

PREVENT PLASTIC POLLUTION WITH SILO PROTECTION



The issue of plastic pollution is in the news almost constantly at the moment – and with good reason: there is now no corner of the globe that is not affected by it. Plastics manufacturers are finding themselves **heavily scrutinised**, and industry leaders must take action to prevent their product escaping into the environment.

Around **2.5 million tonnes of plastic are produced in the UK every year**. Powdered products are common throughout the manufacturing process; besides plastic stored in powder form, other materials like **mica, clay, or calcium carbonate** are important ingredients for a variety of purposes, e.g. moulding.

As in other industries, powder storage silos are at risk from over-pressurisation during the pneumatic filling process. Excessive blow-in pressures or restricted air outflow (from blocked filters and PRVs) leads to **ejected powder and pollution**, and even risks **rupturing the vessel or blowing the filter unit off the silo roof**.

PLASTIC SILO OVER-PRESSURISATION - THE FACTS

- ◆ Caused by either excessive blow-in pressure or restricted outflow
- ◆ Powders may blow out of pressure valves or ruptured filters
- ◆ Beside pollution, over-pressurisation creates multiple site risks:
 - ◆ Danger to staff from filter units being blown off silo-tops
 - ◆ Silos may become buckled or even rupture, incurring repair costs
 - ◆ Fines, damage to company and site reputation, media scrutiny
- ◆ Most plastics manufacturing sites lack adequate silo protection
- ◆ Over-pressurisation is a major issue across a range of industries
- ◆ Testing silo-top safety equipment creates a working at height risk

WHY DO YOU NEED TO CONSIDER SILO PROTECTION?

If you have a powder storage silo on your site then the fact is that **you are already exposed to the risks outlined above**. Congested filters and blocked pressure relief valves are a commonplace problem on silos over a range of industries, and in many cases they are **disasters waiting to happen** - creating serious safety and cost implications. The fact that most safety equipment can only be checked by climbing to the silo-top adds **additional dangers** from slips, trips and falls.

Hycontrol's pioneering **SHIELD Silo Protection System** comprehensively resolves all the issues listed above. A compact, modular system incorporating a **PRV, pressure sensor and level probe**, SHIELD is fully Ground Level Test-enabled, performing a total safety test with a single key turn - **in just six seconds!**

SHIELD SILO PROTECTION SYSTEM - KEY FEATURES

- ◆ The most advanced SPS available, purpose-designed for safety
- ◆ Ground Level Test (GLT) function checks key safety components
- ◆ GLT reduces maintenance, working at height; alerts users to problems
- ◆ Event logging allows preventative maintenance and driver monitoring
- ◆ Quick-connect kit makes installation and set-up simple
- ◆ Meets and exceeds all existing industry silo protection standards
- ◆ Improves environmental standards and reduces product emissions
- ◆ Reduces risk of silo pressure damage and improves site safety

