

# Shield Lite Tank Silo Protection

The Hycontrol 6 sec ground level silo protection system from over-pressurization

Cement, animal feed, flour, sugar and other powder storage silos face the risk of over pressurizing during tanker delivery. An overpressure of 1-2 PSI can lead up to huge losses: environmental pollution, silo damage (rupture, split, explosion, filter ejection), staff injuries (working at height, dropped items, explosions). These accidents are caused by 3 issues:

- **employees:** overriding safety control systems, speed up deliveries, uncontrolled discharges, not following procedures, unreported errors
- **maintenance:** failing of silo venting filter, faulty/missing pressure switch, sensor or inlet valve
- **safety issues:** no failsafe control equipment, panels allowing delivery in spite of failure



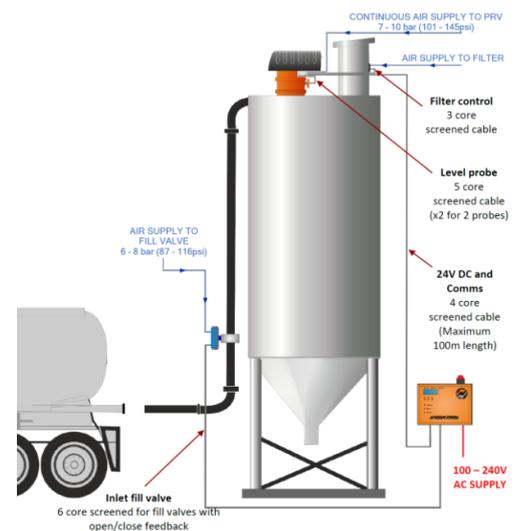
The Shield lite safety control system from Hycontrol (Shield protection unit with PRV and pressure sensor, high level vibrating probe, ground level test control panel with beacon and siren), addresses both human error, over-pressurization, over-spilling and instrument testing. Their **failsafe sensors** eliminate human error by automatically controlling the inlet valve and avoiding the need of climbing the silo. **With a single key turn the complete system is tested within 6 seconds before each delivery to ensure full functionality of each instrument and safety device:**



- the pressure sensor cleans the breathable membrane and measures a test pulse
- the pressure relief valve is cycled open and close
- the high-level vibration probe is tested by stopping the vibration to check the alarm
- the butterfly valve is tested to change positions from closed to fully open and is continuously monitored for dangerous override actions

If after a ground level test (GLT) any of the components fail the system will alarm and the silo cannot be filled until the problem has been rectified. If all the tests are passed the inlet valve will open 90 min for tanker delivery.

Level and pressure is monitored during discharge. In case of an event the inlet valve will automatically close to protect the silo.



**All sensor activations are logged and totalized for maintenance diagnostics and preventative maintenance warning.** The system will inform the site when to change the filter cartridges of the venting system. It recognizes poor driver behaviour (blowing too quickly or venting excess pressure into the silo) so that corrective measures can be taken proactively.

Shield is the most advanced silo system on the market and guarantees safe delivery every time.

[PDF Shield Lite Silo Protection data sheet](#)

[watch video](#)