

Monoform™ Solutions

Monoform™ Solutions for Fully Structural Manhole Rehab & Installation

HK Solutions Group has decades of experience restoring underground infrastructure within municipal communities and industrial facilities. With our advanced field experience, state-of-the-art technology and proprietary processes, we can confidently say crumbling manholes are no match for our custom Monoform™ manhole rehabilitation solutions.

Through various connections, acquisitions and partnerships in the industry—including our collaborative partnership with **AGRU plastics**—we've developed a series of manhole lining solutions to revolutionize sewer rehabilitation across the U.S.

What is Monoform™?

Monoform™ is a fully structural trenchless **manhole rehab** solution designed to restore leaking, cracked and deteriorating manholes **without digging**. Instead, technicians install plastic molds within the structure's interior and insert a heavy-duty concrete liner inside the manhole, strengthening its foundation for like-new longevity.

HK's one-of-a-kind Monoform™ manhole lining process is designed to deliver more efficient, cost-effective sewer repairs to our customers. We pride ourselves on offering state-of-the-art solutions tailored to meet the needs of each project we take on. That's why we took the proven success of Monoform™ one step further by applying it to a variety of use cases to better serve our customers.

Comparing Monoform™ Manhole Lining Solutions for Trenchless Sewer Repair, Manhole Restoration & Installation

Along with our exclusive **Monoform™** manhole liners, we've curated custom solutions to

Call Now!

installation, Monoform LIFT™ to support underground infrastructure maintenance in areas requiring an elevated structure, and Monoform CORE™ for internal structural rehabilitation for severely deteriorated manholes.

Feature/ Benefit	Monoform™	Monoform PLUS™	Monoform CORE™	Monoform HEX™	Monoform LIFT™
Primary Purpose	Standard trenchless manhole rehab	Corrosion-resistant manhole rehab	Core structural manhole repair	No-dig manhole installation	Raising/reinforcing manholes
Applications	General manhole rehabilitation	High H ₂ S environments, corrosive conditions	Reinforcing deteriorated manholes	Utility access where traditional excavation isn't possible	Manholes in flood-prone areas, levees
Corrosion Resistance	✗ No	✓ Yes	✓ Yes	✗ No	✗ No
Trenchless	✓ Yes	✓ Yes	✓ Yes	✗ No (hydro-excavation)	✓ Yes

We provide in-house fabrication and field fabrication, as well as field welding, to secure the integrity of failing **underground infrastructure** otherwise susceptible to leaking, cracking or corrosion. While our approach varies depending on the needs of the project, we always exercise the utmost precision to ensure you're truly receiving the best solution, no matter the application.

Ask HK About Our
Monoform™ Solutions

Monoform™: A Trenchless Manhole Rehab Solution

Our original Monoform™ service is a cost-effective, trenchless approach to structural manhole rehab. The Monoform™ manhole lining process involves assembling a plastic form inside a deteriorating manhole, pouring ready-mixed concrete around the form and then removing the form. Monoform™ is an excellent solution for typical manhole repair and rehabilitation projects in situations that don't require additional fortification or hydro-excavation.

See Monoform™ in action:

Call Now!

Trenchless Manhole Rehabilitation Using Monoform™



Schedule a Monoform™
Demo

Monoform PLUS™: Manhole Rehabilitation with Anti-Corrosion Protection

HK's Monoform PLUS™ process is the result of our acquisition of **Turner Lining Company**, a premier fabrication contractor of AGRU Ultra-Grip™ HDPE plastic. Partnering with AGRU, we worked closely to develop a 100% corrosion-resistant manhole rehab solution.

Monoform PLUS™ is a polyethylene manhole solution perfect for applications where standing water and high hydrogen sulfide concentrations rapidly deteriorate concrete manholes and structures. It's the only **manhole rehab** technique on the market proven to eliminate infiltration, exfiltration and corrosion. HDPE manhole liners offer long-term durability compared to traditional concrete manhole structures.

Learn more about our Monoform PLUS™ solution:

Call Now!

Manhole Rehabilitation w/ Monoform PLUS™: 100% Corrosion-Resistant



Request a Quote for
Manhole Rehab

Monoform HEX™: Manhole Installation with Hydro-Excavation

Monoform HEX™ enables structural manhole installation in situations where excavation needs to be minimal and precise. The hydro-excavation process allows for advanced precision and reduced risk when working around delicate utilities. Monoform HEX™ is great for applications like levee projects when surrounding soil needs to remain intact and undisturbed. Monoform HEX™ is also a great candidate for areas like wetlands where traditional excavation is not possible.

Call Now!

Monoform HEX™: Trenchless Manhole Installation with Hydro Excavation



Discover Monoform
HEX™

Monoform CORE™

Monoform CORE™ is designed for manholes that have reached an advanced stage of deterioration, corrosion or structural compromise. Instead of relying on the original structure for support, this solution rebuilds manholes from the inside out.

Crews insert a precision-cut HDPE pipe liner directly into the manhole to act as a permanent form. From there, we reconstruct the bench, seal all joints, and inject high-strength, flowable concrete between the existing structure and the new liner. The result is a fully structural solution with the performance and longevity of a brand-new manhole - delivered with significantly less excavation and disruption than traditional replacement methods.

Monoform CORE™ is ideal for high-risk environments or severely degraded manholes where standard trenchless rehab options aren't viable.

Call Now!

Request a Structural
Assessment Today

Monoform LIFT™: Raising & Reinforcing Manholes in Delicate Levee Areas

For manholes located on a levee or another area prone to flooding, Monoform LIFT™ enables trenchless manhole restoration to restore deteriorating manholes and adjust elevation to the desired height. We install both a lower and upper concrete liner to reinforce the existing manhole structure and create more height before placing a new manhole cover. Enjoy all the benefits of Monoform™ or Monoform PLUS™, with the added bonus of a more conveniently located manhole to accommodate tricky terrain and flooding.

Ask HK About Monoform
LIFT™ for Levees

Monoform™ is the Preferred Solution for Minimally-Invasive Municipal & Industrial Manhole Rehab

As a trenchless manhole lining solution, Monoform™ eliminates many of the risks and issues associated with a traditional manhole replacement. No digging is just the tip of the iceberg. **HK's manhole liners** fully restore ailing sewer structures, providing equal—if not better—performance and longevity compared to a replacement. Monoform™ helps industrial and municipal customers get more life out of their sanitary sewer structures and collections systems without sacrificing the quality required for critical **underground infrastructure**. More highlights include:

- Liners typically installed in just two days, a much faster turnaround than a traditional replacement
- Minimal disturbance to traffic, utilities or ongoing operations
- Structural integrity and surrounding environment remain intact
- Built for a full lifespan of at least 50 years
- Mitigates **inflow and infiltration** issues along with subsequent expenses
- Monoform PLUS™ prevents manhole corrosion, reducing maintenance needs and costs compared to traditional sewer structures

Call Now!

- Cut costs all around: quick installation means more cost-effective labor and no digging eliminates the need to pay restorative landscaping or paving fees
- No external bypass pumps required, as we manage flow with an internal bypass system
- Durable liners support the weight of a fully loaded train and are approved for use in strenuous environments, including **railways** and production floors



Interested in Monoform PLUS™ & More Manhole Lining Solutions? Call HK to Get Started!

HK Solutions Group is a leading industrial and municipal services provider specializing in **sanitary sewer maintenance** and **manhole rehabilitation**. Our full line of Monoform™ manhole lining solutions is here to take away the complexities and costs associated with traditional sewer repair.

Are you in a corrosive environment? No problem, that's why we developed Monoform PLUS™! Need access to utilities with no manhole in sight? That's where Monoform HEX™ for **manhole installation** comes in! **Contact us** online to learn more about our solutions, or give us a call at **(515) 789-3078** to get started with quick, convenient, cost-effective sewer rehabilitation today.

Call Now!