

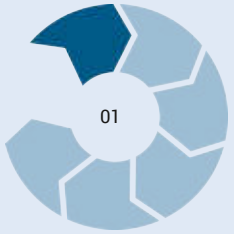


⌘ Chemflo

**Engineered
Below Ground
Chemical
Drainage System**

⌘ CPV

www.cpv.co.uk



Scope

Engineered Below Ground Systems

Who We Are

CPV is a UK specialist manufacturer and, for more than 70 years, has specialised in the design, manufacture and integration of engineered pipe systems for industrial and building services applications.

From our UK production facility, we deliver high-performance solutions across a range of materials, supported by in-house services, and trusted in critical infrastructure environments across the UK and internationally.

Chemflo is built around the same principle used across our engineered systems: we develop the solution to match the client's requirements and specification—then manufacture what's needed to deliver it.



Chemflo Advantages

- 3D BIM models and 2D drawings to support your drainage project
- One supplier, one below ground drainage system, fused together for durability
- Prefabricate angles and branches in a spool to minimise site jointing and fittings
- Swept drainage design for directional drainage flows
- Smooth bores with no internal beading to prevent buildup of fats, oils and grease
- Leak surveillance system and controls for added security



Typical Applications

Plating Solutions • Pickling & Etching • Fume Extract • Pulp Stock • Carbon Dioxide • Blood • Hyposulphite • Silver Salts • Alum / Bleach • Caustic Soda • Alcohol • Brine • Alkalies •

Built For Agressive Effluents

Where Chemflo is used

Our polypropylene chemical and process drainage is proven across demanding environments—where chemical resistance, temperature capability, and reliable installation matter.

Research Facilities

Chemical

Hospitals

Food

Water Treatment

Hydrometallurgical

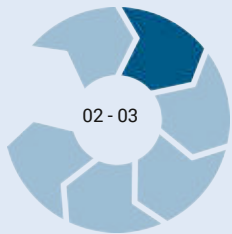
Nuclear

Paper & Pulp

Pharmaceutical, Biotechnology



Acids • Solvents • Toxic Effluents • Foul & Surface Water • High Temperature Waste • Radioactive Waste • Food Processing



Design &
Approve

A Complete Polypropylene Below Ground Chemical Drainage System

Pipe Materials

Chemflo polypropylene pipes and fittings are manufactured in high heat stabilised block copolymer (PP-B), selected for excellent impact resistance at low temperatures and high resistance to chemical attack. It is well suited to many chemical plant uses, especially where higher temperature resistance is also required. Smooth bores result in low pressure loss and high volume flow.

CPV manufactures in beige grey for most applications and natural/pure un-pigmented for high purity applications. Other types of PP are available, including PP-H, β PP-H, PP-R, as well as PVDF and HDPE.



Smooth bore

Smooth internal bores help reduce pressure loss and support high volume flow.



Ductility

Will deform and return after overload; helps accommodate ground movement when buried.



Maintenance-free

Will not corrode or rot; can be buried underground or in concrete without adverse effect.



Temperature capability

Safely conveys chemicals from -20°C to $+110^{\circ}\text{C}$ (continuous) and up to $+130^{\circ}\text{C}$ for short periods.



Impact resistance

Made to handle abuse; strong even at sub-zero temperatures.



External loadings

High performance PP accommodates ground movement and enables installation under buildings (UD).



Wear resistance

Low friction coefficient and high abrasion resistance.



Lightweight

Easier handling and installation versus metallic products; around 1/8th the weight of cast iron.

For underground drainage

Chemflo is one material fused together, creating a unified system underground. It complies with EN 1852-1 for non-pressure underground drainage and sewerage. Chemflo pipework can be installed under building structures due to the high modulus polypropylene having a ring stiffness $> 8 \text{ kNm}^{-2}$.

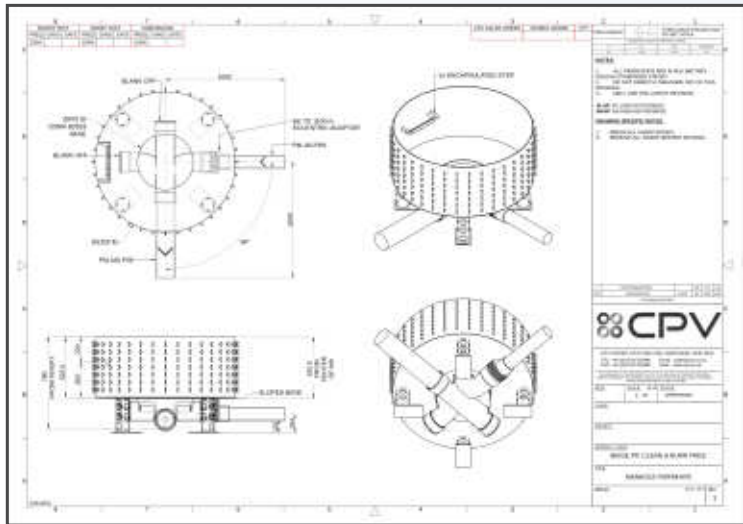
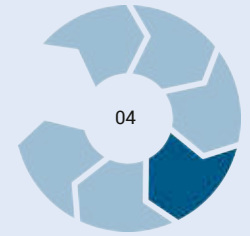
What's in the system?

A comprehensive range including pipes, fittings, fabricated fittings, access chambers, manways, gullies and floor drains, rodding eyes, neutralisation/holding tanks, and more - available with on-site jointing options including butt welding, socket fusion, electrofusion and mechanical joints.



Fewer Joints. Cleaner Flow. Faster Installation.

Production



Off-site Fabrication. Installed with confidence.

CPV offers the facility to pre-fabricate and factory assemble pipe spools and skids in a controlled environment. Pipe angles and branches can all be fabricated, rather than using a multitude of fittings with potential leak points. These can be built in parallel with site works, reduce on-site labour and risk; delivering tested assemblies ready for final connections.

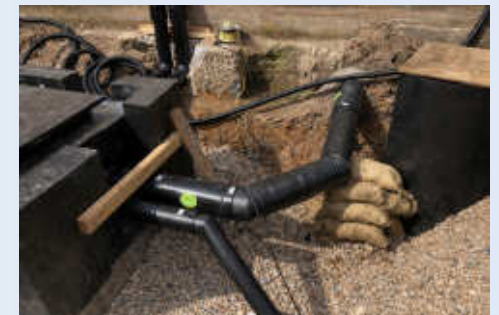
Manholes & Chambers

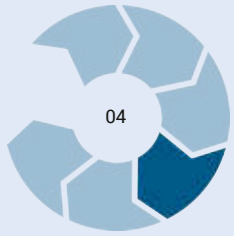
Manholes and chambers can be constructed with factory-fabricated liners manufactured from PP-B sheet (and PP-H concrete protective liner), with chamber bases moulded from PP-B, available double bundled. Chambers can be swept open channels or closed bench with either round or rectangular access openings. Chemflo polypropylene manholes and access chambers are fabricated in accordance with BS 7158 (Plastic Inspection Chambers) and BS EN 13598-1, and are tested to relevant standards including BS EN 1277 and BS EN 13101.

Access chambers are made to order and can be supplied with up to four inlets on each side. Inlets can be supplied as plain pipe ends or electrofusion sockets.

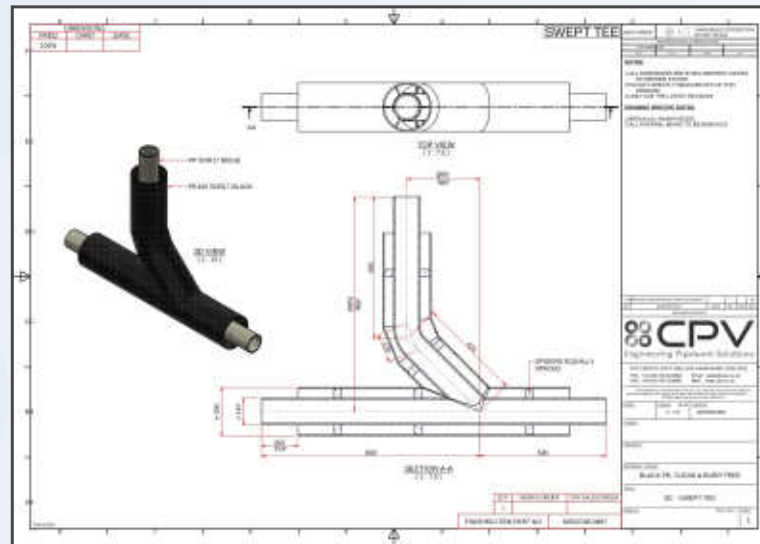
Neutralisation Tanks

Neutralisation tanks are designed to intercept harmful chemicals; dilute and neutralise wastes; and release them to the public sewerage system. Fluids pass through limestone chips; acids form neutral salts, and wastes are discharged once neutralised. Available in small to large capacities.





Dual Containment For Higher-Risk Effluents And Sensitive Areas



How It Works

Dual containment works simply by providing a secondary containment pipe around the carrier (service) pipe, so that if there's a leak from the service pipe, the leaked media is safely contained. It can be supplied as factory assembled dual-contained components (with a range of service pipe options) or as a containment pipe system for on-site assembly.

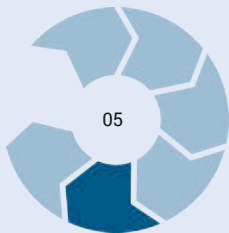
Add Security With Dual Containment

Chemflo is also available as dual containment piping, a key risk mitigation feature in critical piping applications. Pipe-in-pipe (dual containment) provides a second line of defence, compatible with integrated leak detection cables for early warning and precise fault location.



Full Range Of Pipe Sizes Backed By Design Support & Leak Detection

Inspection



Detailed Models

We provide detailed 3D BIM models and 2D drawings to provide a proactive approach to creating custom below ground drainage projects. Let our team design around obstacles and provide straight-forward jointing on site.



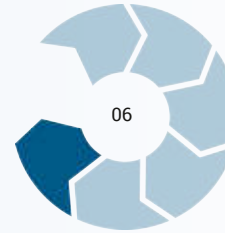
Leak Detection

Leak detection is available for dual contained drainage pipes and manholes and access chambers. The type of leak detection system used depends on the effluent waste. Discuss your project requirements with CPV and we can tailor the solution on a case by case basis.

Available Pipe Sizes & Fittings		
Pipe Length	Diameter	Available Fittings
Supplied in 6m lengths. Longer pipe lengths can be discussed on a per project basis.	110	Equal Swept Branch
	160	
	200	Reducing Swept Branch
	225	Equal Branch
	250	
	280	Reducing Branch
	315	90° or 91.5° Bend
	355	45° Bend
	400	22.5° Bend
	450	Fabricated Angles
	500	

Engineering Your Below Ground Drainage System

Delivery



Quality, Inspection & Delivery

CPV operates to BS EN ISO 9001, with QA systems assessed by the British Standards Institute (BSI) through audits twice yearly.

All systems follow a quality assurance plan with checks such as dimensional verification and testing, with traceability.

Customer orders are delivered to site tested, labelled and ready to install - aligned to site schedules.

Installation & Training

The system is available with a range of on-site jointing options including butt welding, socket fusion, electrofusion and mechanical joints.

Full technical back-up and training is available from CPV. Training is offered at the CPV training centre; operatives can be trained on installation/jointing and testing regimes.



Contact Us

Whether you're in early-stage design or preparing for project delivery, our team is ready to support your goals.

✉ enquiries@cpv.co.uk

☎ +44 (0)1794 322 884

🌐 www.cpv.co.uk



Also Ask Us About

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