



FILTER UPGRADES

LOW PROFILE

EASY INSTALLATION

LOW HEADLOSS

← Applications

- New Filter Designs
- Retrofit Existing Filters
- Complete filter systems for municipal drinking water and industrial process water



TETRA™ Block Underdrains are a high-density, dual-parallel, lateral underdrain system that provides superior distribution of both water and air, for either concurrent or sequential backwash.

Air and water is distributed uniformly over the entire filter bottom to scour the media and to provide an airlift that, with water, removes released solids from the filter. This dual backwash action provides intense washing energy throughout the filter bed.

The effectiveness of this cleaning action and the uniformity of air and water distribution provide consistent filter run times and extend the life of the filter media.

MAIN FEATURES

- Lightweight, easy to handle
- Two block profile options
- Easy and quick installation – snapfit, bell and spigot joint
- NSF certified & corrosion-resistant materials
- Lower cost versus low profile stainless steel alternatives
- Long, maintenance-free life



TETRA™ LP & U BLOCK UNDERDRAIN SPECIFIC TECHNOLOGY

Infilco's TETRA™ Block Underdrain design is unmatched in the industry. Both the "LP" and "U" block are offered with three choices of media retaining plates (MRP) for any media configuration. The advanced design of the low profile, "LP" block, offers 4 additional

inches of depth, 3 times the pullout strength, 33% less installation time, 25% less grout and 10% more effective filter versus the conventional "U" underdrain block. Whether a new or an existing filter, the TETRA™ blocks can be designed for any filter basin.

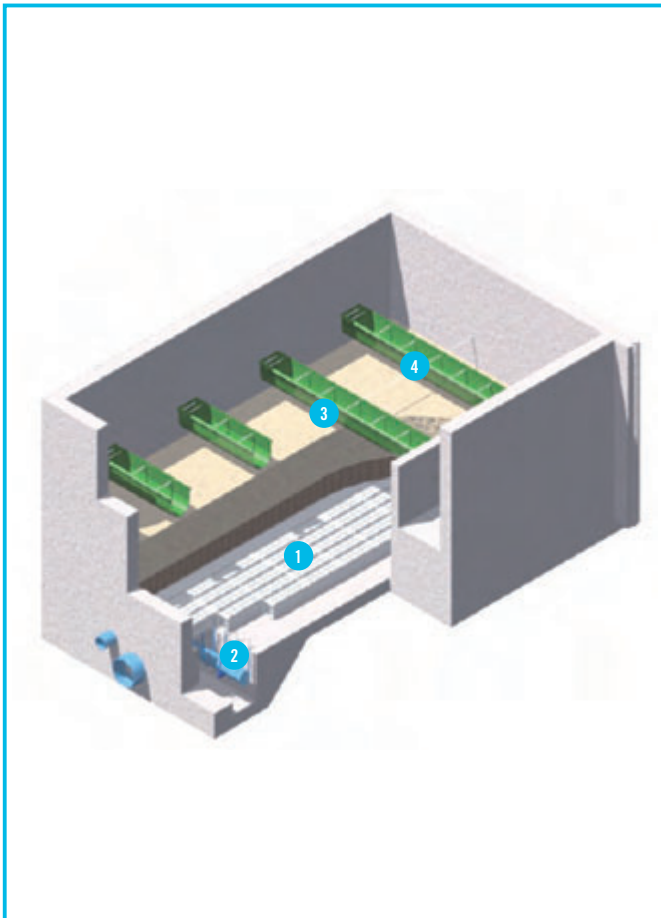
TETRA™ BLOCK UNDERDRAINS

HOW IT WORKS

A COMPLETE FILTRATION SYSTEM

Incorporate the TETRA™ Block Underdrain system into your new or retrofit filter design. Infilco Degremont offers just the underdrains or a complete filter package including air scour or surface sweeps, media, washtroughs, instrumentation and controls. A full filter package from Infilco Degremont ensures compatibility and single source responsibility for all your filter components.

- 1 BLOCK UNDERDRAIN:** Select either the “LP” or “U” block underdrain, with or without a media retaining plate (MRP), for placement in the base of the filter basin.
- 2 FLUME & AIR SCOUR:** An air header pipe engineered for specific backwash requirements is located within the filter flume. The block underdrain may be designed with one of many flume configurations (center, front, etc.).
- 3 MEDIA:** The block underdrain may be designed for support of nearly all media configurations (mono-media, dual-media, GAC). The MRP eliminates the need for support gravel, common with other underdrains.
- 4 WASH TROUGH:** Complete the internals of your filtration system with NSF certified, fiberglass “U” troughs.



Product Highlights

TETRA™ U BLOCK

- Snap fit, single gasket, bell-and spigot joint assembly ensures a tight fit with no leaking
- Long, maintenance-free life with no moving parts or corrodible materials
- Easily adapted to new or old filter designs for hydraulic-only, or air/water backwash applications
- Even distribution of air and water across the entire filter bed during backwash guarantees high efficiency backwash and a clean filter bed without dead spaces, mud balling, or filter failures
- Low headloss, non-clogging underdrain eliminates filter blowups
- Filter support gravel is not required

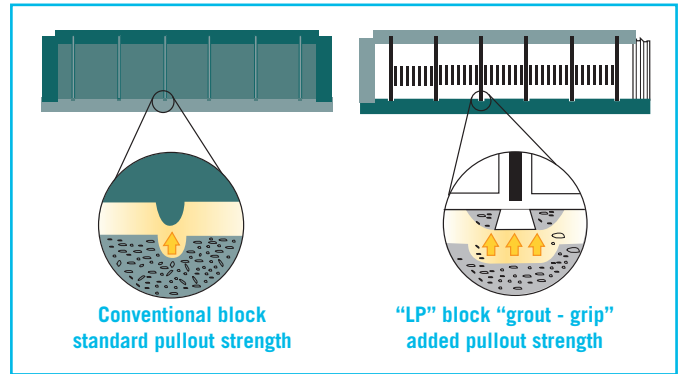
TETRA™ LP BLOCK

The LP Block offers all of the advantages of the U Block, plus:

- Lower Installed Cost - 6” wider profile means fewer blocks, fewer joints, and less grout
- Flexible - Block can be cut in half lengthwise to avoid grouting space that will not accommodate a full - width block
- Strength - Patented LP “Grout - Grip” integral grip resists pullout failures
- Media leakage is negligible
- Maldistribution - Less than 5% for lateral lengths up to 30 feet long

ADDED VALUE WITH “LP” BLOCK

- The “LP” block’s lower profile allows for the retrofit of existing shallow filters, while adding filter depth to media, operating head or freeboard.
- The “LP” block leads the industry in its ability to resist uplift forces. The blocks include integrally molded wedges (“Grout - grip”) that key into the floor grout, resulting in 3 times the pullout strength versus conventional block underdrains.



DESIGN SPECIFICATIONS

	“LP” Block™	“U” Block™
Maximum Lateral Length Each Side of Flume at 20 gpm / ft²	30'	60'
Headloss at 20 gpm / ft², 30' lateral length	2.25' W.C.	2.25' W.C.
Headloss at 4 scfm air & at 5 gpm / ft² Water BW	6.20' W.C.	8' W.C.
Total Maldistribution (lateral and flume)	+ / - 5%	+ / - 5%
Available Media Retaining Plate (MRP)	S, B, T	S, B, T
Available Media Suitable for MRP*	M, DM, MM	M, DM, MM
Additional Freeboard or Media Depth Available with MRP	11"	11"
MGrout Costs (compared to competitor's underdrains)	25% lower	NA
Labor Costs (compared to competitor's underdrains)	33% lower	NA

*S - MRP + M = Mono media (anyone of the following GAC, Sand, or Anthracite), S - MRP + DM = Dual media (combination of the following GAC / Sand, Anthracite / Sand)
 B - MRP + MM = Mixed media (combination of the following GAC / Sand/Garnet, Anthracite / Sand / Garnet)

MEDIA RETENTION PLATES (MRP)

The media retention plate is a porous, tri-molded, bi-molded or single-molded plate factory installed on the top of each block underdrain. The TETRA™ Block Underdrains may be installed with any one of the media retention plates.



SAVAGE PLATE- MEDIA RETENTION PLATE

Lightweight and easy to install, the SAVAGE PLATE® is a high-density, polyethylene porous plate that replaces gravel in TETRA™ underdrain installations. The elimination of support gravel means a deeper media bed can be installed in any shallow filter.

The SAVAGE PLATE® is securely fastened to the top of the underdrain block with three rows of stainless steel screws and then sealed with NSF-certified polyurethane sealant.

Technical Features

- Removable for inspection
- Compatible with water treatment chemicals
- Provides uniform flow distribution at a headloss equivalent to or less than gravel
- Eliminates the need for support gravel

TECHNICAL SPECIFICATIONS

Parameter	S PLATE™ (Single - Molded)	B PLATE™ (Bi - Molded)	T PLATE™ (Tri - Molded)
Average Porosity	500 micron	500 micron (top) 300 micron (bottom)	500 micron (top) 300 micron (middle) 500 micron (bottom)
Bulk Density	38 to 40 lbs / ft³	38 to 40 lbs / ft³	38 to 40 lbs/ft³
Modulus of Rupture	700 psi @ 70°F	700 psi @ 70°F	700 psi @ 70°F

TETRA™ BLOCK UNDERDRAINS

COMPLETE TREATMENT SOLUTIONS

Infilco Degremont offers an array of water, wastewater and industrial treatment solutions for any size client. Headworks, clarification, filtration, biological and disinfection systems are several of the product disciplines in our portfolio.

If interested in this product, check out some of the complementary SEPARATIONS products:

- Monoflor® Nozzle Underdrains
- Superpulsator® Clarifier
- AquaDAF® Clarifier
- Accelator® Clarifier-Softener
- Greenleaf Filter System



With a variety of filtration and clarification products in our SEPARATIONS department, Infilco engineers carefully evaluate each application to provide the most cost-effective and efficient treatment solution.

- ABW® Automatic Backwash Filter
- PulsaPAK® Package Clarifier/Filter System
- AquaPAK® DAF - Package Clarifier/Filter System
- AccelaPAK® - Package Clarifier/Softener/Filter
- DensaDeg® Clarifier/Thickener

SERVICES INFILCare®

Part Sales

Infilco Degremont sells parts and components for most INFILCO brand equipment as well as parts for demineralizers, thickeners, nozzles, pressure filters, and valves. We offer reliable spare parts at competitive prices. We maintain records of previous installations to quickly identify your requirements. Many items are shipped directly from stock for quick delivery.



Rebuilds, Retrofits and Upgrades

Infilco Degremont offers cost-effective rebuilds and upgrades for INFILCO provided systems, no matter what year they were built. If you are interested in an economical alternative to installing a whole new system, contact us for a proposal.



Contacts

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