



**eVOQUA**  
WATER TECHNOLOGIES



## **ENVIREX<sup>®</sup> CHAIN & SCRAPER SLUDGE COLLECTOR SYSTEMS & COMPONENTS**

# EVOQUA IS THE TECHNOLOGY LEADER IN SLUDGE COLLECTORS

Envirex® rectangular sludge collector systems and components are made of advanced materials and designed for long life and reduced wear. They offer more options, material choices and sizes than anyone else in the industry. All systems and components are designed to meet the specific requirements of each installation, whether for new construction or when retrofitting existing collectors.

## 1 Carrier Chains

**Envirex® NCS720S Chain:** This is the worldwide standard for molded collector chain. Lightweight and easy to install, it provides wear resistance, chemical resistance, and long service life. Some of the original installations have over 20 years of successful operation.



**Envirex® HS730 Chain:** Constructed out of high-strength composite materials, Loop Chain is suited for collectors that are heavily loaded or are over 300 ft (90 m) in length. It is the only non-metallic collector chain that offers strength nearly equal to cast and stainless steel chain at a fraction of the weight.



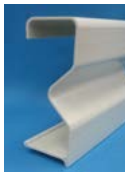
**Envirex® ENV715 Chain:** Manufactured out of Series 400 stainless steel with hardened pins and bushings, ENV715 collector chain provides excellent strength and corrosion resistance. This chain is suitable for applications with elevated grit levels or sludge loads where a stronger, more robust chain is required. It is especially suited for plants using stacked (double deck) collectors where the collectors can't be visually inspected or easily accessed.



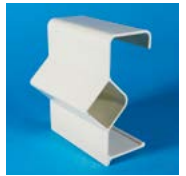
## 2 Fiberglass Scraper Flights

Envirex scraper flights are pultruded out of fiberglass for consistent shape, quality and performance. The fiberglass is totally encapsulated in a water resistant resin to prevent wicking, ensuring the flights remain strong and stiff throughout their service life. The standard size is 3 inch by 8 inch (76 mm x 203 mm) and will fit existing F28 attachment mounting hole patterns.

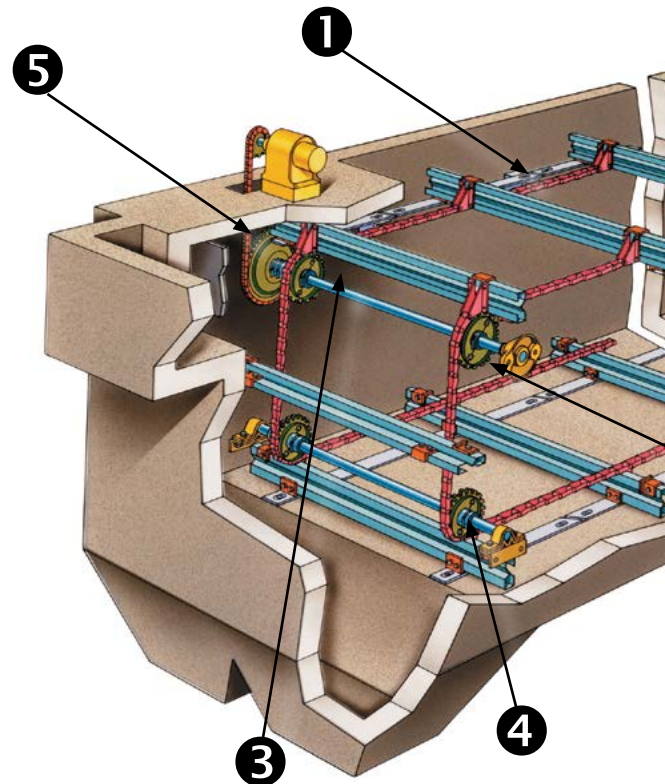
**Sigma Plus Flights:** This flight is an improvement over conventional channel flights due to its transverse concave indentation. With 60% greater structural support compared to a channel flight, it can be installed in collectors up to 25 feet (7.6 m) wide.



**Diamond Flights:** This high strength flight can handle heavy sludge loads or be used in tanks up to 32 feet (10 m) in width. This special design gives it exceptional resistance to deflection and twist.



**Extensions:** Envirex flights can be provided with an integral face extension to permit more effective movement of lighter secondary or alum sludge, which can flow over shorter flights. It also provides added stiffness and strength for challenging applications. Sigma Plus extensions are available in 3 inch (76 mm) and 7 inch (178 mm) heights, and the Diamond is available with a 4.5 inch (114 mm) extension.



## 3 Shafting - Head

**Metallic:** Solid construction up to 25 ft (7.6 m) or torque tub to 30 ft (10 m), keyed to suite. Available in carbon or stainless steel.

**Non-metallic:** This new assembly consists of a filament wound fiberglass unitube with UHMW PE end bearings. The tube rotates over fabricated stainless steel wall supports to provide proper load absorption. The result is a headshaft that is lightweight, corrosion resistant, and doesn't require additional external lubrication.



#### 4 Shafting - Corners

**Full width:** Solid construction for use in either live (in bearings) or static (fixed, not rotating) applications. Available in carbon or stainless steel.

**Stub shaft:** Cast iron tripod with extendable metallic stub end to accommodate tank wall irregularities.



**Driven:** Non-metallic and split construction for easy installation. Dished to accommodate wall bearings and to avoid contact with flights. Replaceable or integral teeth are available.

**Materials:** Teeth in polyurethane or cast nylon. Bodies in polyurethane, cast nylon or cast iron.



#### 6 Return Tracks

**Angles:** Wall mounted supports with replaceable UHMW PE wear strip for low friction and extended service life for flight wear shoes and support rails. Non-metallic wall brackets that are adjustable in the field to ensure proper flight tracking along the collector. Available in fiberglass, carbon or stainless steel.

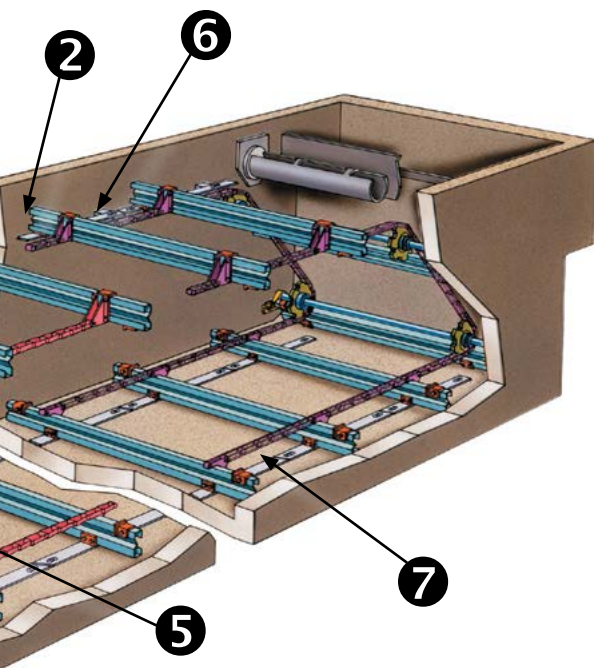
**J-Track:** Named for the unique shape of the main fiberglass structural member, this special configuration eliminates twisting and bowing for track support spacing greater than 20 ft (3 m). A UHMW PE wear strip slides on top of the J, eliminating the need for mounting hardware, maximizing the effective wearing thickness.

#### 7 Wearing Strips

**Floor:** The Envirex wear strip system is attached directly to the tank floor to conform to rough concrete surfaces and uneven expansion joints. Manufactured out of UHMW PE material for low friction.

**C-Rail:** The floor-mounted version of the wear strip used with the J-Track. T-shaped cleats accommodate the special wear strip, eliminating mounting hardware and maximizing the effective wear shoe.

**Return Track:** Same as the floor wear strips, but attached to fiberglass return track with self-tapping screws to reduce installation time. Can also be attached to metallic return tracks with weldable washers.



#### 5 Sprockets

**Collector:** Non-metallic and split construction for easy installation. Integrally molded hubs, tooth profile and chain saver rim for optimum integrity and strength. Captured keyway or set screwed for headshaft sprockets to ensure accurate location.

**Driver:** Non-metallic teeth on a metallic hub with torque overload protection.





We offer complete installation and after-sales services to help you protect your investment.

- Our experienced field service personnel—the largest group in the industry—can handle a complete upgrade, or do portions of it assisted by your personnel.
- We can handle the installation of new collectors, as well, working with your contractors or others. They can perform annual inspections, advise on inventory requirements and, of course, be on-site for emergencies.
- We can upgrade or retrofit any manufacturer's sludge collector with new, non-metallic components. The renovated collector will run smoother and require far less maintenance than the original.
- For replacement parts, we have the most extensive inventory in the business, and can ship from stock immediately when required.

**Envirex**<sup>®</sup>  
an EVOQUA brand



2607 N. Grandview Blvd, Suite 130, Waukesha, Wisconsin 53188

+1 (866) 926-8420 (toll-free) +1 (978) 614-7233 (toll)

[www.evoqua.com](http://www.evoqua.com)

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