



INSTALLATION TECHNICAL SERVICE SUPPORT

HYCONTROL
LEVEL MEASUREMENT SOLUTIONS

SCOPE OF SERVICE

- Level Measurement
- Silo Protection
- Bitumen Safety System
- ATEX Instrumentation
- Electrical Panels
- Software Control
- Filter Systems
- High / Low Level Alarms
- VMI Systems
- Control & Instrumentation

INDUSTRIES

- Water and Waste
- Oils and Lubricants
- Ready Mix Concrete
- Coating Plants
- Quarry and Aggregate
- Food and Drink
- Chemicals and Process
- Plastics
- Pharmaceutical
- Animal Feed

TECHNOLOGIES

- Ultrasonic
- Radar
- Capacitive
- TDR
- Vibration
- Plumb-bob
- Admittance
- Sonar
- Pressure
- Thruwall
- PLC
- Filters
- Relief Valves
- Hydrostatic

Hycontrol's comprehensive Installation, Technical Service and Support portfolio

is designed to ensure your new or existing system will work accurately and efficiently - not just today or next week but whenever you need it. We specialise in optimising your productivity and ensuring you comply with Health and Safety legislation.

Our unrivaled expertise is backed up by over 30 years' experience in the design, manufacture and installation of measuring and safety systems. Our approach is thorough, meticulous and practical, allowing you to operate your business with total peace of mind, and without the worry of breakdowns or legislative breaches.



SERVICING AND MAINTENANCE

Hycontrol take responsibility for organising and booking a structured, regular service plan. This will ensure your plant continues to operate smoothly all year round. Without effective planned maintenance your plant is at risk of:

- Injuries or death of site personnel
- Equipment and plant failure
- Increased product wastage
- Environmental pollution
- Health & Safety non-compliance
- Reduced life of equipment
- Increased plant downtime
- Increased service costs



DISASTERS WAITING TO HAPPEN!

Effective silo servicing routines published in guidance notes from DEFRA and the MPA (Mineral Products Association) state the necessity of checking and testing all critical protection components. These checks include the pressure relief valve (PRV), pressure sensor, filter and the ultimate High Level sensor: all essential for maintaining a healthy safety system.

Unfortunately in many industries these guidelines are often overlooked or misunderstood. Typically, the average silo service includes a visual inspection with a quick once-over and dusting that fails to assess their true condition. Additionally, leaked product on the silo top is often disregarded with no effort made to establish the cause - a clear danger sign if left ignored.

Whilst many operators are aware of the consequences of a faulty system, there is understandably a reluctance to climb high silos in poor weather conditions for their regular weekly checks.

THE HYCONTROL DIFFERENCE

Hycontrol have 30 years' experience servicing silo instrumentation. Our service engineers conduct an exhaustive **60-point service check** of the complete system from top to bottom.

Hycontrol conduct a physical test of all critical components on the silo, using specially-designed pressure and load-test rigs to ensure all safety devices are not merely clean but in good condition and fully operational. This includes the level and pressure sensors, the pressure relief valve and the filter.

HYCONTROL'S UNIQUE ADVANTAGES

1. **Industry award-winning** silo safety systems
2. **Fully conversant with latest MPA & DEFRA guidelines**
3. **Full critical component tests** - not just visual
4. **Comprehensive service checks** - 60 points on the silo alone
5. **Competent engineers** who understand silo safety
6. **Largest UK silo instrumentation company**
7. **Pioneering silo safety technology**
8. **Reduced service costs** with advanced equipment
9. **Fully MPQC SPA safety passport-trained engineers**
10. **On-site silo fault diagnosis capability**
11. **Scheduled servicing** - Hycontrol takes responsibility

COMMON FAULTS



Pressure relief valves (PRV) are the last line of defence against over-pressure. With effective protection and servicing, blocks like the example above can be avoided.



This PRV appeared fine, but an inspection under the lid reveals the opposite. This problem would indicate the silo safety system has totally failed!



After physical testing, this PRV and pressure sensor failed to operate at the correct set points. Previously this was serviced with only a visual inspection!



Damaged and neglected filter cartridges will cause emission issues if they burst, or if they are completely blocked they have the potential to cause serious silo damage!

CASE STUDY - SILO PROTECTION

BEFORE: This customer received weekly lime powder deliveries, pneumatically blown from road tankers into their silo. Product was found blown out from the pressure relief panels onto the top of the silo and the surrounding area. The customer recognised this was an issue and knew the risks of pollution, wastage, and to Health & Safety. The customer called upon Hycontrol's expertise to investigate the problem and how to resolve it. They presumed that the tanker drivers were discharging at correct pressures. Hycontrol revealed the following issues with the existing protection system:

- **PRVs were operating continuously leading to discharge and pollution**
- **Filters were blocked, without any regular maintenance being carried out**
- **Inadequate silo level control led to contents confusion, which led to overspills**
- **No silo protection equipment to monitor and control inlet tanker discharge**
- **No local tanker display to warn the driver to control discharge**
- **No inlet control valves or auto shut-off system in the event of an over-pressure event**
- **Lack of understanding of industry best practice as advised by MPA & DEFRA**
- **Ineffective maintenance routines and no testing of safety equipment**



Product discharge from the PRV



Environmental pollution issues



No display or auto shut-off

AFTER: A complete auto shut-off Silo Protection System was supplied, installed and commissioned by Hycontrol, enabling the customer to reduce service costs, monitor the safety of inlet pressure, and most importantly test all the equipment functions correctly before **EVERY** delivery. The new system is serviced annually by Hycontrol to ensure continued optimum performance.



Complete project installation



Installed by qualified engineers



New reverse-jet filters fitted



Latest testable silo instruments



Valves fitted for auto shut-off



Display and control at fill point

Structured preventative maintenance will result in minimum disruption and maximum safety for your site and personnel.

Hycontrol know the chaos and expense caused by equipment breakdowns and malfunctions - not to mention the resulting Health & Safety implications.

In most cases such failures don't happen out of the blue, but as a result of problems accruing over time. This is best counteracted through a regular, scheduled preventative maintenance programme carried out by **competent, professional** engineers. Hycontrol's engineering teams are able to spot problems before they arise, ensuring best performance and extended equipment life.



ORGANISED SUPPORT AND SERVICE

Hycontrol's scheduled support service means you no longer have to concern yourself with arranging maintenance of your system. **Our team keep detailed records and will contact you when your service is due**, making sure to give you plenty of notice to ensure your equipment is serviced with the minimum of disruption to your site.

We will also remind you to arrange any plant hire, cherry pickers etc. that may be required for when our team arrives so there are no delays or issues prior to them starting.



TAILOR-MADE SUPPORT PACKAGES

Before designing your optimum service and support package, we carry out a **detailed site survey** with you. We discuss the ins and outs of your daily site routine and consider any relevant legislation to help ensure that you remain compliant.

With a scheduled support plan from Hycontrol, you'll have peace of mind knowing not only that you have support in an emergency, but you have a team working regularly to ensure an emergency never occurs.



ATTENTION TO DETAIL

Our engineers comprehensively check every aspect of your silo or tank level system - from top to bottom. That's why, for example, we have a **checklist of over 60 critical items** to inspect when servicing Silo Protection or Bitumen Overflow Safety Systems.

Hycontrol will retain detailed information and drawings of your equipment. This means if one of our engineers visits your site or you're telephoning our office-based technical support, we'll have the information we need to hand.



TRAINED, COMPETENT ENGINEERS

Our engineers have all received **extensive** training, with qualifications including MPQC, SPA quarry passport, IPAF, MEWP, harness licences and ATEX awareness certification, as well as BTEC HNC in Electrical & Electronic Engineering and C&G 2365, 2330 and 2360.

Furthermore, our teams undergo regular in-house training to keep up to date with the latest product innovations and industry regulations.

Hycontrol offer the complete level solution. From the initial survey through installation to an ongoing maintenance service, you'll only need one company.



1 - SITE SURVEY

Starting with a detailed, free survey, we get to know your process and what you need from a level measuring system. We establish all the key factors including: vessel types and sizes, product characteristics, environmental conditions together with Health & Safety considerations.

An in-depth understanding of your site and your process allows us to design a system to perfectly match your needs.



2 - MANUFACTURE

Hycontrol manufacture and supply a vast range of level measurement equipment. We also design and build more control panels than any other level measurement company in the UK.

Whether your application requires a simple alarm panel or a complex multi-point ATEX-certified system, Hycontrol will provide tough, precision-engineered, high-spec equipment that fulfils your requirements.



3 - INSTALLATION

Hycontrol's three decades of expertise supplying and installing level measurement systems give us a natural advantage over third-party installers. Rather than the headaches of dealing with multiple suppliers, you'll have peace of mind knowing that the manufacturers of your system are also installing it.

We take site safety very seriously and you can be confident that all our installation engineers have been suitably trained.



4 - COMMISSIONING

The performance of your system hinges on the initial commissioning and calibration. Our engineers know the importance of establishing correct settings, and the factors that affect accuracy. They ensure level alarms, ullage and units of measurement are all set correctly, and that the measurement is not adversely affected by any internal tank structures.

Letting Hycontrol install and commission your new system guarantees a complete and competent set-up.



5 - SERVICE

Our team of UK service engineers guarantee a speedy response and comprehensive support.

Letting Hycontrol oversee every aspect of your level control system means you can relax, confident you'll receive the service you expect from a market leader. We offer comprehensive service contracts for ongoing maintenance to help you get the most from your equipment for years to come.