



# Pipex Chemsafe Dual Contained Effluent Waste Containment

The Pipex Chemsafe™ Dual Contained Pipework and chambers systems is available in for the safe transmission and containment bio-hazardous fluids within high security containment laboratories, chemical/corrosive chemical waste effluent associated with industrial, pharmaceutical and animal research applications for below and above ground applications.

The system is manufactured in a range of thermoplastic materials to suit the application in either Homopolymer Polypropylene PP-H, PE100, C-PVC, PVDF and Glass Reinforced Epoxy (GRE)

Manholes, Holding Tanks, Pumping Stations, Floor Drains and channels are available for the complete below ground Dual Containment waste systems with leak detection system and controls.

Site training or full installation packages available from FGS site operations. Detailed working drawings provided in 2D or 3D design models.

## Typical application areas:

- Biosecurity CL3 and CL4 Laboratories
- Sludge Lines Treatment Works
- Chemical
- Pharmaceutical
- Electrical Switch Rooms
- Radio-Active Waste

## Key Advantages:

- Complete below ground packaged drainage system
- Heavy wall pipe for buried pipe systems
- Smooth internal bores no internal beads avoid build-up of fats, oils and grease
- Swept drainage fittings for directional drainage flows
- Where required system can be prefabricated limiting site joints
- Can be pressure jetted to WRc standards

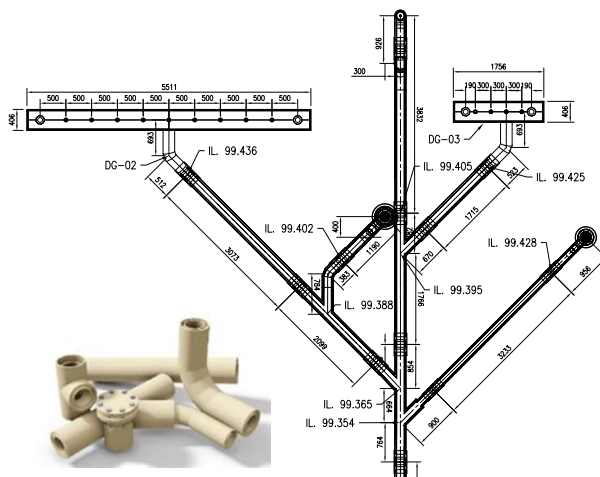
# Chemsafe Dual Contained Effluent Waste Containment

## Detailed Design, Manufacture, Supply & Installation

We provide detailed designed models in 3D or 2D formats for importing into the overall project model.

Complex pipework systems can be supplied either as pipe and fittings or itemized as prefabricated spools to minimize site jointing.

Chemical analysis is provided to select the appropriate thermoplastic chemical resistant pipework system for the application.



## Chemsafe Dual Contained

Our Chemsafe Dual Contained systems are available for high security effluent pipework systems containing pathogens or highly corrosive chemicals where additional containment protection is required.

The system can be used for safe transfer of fluids through electrical rooms or areas containing sensitive data where protection is required to pipework.

The system is factory manufactured as a completed dual contained fittings and pipework no site assembly is required to form the secondary containment.

Fittings are tested in the factory prior to delivery.

Contact us for material selection for the chemical application.

For elevated temperatures and highly corrosive chemicals we can manufacture Polypropylene (PP-H) secondary containment with Glass Reinforced Epoxy (GRE) dual contained system, contact us for further information.



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## Chemsafe Dual Contained Manholes

Manholes are available to allow for safe man entry to access the pipework system passing through the manhole.

Rodding points facilitate inspection and cleaning to the dual contained drainage system.

Leak detection probes can be installed in the manholes to monitor the pipework system, control panels are provided to provide audible visual alarm with volt free contacts for BMS output.

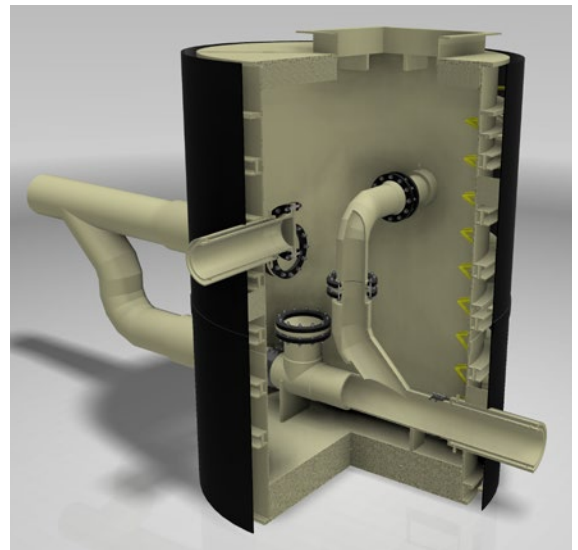
Internal pipework arrangements are configured to suit the drainage design. Where required valves can be installed to control or isolate the drainage flows.

Sampling points can be provided if required for end user validation of the effluent contents.

Specific instrumentation can be factory fitted.

Manholes and internal pipework are tested at the factory prior to delivery.

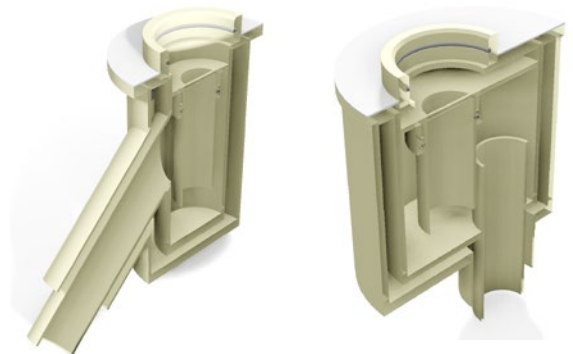
The manholes are configured to suit the design drawings and are numbered to correspond with the system design.



## Chemsafe Dual Contained Floor Drains & Channels

A full range of floor drains, channels and rodding points are available to allow the above ground effluent waste to discharge into the dual contained drainage system.

Gratings can be provided either in thermoplastic, composite or stainless steel to suit the client requirements and floor finishes.



## Chemsafe Dual Contained Effluent Waste Containment

### Dual Contained Chemsafe Pumping Stations & Tanks

Where Bio-Hazardous waste and highly corrosive liquids are going to be stored before being treated locally or transferred to treatment facilities the containment tanks need to be secure with measures in place to prevent exposure to the environment.

Dual contained tanks and pumping stations are manufactured to suit capacities and project specific designs

We can assist pump selection to the application, submersible or transfer pumps can be included with the scope of supply.

Level instrumentation is provided to suit the type of effluent with respect to foaming and or corrosive mediums in contact with controls within the tank.

Leak detection system is installed within the annular void of the dual contained tank to provide a visual and audible alarm in the unlikely event of a breach of the inner containment.

From the chemical data provided we will determine the material required for the application.

Internal resin finishes can be applied for elevated temperatures or to resist specific chemical concentrations.

