MagnaPlast™
Sanitary Sewer Manhole System

MagnaPlast™ by Houston PolyTank, is a complete, factory-assembled, monolithic HDPE sanitary sewer manhole system engineered for municipal and industrial wastewater applications.

Each project-specific system is delivered as one coordinated assembly, rather than a collection of separate field-assembled components—to help reduce corrosion exposure, leak paths, installation complexity, and long-term maintenance burden.

Threaded Adjustable Riser System

Provides controlled field adjustment to final grade without cutting or field-fabricating the manhole barrel.

Integrated Handling Lugs

Provide designated attachment points for controlled lifting and installation.

Factory-configured Inlet / Outlet Geometry

Project-specific elevations, diameters, and orientations help reduce field modification and alignment uncertainty.

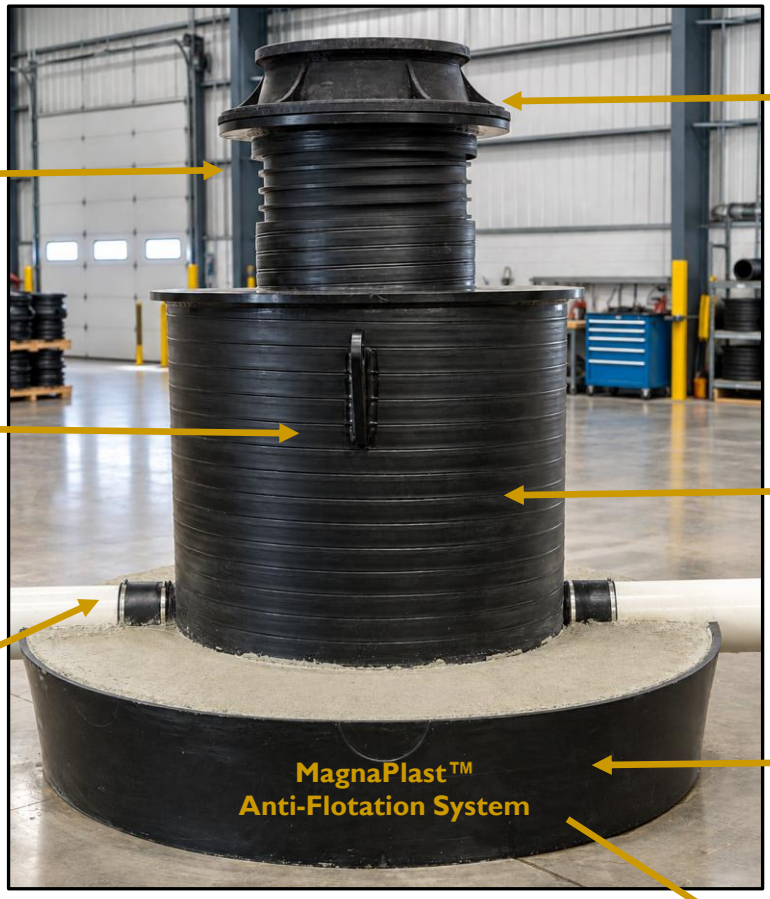


Photo of System shown with the foundation tub filled in the factory is for demonstration purposes only.

Cast-iron frame and cover

A rated frame-and-cover assembly accommodates specified H-20 or H-25 traffic loading and transfers wheel loads to the supporting top structure.

Monolithic HDPE Barrel

Corrosion-resistant virgin HDPE formed into a monolithic solid-wall cylinder through continuous spiral-wound extrusion, with no longitudinal seam or welded profile joint.

7-Foot HDPE Concrete-Fill Foundation Tub

The foundation tub is filled on site with specified concrete after the system is set to line and grade.



Factory-filled, HDPE-encapsulated Rotomolded Base

Concrete is permanently enclosed within HDPE.



Close-up: Anti-Flotation System before on-site concrete placement.

Bottom line: MagnaPlast™ is engineered to help utilities move beyond repeated rehabilitation. Its factory-assembled, monolithic HDPE construction is designed to reduce corrosion exposure and leak paths while providing a project-configured, structurally resilient wastewater manhole system for long-term ownership.

MagnaPlast™ is a trademark of Houston PolyTank, LLC. MagnaPlast™ and its integrated Anti-Flotation System incorporate proprietary structural and manufacturing features that are patent pending under U.S. Patent Application No. 63/789,260.

Designed to help utilities: Resist corrosion ~ Reduce leak paths ~ Simplify installation Reduce long-term maintenance exposure.

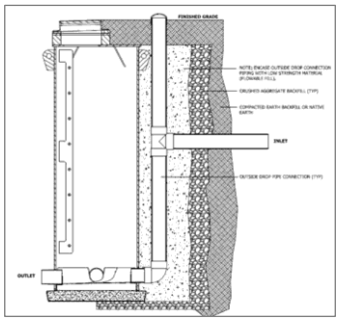
Engineered for Project-Specific Performance

Technical Specifications	Configuration Options
Manhole Diameters	4 ft. | 5.5 ft. | 7 ft. | 7.8 ft. | 9 ft. | 11 ft. | 13 ft.
Monolithic HDPE Barrel / Cylinder	Manufacturing: Virgin, carbon-black-filled HDPE, continuously spiral-wound into a monolithic cylinder; 0.75–2.0 in. uniform wall thickness.
Overall Structure Depth	2 ft. to 40 ft.
Inlet / Outlet Geometry	Custom inlet and outlet locations, elevations, diameters, and orientations. Standard configurations accommodate up to five inlets; additional connections may be available based on project-specific engineering.
Threaded Adjustable Riser	24 in., 27 in., and 30 in. riser options; up to 9 in. of vertical adjustment.
Access & Cover Options	Direct-mount or grade-ring access configurations for specified frames, covers, and traffic loading, including H-20/HS-20 or H-25/HS-25 where configured.
Rotomolded Base Configuration	Factory-filled, flat-bottom rotomolded HDPE base with concrete permanently encapsulated within HDPE and structural gussets. The base incorporates the project-configured flow channel and is part of MagnaPlast's dual-stage anti-flotation foundation.
Anti-Flotation System	The factory-filled, HDPE-encapsulated rotomolded base and separate HDPE foundation tub form MagnaPlast's dual-stage anti-flotation foundation. After the complete assembly is set to line and grade, the tub is field-filled on site with specified concrete to help resist project-specific uplift and lateral movement.
Hydraulic & Access Parameters	24-in. manway opening, or larger as specified; 2.08% channel cross-slope, inlet to outlet; Manning's n = 0.010."
Design Standards & Requirements	MagnaPlast™ systems are engineered using applicable ASTM F1759, DVS 2205, AASHTO loading criteria, ASTM D2321 installation principles, and project-specific requirements.

A Complete, Installation-Ready System



Jobsite-Ready Installation
Factory-assembled and project-configured, MagnaPlast™ arrives ready to set, connect, adjust to final grade, and complete with project-specified anti-flotation and backfill requirements.



Typical MagnaPlast™ Installation Section
Project-specific dimensions, bedding, backfill, groundwater control, access-and-cover loading, and installation requirements apply.

For technical information or project-specific configuration, or quotation requests: sales@houstonpolytank

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