

Biscuit Processing

Silo Safety System KCS

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Function ▼

The system, supplied in component form, prevents overfilling or excess pressurisation, thus avoiding damage to the silo, to the venting filter or any other accessory, at the same time reducing the risk of dust emission.



Description ▼

KCS is a system supplied in component form. These components are fixed on the silo for monitoring pressure and level of material inside the silo.

The components are:

ILTAO - Rotary paddle level indicator (min./max. level)

IPE - Electronic pressure meter
(measures real-time pressure inside the silo)

IPM - Mechanical pressure switch
(indicates excess pressure inside the silo)

IPX - Stub pipe connected to silo
(to be welded on the silo for fixing IPE or IPM)

KAT-080 A - Kit for pipe connection to tanker
(for 80mm diam. filling pipe)

KAT 100 A - Kit for pipe connection to tanker
(for 100mm diam. filling pipe)

KAT 100 B - Kit for pipe connection to tanker (for Italian market)

LS 1 - Audible alarm

PF12 - Filter pressure switch (measures presence of air in the air tank)

SC 1 - Control panel (monitoring of up to 16 silos)

SP 1 - Power panel (one for each silo)

ST 1 - Integrated control/power panel

VM..A. - Pinch valve (interrupts silo filling in case of emergency)

VMX01 N - Pinch valve control unit with box (actuates pinch valve)

XKF... - Connector flange (counter flange for pinch valve)

Additional recommended equipment:

Pressure Relief Valve VCP / VHS

WAMFLO® Venting Filter

Application ▼

The KCS can be used for different materials stored in silos or bins, where the process status has to be monitored and controlled. It suits all applications in which silos or bins are filled using horizontal or vertical type tankers.

Benefits ▼

- ✓ Avoids damage to silo and accessories;
- ✓ Reduces risk of air pollution;
- ✓ Eliminates risk of filling the incorrect silo;
- ✓ Starts and stops filter cleaning automatically;
- ✓ Receives indication from electronic pressure meter whether venting filter needs attention;

- ✓ Benefits from control panel monitoring of:
- ✓ Internal pressure of any silo;
- ✓ Maximum level indicator free;
- ✓ Presence of compressed air to venting filter (if air jet filter is used);
- ✓ Presence of compressed air to pinch valve.

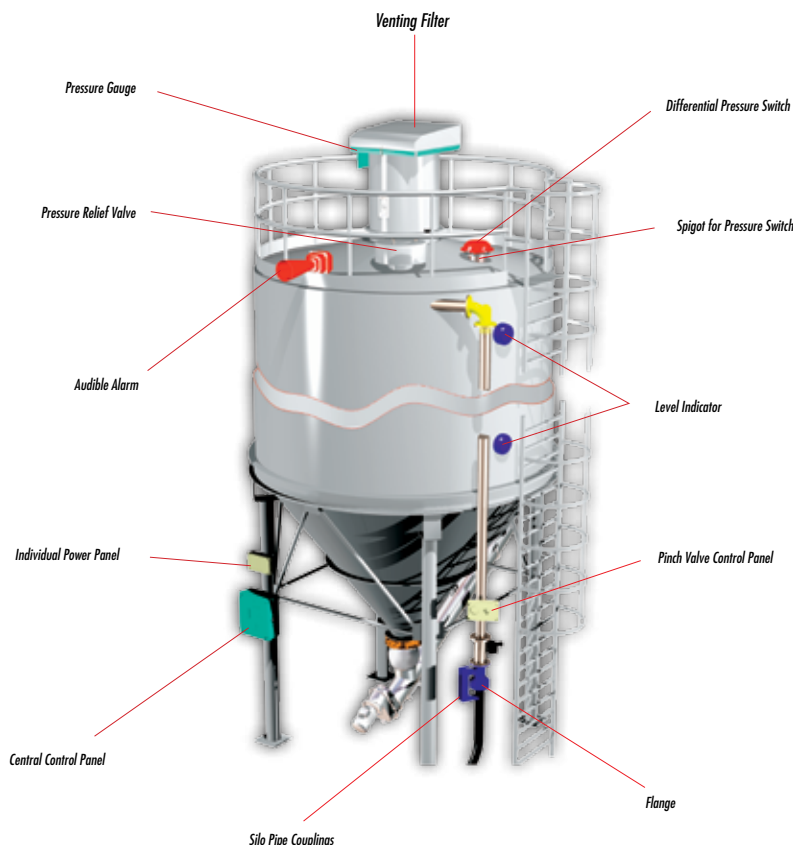
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Technical Features / Performance

- ▶ Graphic display interface
- ▶ Display and software logic presents information in written form
- ▶ Menu in different languages (English, French, German, Dutch, Spanish, Italian)
- ▶ Messages provided by the system are included in the selected language
- ▶ The language can be changed at any time
- ▶ Parallel handling of silos
- ▶ KCS System simultaneously monitors up to 16 silos separately. In the event of an alarm in one of the 16 silos the KCS System automatically displays the silo concerned, simultaneously displaying a message concerning the type of fault
- ▶ ST1 integrated panel combines logical and functional features of the SC1 and SP1 panels making it possible to economise when a plant with just one silo has to be monitored
- ▶ As regards the internal logic of the SC1 and ST1 panels, software can be easily and rapidly updated using a portable PC
- ▶ Software can also be transmitted by e-mail ensuring quick, specific operation
- ▶ Self-diagnostics function of SC1 and ST1 panels enables testing of all outputs of the panel concerned, so that, in the event of a fault, it is possible to locate it
- ▶ Safe against undesirable intrusion
- ▶ System protected by means of a 4-digit electronic code entered through keyboard
- ▶ KCS System installed in a plant to which additional silos are connected can be easily extended at any time
- ▶ Versatility: each silo is controlled separately and can have a configuration suitable for the specific use. Functioning of related equipment of each silo is not affected by the settings made for the another silo
- ▶ Adaptable to existing plant
- ▶ The KCS System is designed to be easily integrated with components of another make already installed on the plant
- ▶ Easy detection of faults: in the event of faults, the mimic panel enables identification of the component that caused the alarm status
- ▶ Prompt delivery
- ▶ When the controlling body obliges the user to upgrade the plant to the new emission standards, time is money
- ▶ Filter check
- ▶ If the silo is provided with a REVERSE AIR JET FILTER together with an ELECTRONIC PRESSURE METER, the control mimic panel also functions as the "check panel" for the filter
- ▶ Maintenance-free
- ▶ None of the components require any maintenance



This datasheet might not show the complete range but only the models specialised for the application.