Grain Storage Terminal Wil, Switzerland

Successful future with the **WinCoS.r2** plant control system.



Silo AG Wil with a new technical inner life.

The grain storage terminal in Wil, the largest autonomous facility of its kind in eastern Switzerland, can look back on a history of more than 50 years. The two conspicuous silo structures date back to the years 1957 and 1977. The mechanical and electrical systems were supplied by Buhler.

The silo plant comprises over 220 storage bins holding a wide variety of grain products, with complex intake, cleaning and turn-over possibilities. The grain terminal in Wil also stores over 20,000 metric tons of grain as government-mandated stocks.

Major investments in the upgrade of the technical systems were last made 20 years ago.

Facts and figures

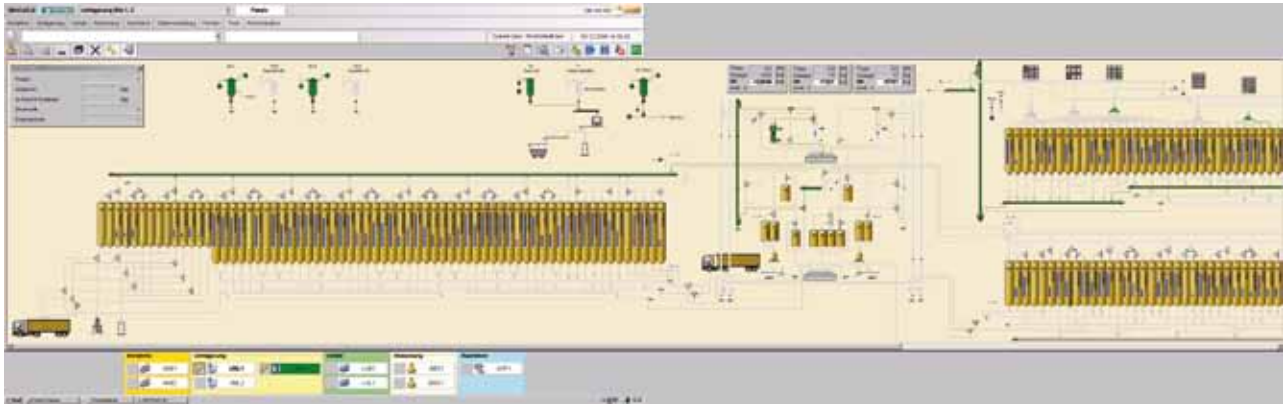
Hardware:

PLC: Simatic S7/414-3
9 I/O racks / 12 WAGO nodes / 1900 I/Os
70 motors

Software WinCoS.r2:

Customer and inventory management
Product and bin management
Bin contents with layer management
Automatic job processing
Various reporting options

WinCoS.r2 – New automation technology enhances the value of the grain terminal.



Trend-setting functionalities made for a grain terminal needs.



Auto-Routing supports the user.

The software supports the plant personnel in all possible ways, allowing optimal utilization of the technical equipment and thus ensuring high product safety and operating reliability. Different WinCoS.r2 function modules form the backbone of the automation system. The zoom- in graphic process visualization system informs the users when and where necessary about all process details.

Trend-setting functionalities for a grain terminal Grain-O-Mat

Grain deliveries are possible beyond regular office hours without compromising convenience, data security or product safety. The “Grain-O Mat” works like an automated banking teller, with grain being withdrawn here instead of money. The truck driver signs in at the device with his registration license, can then retrieve the pre-ordered, specified delivery and thereby automatically obtains the required grain quantity. Self-withdrawn deliveries are recorded by the system.

Auto-Routing

Complex intake, cleaning, storage and turn-over possibilities which can be carried out simultaneously require optimal routing of the jobs. **WinCoS.Routing** offers this possibility.

Upon request, the system will suggest routes to the user, giving consideration to parameters such as short distances, elements already occupied, or cleaning and weighing processes. Proposed route patterns can be reused either unchanged or changed.

Optimized silo inventory management

The **WinCoS.r2** “Contract-, Lot- and Layer Management” modules enable optimal and user-controlled linking of the basic contract data with the daily product movements in the plant. This also prevents undesirable product cross-contamination. Quantities, deliveries and inventory data can be retrieved by just pressing the button per customer or contract at any time.