





Innovative solutions that are flexible, reliable, and resilient

Modern society has low tolerance for disrupted essential services. This creates high demand for reliable power supplies, data security, and grid resiliency — all essential considerations in every infrastructure engineering project.

Based on years of expertise solving field-based problems, Polywater | Hauff Technik offers the innovative products needed for hardening today's systems. Our solutions provide performance and durability, while ensuring flexible expansion options that adapt to future needs.













Structure entrances — secure, sealed, scalable

Duct banks are designed to protect underground cabling and provide entrances into a structure. With few choices and limited permitting, it is important to consider which entrance best allows future expansion with minimal additional cost.

For poured or cast structures, the PHSI-VARIA offers a new way to create gastight and watertight duct banks. This solution creates secure, sealed pathways now and into the future.

VARIA modules

- Effortlessly create duct banks by locking modules together.
- Patented design easily secures to rebar or forms.
- Inner ribs direct concrete into place and, when cured, guard against water ingress.
- Clear cover provides protection against debris with a double-seal and improves site safety by allowing field crews to check for water in the duct before removal.

PHSI sealing options are engineered to integrate with the bayonet locking mechanism on Varia and DFK entrances. This ensures proper alignment for a watertight and gastight seal. Every time. Sealing options:

- Interlocking **heat and cold shrink seals** connect cables from direct buried or open trough duct banks.
- PHSI-DG and PHSI-PHRD6 mechanical seals provide exceptional sealing and durability for single or multiple cables/pipes.
- The innovative **Segmento** modular system integrates with PHSI to manage newly installed cables. Match various cable sizes and configurations with three insert module choices for flexibility and field convenience. Change cable group combinations with ease. Unused openings are sealed and available for future use.

PSEK

PSEK offers a closed system for up to 24 cables per frame. It inserts easily into portable distribution centers, containers, and above-grade substation and building entrances.

• The split design swings open to quickly and easily seal cables.













External pipe security — protecting from structural damage

The NESC code requires sealing both inside and around conduits at building entrances to prevent the incursion of gases into structures. In addition to keeping out gases, seals can prevent water, dirt, and rodents from causing costly damage and outages.

PHSI-DFK or PHRD-FG FLANGES

PHSI-DFK or PHRD-FG flanges are easily installed in existing concrete or metal structures for a durable entrance. Both flanges create resilient and reliable sealing systems when combined with Polywater-Hauff Technik mechanical seals.

InstaGrout™

Mounted enclosures and equipment need to block more than debris and water. Rodents, snakes, and insects can damage cables, create outages, and pose health risks. Polywater InstaGrout™ deploys conveniently in the field, requiring no water.

- Flows freely around stub-up cables and conduits, and self levels.
- Cures to form a robust barrier that effectively seals an enclosure from intruders.

PGKD modular

The PGKD modular seal offers durability and performance, and assures owners and installers that it has been installed properly.

- Watertight to 72 PSI.
- An integrated, patented visual indicator that validates secure seal installation.

PHSD SSG

The PHSD SSG provides the ability to peel individual layers of EPDM rubber to custom fit the annular space and OD of a conduit or cable in the field.

- Installers can inventory seals for a wide range of projects and cable/pipe diameters.
- Watertight to 32 PSI.





Internal pipe security — preventing costly outages

All buildings, particularly those with mission-critical functions, require robust watertight and gastight seals at structural pathway entrances, as stated in NEC code. Conduits and pipes must be completely sealed to prevent damage or outages caused by water, gas, dirt, or rodents, especially in Class 1 Division 2 locations.

Polywater | Hauff -Technik seals:

- · Engineered one-piece design that opens to fit installed cables
- Guaranteed performance backed by a 10-year warranty
- · Watertight to 32 PSI
- · Effective in environments with post installation movement or vibration
- · Maintains a pressure differential for negative pressure spaces

PHRK and PHRD-SG

PHRK and PHRD-SG segmented ring technology enables installers to custom fit cables in the field by peeling and removing the rings.

- Unused openings remain closed until needed for future expansion.
- Choose from a variety of sizes and cable opening configurations.

PHRD

PHRD seals are custom-cut to meet your cabling project needs.

- UL certified for conduit entrances in buildings with critical electrical equipment areas.
- Optional flanged pressure plates offer greater safety and ease of installation in vertical applications.

FST[™] and **AFT**[™]

For situations where mechanical seals are not an option, Polywater FST and AFT closed-cell duct sealants meet the NEC requirements for raceway seals while providing superior performance.













Infrastructure designed to last

Your Project.

Strong infrastructure construction is needed to better protect customers from outages. How are systems hardened against water, gas, weather, and rodents? There is no "one size fits all" solution for grid hardening and asset protection.

Your Solution.

The ability to provide hardened protection in and around cables, conduits, pipes, and structure entrances exists with innovative sealing systems from Polywater | Hauff Technik. Our solutions are durable, reliable, and easy to install. Specify these products to ensure your project is built to last.

The right products for critical projects

Data Centers

These vital facilities require constant temperatures and large, redundant, and uninterruptible power sources to run at optimum levels. Manage outage risks by specifying best-in-class sealing solutions.

Renewable Energy

The electrical grid is evolving with the interconnection of power sources: wind, solar, DERs, and microgrids. Varying systems require a wide range of products to meet requirements.

Utility

T&D and switching substation control houses need protection from water, gases, and animal intrusion to prevent power interruption. Sealing underground electrical systems mitigates the occurrence of manhole events by stopping explosive gases.

Water/Wastewater

Medium voltage systems, hazardous and classified locations, and harsh environments demand reliable seals. Contaminants can compromise critical apparatus if not protected.

Find the right solution for your project needs with these tools:

Building Information Modeling (BIM) offers over 90 versions of software. <u>Link</u>
Planning tool helps determine the correct product for a job. <u>Link</u>
PGKD Modular Seal Calculator to determine size and number of segments. <u>Link</u>
Polywater FST foam sealant calculator to verify the amount required. <u>Link</u>

Polywater and Hauff-Technik collaborated to offer best-in-class sealing solutions for cables, conduits, pipes, and building entries that provide the performance your project demands. We have a long history of developing world-class product performance and innovative solutions for infrastructure construction and maintenance. Our products are engineered to deliver guaranteed watertight and airtight seals. They are resilient, easy to use, and future-ready.

IMPORTANT NOTICE: The statements here are made in good faith based on tests and observations we believe to be reliable. However, the completeness and accuracy of the information is not guaranteed. Before using, the end-user should conduct whatever evaluations are necessary to determine that the product is suitable for the intended use. American Polywater expressly disclaims any implied warranties and conditions of merchantability and fitness for a particular purpose. American Polywater's only obligation shall be to replace such quantity of the product proven to be defective. Except for the replacement remedy, American Polywater shall not be liable for any loss, injury, or direct, indirect, or consequential damages resulting from product's use,

CONTACT US

1-800-328-9384 Toll Free **1-651-430-2270** Main

1-651-430-3634 Fax

email: support@polywater.com

website: www.polywater-haufftechnik.com

American Polywater Corporation 11222 60th Street N Stillwater, MN 55082 USA



