

Asset Management Programme - Offsite Build



Governments, utilities companies, contractors, designers, and project managers involved with the construction of new and existing UK water and wastewater are under increasing challenges for providing solutions that utilize the latest technologies to improve complex project requirements.

Asset Management is an integrated strategy to manage capital assets, operating and maintenance tasks and costs to provide the end user with projects delivered on time and within budget.

Fiber Glass Systems has been manufacturing offsite build Thermoplastic drainage and civils products for the industry for many years and offers the designers the opportunity to engage directly with a UK manufacture to develop project specific offsite build solutions as well as asset standard models.

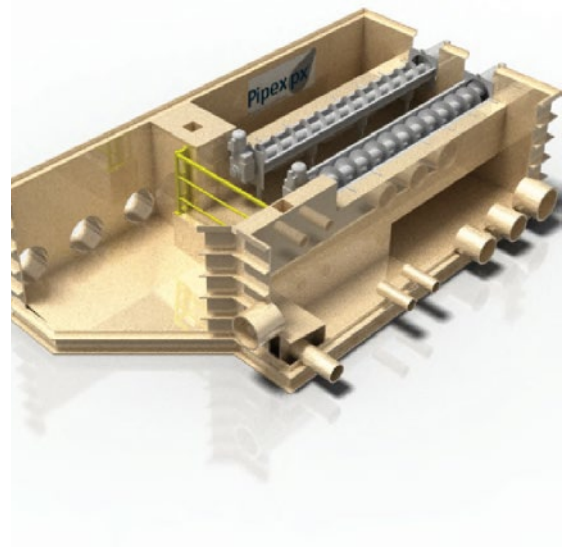
ISO 9001, ISO 14001 & ISO 45001

Key Advantages:

- Manufactured from advanced thermoplastic and composite materials that are corrosion resistant, versatile and robust.
- Lightweight compared to traditional build materials
- Manufactured to project specific requirements
- Fixed price direct from the factory
- Internal equipment such as pumps, screens and valves installed at the factory.
- Suitable for H₂S and Ferric Dosing applications.
- Reduces traffic management issues during site construction

Features of Pipex AMP Drainage & Civils Products

- Circular or rectangular chambers manufactured to BSEN12573 in reinforced self-cleansing, hygienic thermoplastic materials that minimise risk of leaks, blockages, and FOG accumulation.
- Can be high pressures jet washed to WRc Jetting Standard.
- Manufactured to suit specific Adoptable Standards relative to the end user requirements.
- Supplied with or without manholes steps to BSEN131:2002
- Inlets, vents and cable duct entries positioned to suit the project specific design requirements.
- Supplied with lifting points and for larger chambers can be fitted with lifting stroops at the factory.
- Internal benching, channels and weir walls configured to suit the project specific design.



Target Projects for Pipex AMP Drainage & Civils Products

Offsite build is a solution for the more complex designs where using traditional on-site build methods may be problematic to construct on site and involve potential risks to site operatives.

Areas where traditional on site build methods will involve long term disruption to traffic areas and residents.

Adoptable Pumps Stations & Valve Chamber

Manufactured from corrosion resistant polypropylene or high density thermoplastic materials, the packaged pumping stations and associated valve chambers are manufactured to suit specific requirements required by the Utility Company for adoptable applications.

Optional factory fitted rebar reinforcement and shuttering is available to accept insitu poured concrete surround.

Diameters up to 3m and depths to 6m.



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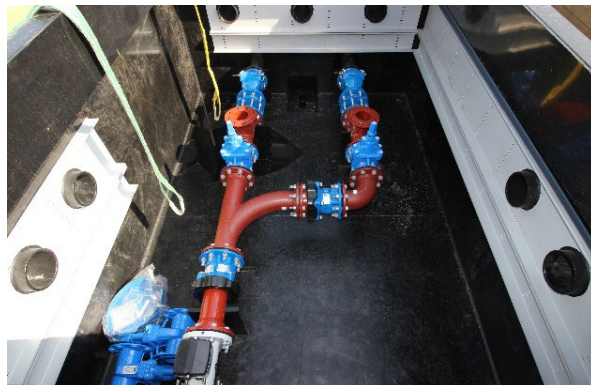
Rising mains, guide rails, valves and if applicable flow meters are factory fitted.

Shuttering can be fitted at the factory to accept insitu poured concrete surround.

The thermoplastic material can be pressure jetted to WR standards.

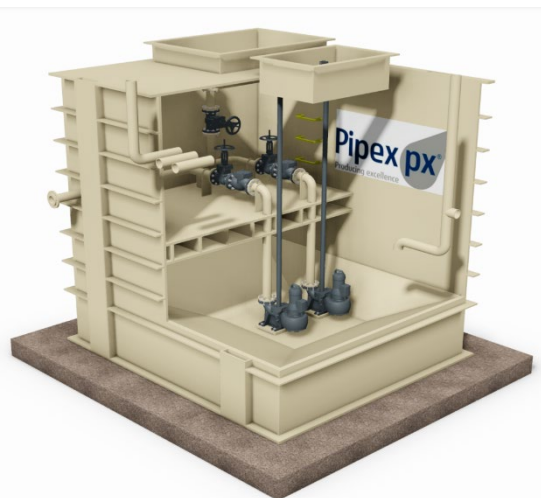
The pumping stations and valve chamber are delivered as completed offsite build solution for fast track installation.

FGS Pipe Pumping Stations have been assessed and certified by the WRc.



Modular Combined Wet Well & Valve Chamber

Combined Wet Well Chamber with integral valve chamber supplied as a single chamber for reduced excavation footprint. The chamber includes two separate entries one to the valve chamber and the other to the wet well chamber. An integral wall divides the chamber removed from the image opposite for clarity. Designed to suit pump storage volumes required.



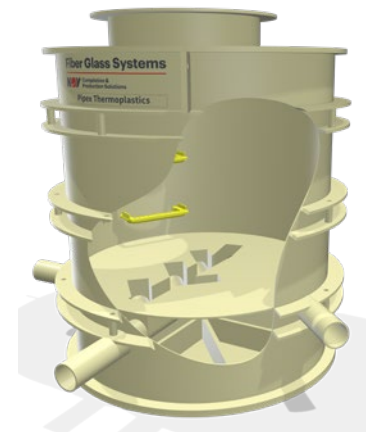
Thermoplastic Manholes and Catchpits

Manufactured from corrosion resistant polypropylene or high-density thermoplastic materials, the manhole chambers are supplied in either rectangular or circular form with branch configurations suit project specific requirements. Diameters up to 3m and depths to 6m.

Internal benching is factory fitted and Manhole steps can be provided to BSEN13101:2002

Optional factory fitted shuttering is available to accept insitu poured concrete surround.

The Pipe Manholes are BBA HAPS Approved and have been tested to BSEN 13598-2.



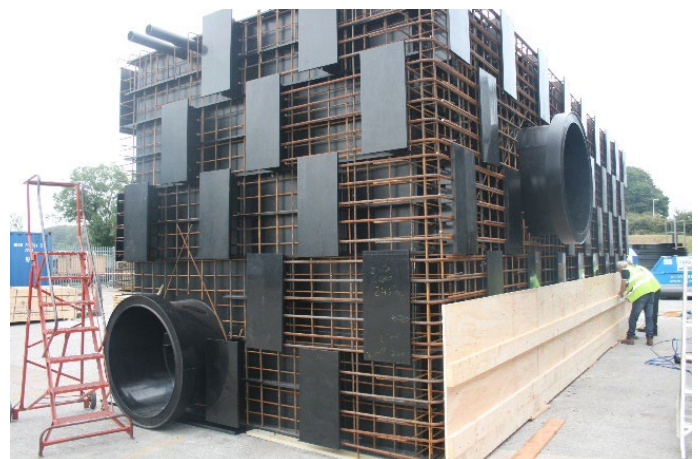
Civil Engineered Chambers

Manufactured from corrosion resistant high-density polyethylene (HDPE) Chambers are manufactured as an alternative to concrete systems and are designed to suit project specific requirements.

From clients designs we produce 3D Working Models which can be provided for project Building Information Modelling (BIM) Complex benching, weir walls are designed and formed in reinforced HDPE.

One piece chambers can be delivered up to 12m x 4m x 4m deep larger chambers can be supplied in sections and assembled on site by FGS Pipex operatives.

The designers supply FGS Pipex with the site GeoTech Reports from this information we design and factory fit rebar reinforcement to suit the loading onto the chamber from ground conditions or highway traffic. The rebar reinforcement is fitted at the factory in a dry safe working environment reducing risks to operatives working on site in deep excavations.



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Optional timber shuttering can be factory fitted to accept the site installed insitu concrete poured surround.

Third party equipment such as screens, valves, pumps etc are supplied to the FGS Pipe factory for fitting prior to delivery to site. This eliminates further works and logistics issues on site.

Complex designs that would be difficult to construct on site can be manufactured offsite as completed assembled chambers with all equipment fitted at the works.



Equipment & Valve Chambers

We have assisted Utility Companies with the design and development of Asset Standard Products which are repeated as a standard model.

We have developed standard wash out chambers associated with rising mains these are ordered as standard models for various sized mains and are fitted out with the valves and urban connections ready for installation.

Penstock Valves can be factory fitted into chambers complete with extension spindles, chambers are manufactured to suit project specific requirements.



Flow meter chambers are available with either thermoplastic or ductile iron pipework systems, cable ducts for electrical and control wiring.



Cable Draw Pits

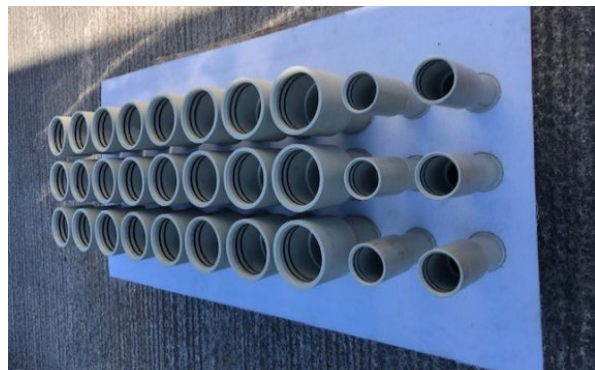
Our Cable Draw Pits are manufactured as completed factory assembled watertight units.

Cable duct sizes and entries are factory welded in place to suit the project requirements this provide a push fit socket to suit any type of cable duct system. Dimensions are to suit the optional factory fitted rebar can be provided for cable draw pits located in highways.



Service Entry Puddle Flanges

Multiple service entry puddle flanges to suit utility service entries into buildings. Sockets are provided to accept individual service entries.



Thermoplastic Pipework Systems

We manufacture, supply and install larger diameter thermoplastic pipework systems.

Materials High Density Polyethylene, Polypropylene, C-PVC, & PVDF.

Pipeworks systems are supplied as itemized prefabricated pipe spools with supporting detailed working drawings.



Dual Contained pipework for the safe transfer of sludge within the sewage treatment works. Manufactured from pressure rated pipe for pumped systems. FGS Pipex supply, install and test the system or can offer site training for the dual contained jointing process.



Complex fabricated pipework fittings are modelled in 3D for assisting designers with placement into the project model.



Chemical Holding Tanks & Vessels

Chemical holding/treatment tanks and vessels are available for either buried or above ground applications.

Bespoke attenuation tanks incorporating weirs and vortex flow control units are available for project specific applications.



Cylindrical or Rectangular Tanks available sizes to project specific requirements.



Floor Channels

Our Floor Drainage Channels manufactured from corrosion resistant thermoplastic materials. Supplied as itemized prefabricated sections with built in falls, channel sections are placed onto lean mix bedding. Each section is bolted together and when fully assembled FGS operatives attend site to perform internal closing hot air thermoplastic welds.



Composite or metallic gratings available to suit applicable loadings.



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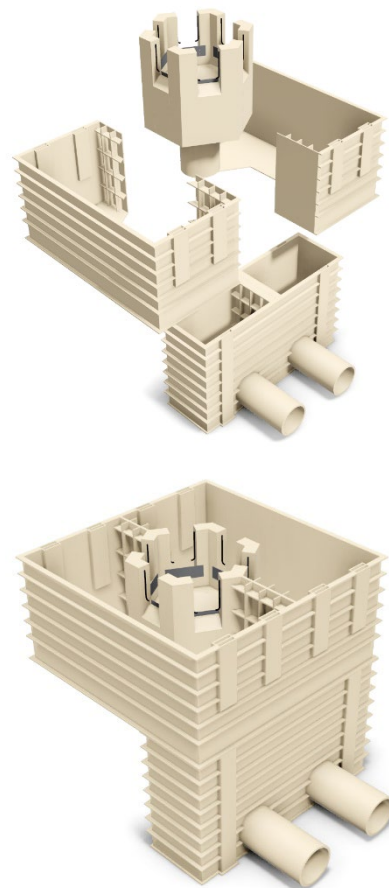
FGS - Sectional Offsite Build

Where designs exceed the limitation of transporting as a singular chamber a sectional site assembled solution can be provided.

The chamber is modelled in 3D and assembled in as an aminated model before manufacture. Each profile of the chamber is detailed in 3D then the parts are CNC cut to form an itemized part list which is then welded in the factory to form each section.

Prior to delivery a dry fit is performed to ensure each section fits to form the completed assembly.

FGS Pipex operatives attend site to complete closing welds and assist with any third part installed equipment.



Composite Glass Reinforced Epoxy Pipework (GRE)

We supply and install FRP Structures and Walkways as an alternative to galvanised or stainless steel systems. The system is used in coastal areas or corrosive applications where metallic systems are not suitable and the end user requires a low maintenance system with improved life expectancy.



Composite Glass Reinforced Epoxy Pipe & Fittings (GRE)

We supply and install GRE pipework & fittings system as an alternative to metallic systems. The system is within corrosive environments or areas where a lightweight system is preferred over steel applications. FGS offer full installation packages including design and stress analysis.



Fiber Glass Systems

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