

DUPERON®

FLEXRAKE® FP PLATFORM THRU-BAR™ TECHNOLOGY

The FlexRake FP platform is engineered to be the first line of defense to maintain process treatment integrity. It is a proven workhorse that just keeps running, easily managing a wide range of flow and debris variations, reliably and without shutdown. The FlexRake combines mechanical simplicity, long product life and set the standard for adaptability.



THE DUPERON DIFFERENCE

FLEXIBLE DESIGN

- *Adapts to a range of unpredictable flow and debris conditions without operator intervention*

PROCESS RESILIENCE

- *Effective fine solids removal through a broad range of flow and debris conditions so downstream assets remain protected*

RELIABLE OPERATION

- *The FlexRake adapts to handle grease, grit, first flushes, rags, large or unusual debris (2x4s, bricks or sewer plugs) without shutdown or operator intervention*

LOW COST OF OWNERSHIP

- *With few parts and minimal maintenance required, Duperon equipment is easy to install, own, and operate*

NO IN-CHANNEL MAINTENANCE

- *Eliminates the need for confined space entries to manage routine maintenance and jamming*

CUSTOMIZABLE

- *Engineered to fit the unique needs of your site*

DUPERON®
FLEXRAKE® FP
 PLATFORM

ADAPTIVE TECHNOLOGY

The FlexRake FP platform is specifically engineered for difficult-to-capture debris, making it ideal for wastewater and industrial applications. Backed by proven performance in over 1800 installations and 25+ years of application experience, FlexRake technology offers effective preliminary treatment to ensure downstream process integrity.

HOW THE FLEXRAKE WORKS



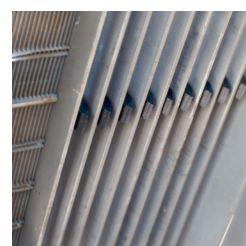
1
 The FlexLink™ articulates to a 90 degree angle, closing on the drive pin. Once closed, the sprocket drives the link system forward.



2
 As it leaves the drive sprocket, the FlexLink™ locks into a solid bar, forming its own frame.

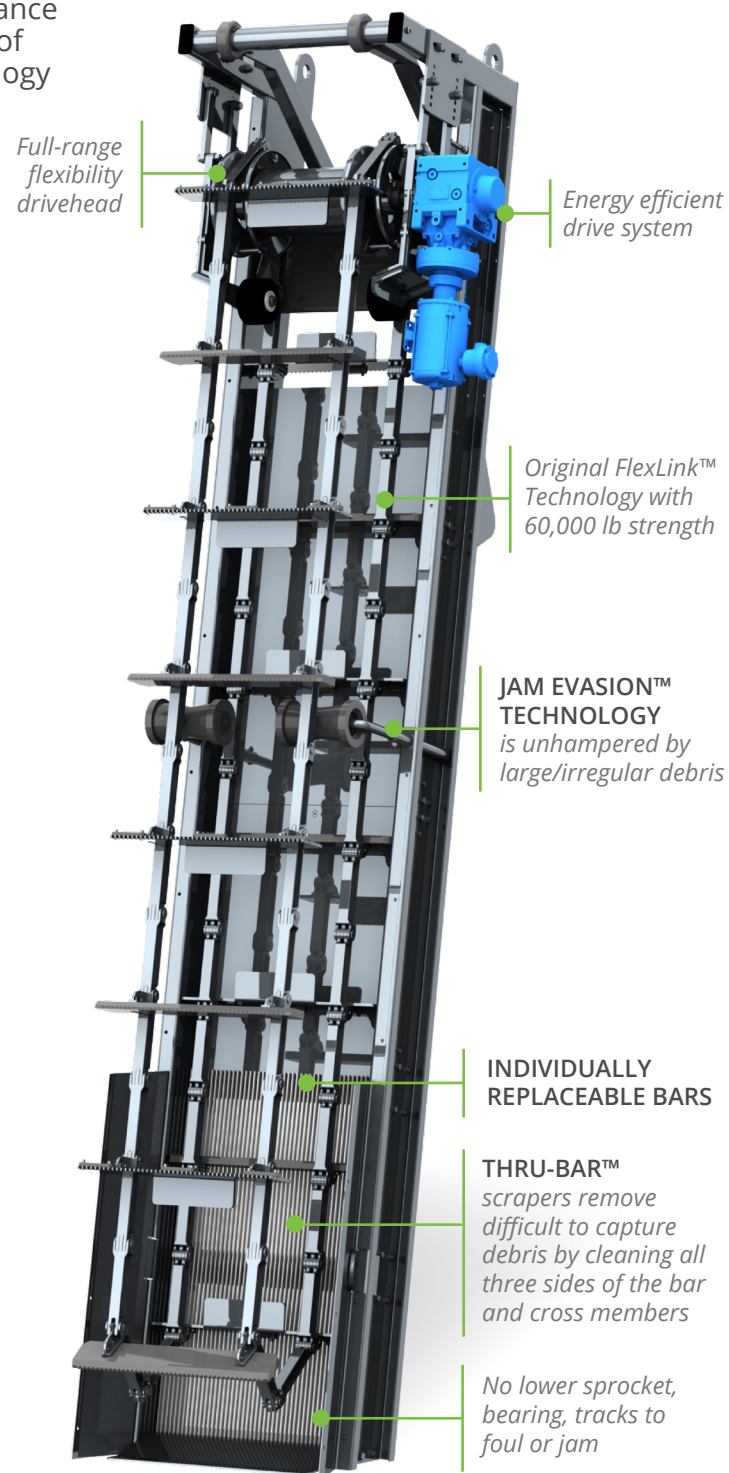


3
 The FlexLink™ forms its own rotating framework at the bottom of the channel.



4
 Industry-leading Thru-Bar scrapers engage into the bar screen, cleaning all 3 sides of the bar and the horizontal cross member.

PROVEN STANDARD OF
SIMPLICITY
 In 1995, Duperon invented the FlexRake and transformed the water and wastewater industry



DUPERON®
FLEXLINK™

The achievement of mechanical simplicity requires the design of one part doing more. The simplicity of the Duperon FlexRake is possible through the multi-functioning action of one part: the FlexLink. This innovative design allows the link to function as a frame, lower sprocket, and connection point for scrapers, driven by a single sprocket. Since it is not trapped by a fixed path of travel, the FlexLink also allows the entire raking mechanism to flex, pivot and discharge large or irregular shaped debris that makes its way into the channel. The FlexLink assures reliable, adaptable, and trouble-free plant protection through its long product life cycle.

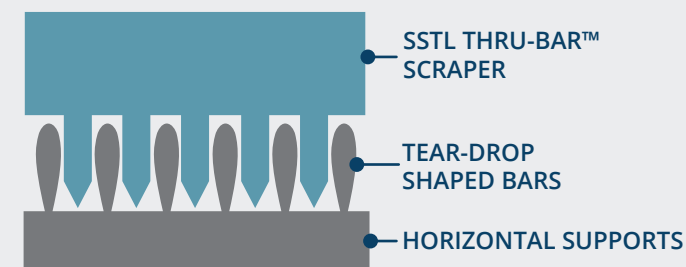
DUPERON'S SOLUTION TO:

- Lower sprockets
- Tracks
- Lubrication points
- Jamming
- Bearings
- Fouling
- Confined space entries
- High maintenance



FLEXRAKE® FPFS

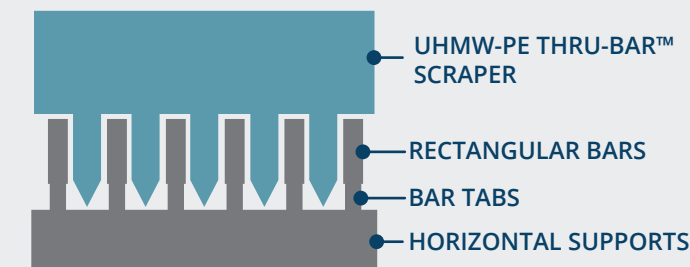
¼ in, ⅜ in, ½ in bar opening



SUPERIOR PERFORMANCE
 High capture rate and efficient hydrodynamics allow for more favorable flow conditions and less headloss

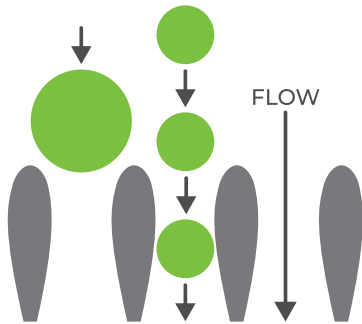
FLEXRAKE® FP

⅝ in or greater bar opening



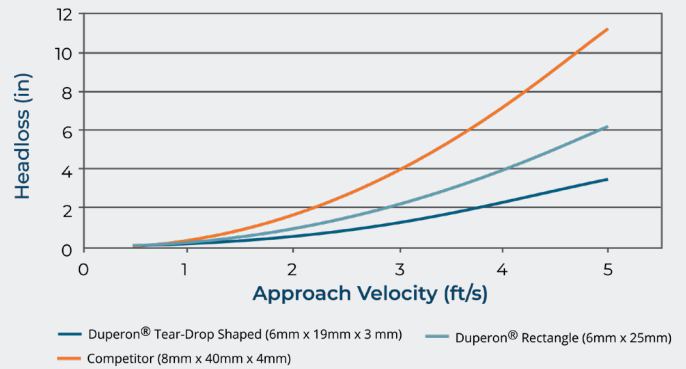
FLEXRAKE® FPFS TEAR-DROP SHAPED BARS

Due to the tear-drop bar shape, large items are captured at the face of the bar screen to be removed by a scraper. Smaller debris passes through without getting lodged between bars.



THE MOST EFFICIENT BARS IN THE INDUSTRY

Tear-Drop Shaped Bars vs. Other Type Bars



Tear-drop shaped bars translate to less headloss, less energy loss (for pumps), and decreased slot velocities for improved capture

PRODUCT DATA

FLEXRAKE® FP

FLEXRAKE® FPFS

BAR OPENINGS	$\frac{5}{8}$ in - 4 in	$\frac{1}{4}$ in, $\frac{3}{8}$ in and $\frac{1}{2}$ in
BAR SHAPE	Rectangular bar	Tear-drop shaped bar
SCRAPER CONFIGURATION	UHMW-PE Thru-Bar™	SSTL Thru-Bar™ and UHMW-PE staging scrapers
UNIT WIDTH	2 ft to 12 ft, single strand unit available 18 in to 24 in	
UNIT LENGTH	10 ft to 100 ft	
MATERIAL OF CONSTRUCTION	Available in 304 or 316 SSTL	
FLOW CAPACITY	Designed to your site	
CLEANING FREQUENCY	1 discharge per minute on low, 4 discharges per minute on high	
LIFTING CAPACITY	1,000 lbs, 3,000 lbs option available	
ANGLE OF INSTALLATION	Vertical to 45 degrees, dependent upon site	
TYPICAL MOTOR	$\frac{1}{2}$ hp inverter duty, explosion proof	
STANDARD CONTROLS	Packages range from simple start/stop to sophisticated automation. Motor overload protection provided	
OPERATION OPTIONS	Continuous/manual, automatic with timer, float, SCADA, differential/high-level sensing options with I/O as needed	
APPLICATIONS	<ul style="list-style-type: none"> Preliminary treatment Headworks Pump/lift stations Combined sewer overflows 	<ul style="list-style-type: none"> Pulp & paper mills Food & beverage Raw water intakes Prisons