DUPERON®

PRELIMINARY LIQUID/SOLIDS SEPARATION

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*

1200 Leon Scott Court, Saginaw, MI 48601 F 989.754.2175 TF 800.383.8479 www.duperon.com

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.

PROVEN STANDARD OF

SIMPLICITY

In 1995, Duperon invented the FlexRake and transformed the water and wastewater industry

HOW THE FLEXRAKE WORKS

1

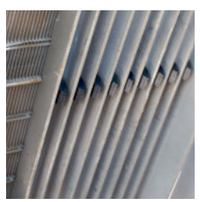
The FlexLink™ articulates to a 90 degree angle, closing on the drive pin. Once closed, the sprocket drives the link system forward.

2

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

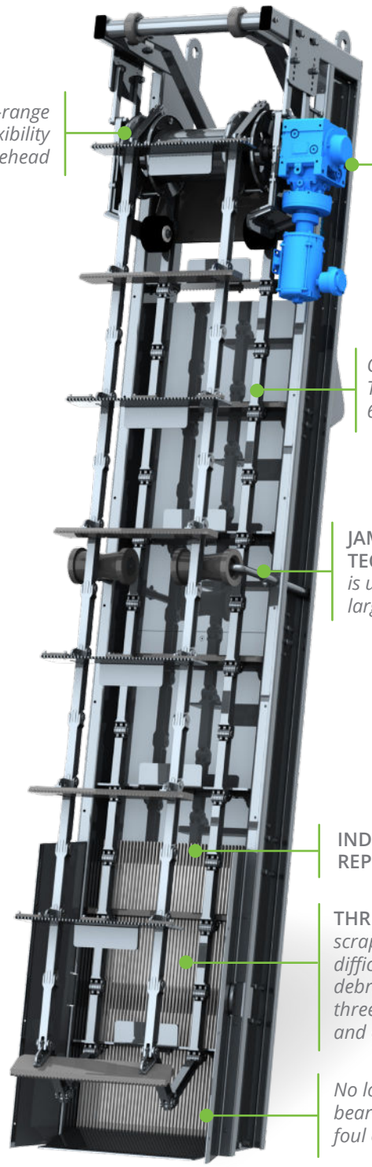
3

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



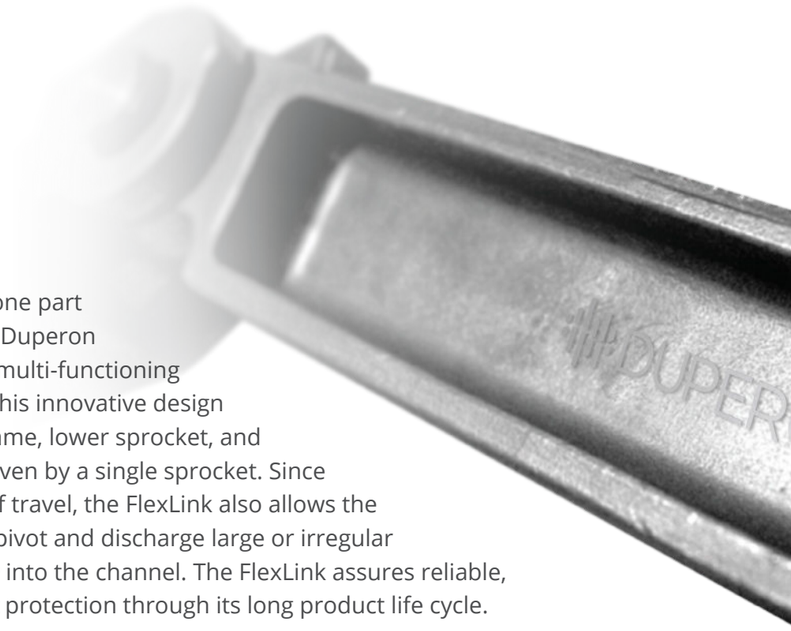
4

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



DUPERON®

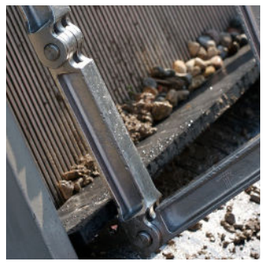
FLEXLINK™



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.

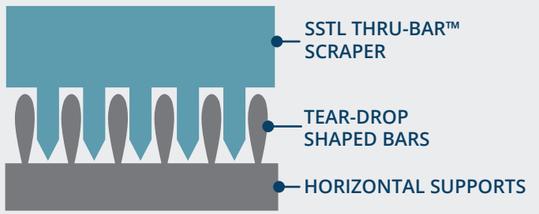
DUPERON'S SOLUTION TO:

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



FLEXRAKE® FPFS

¼ in, ⅜ in, ½ in bar opening

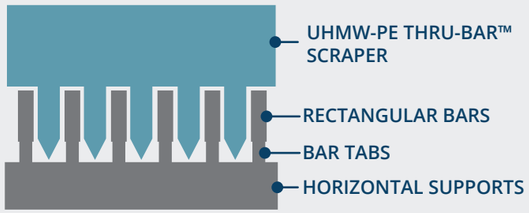


SUPERIOR PERFORMANCE

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

FLEXRAKE® FP

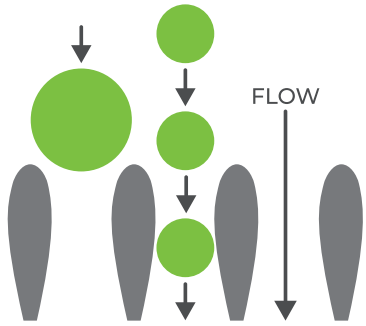
⅝ in or greater bar opening

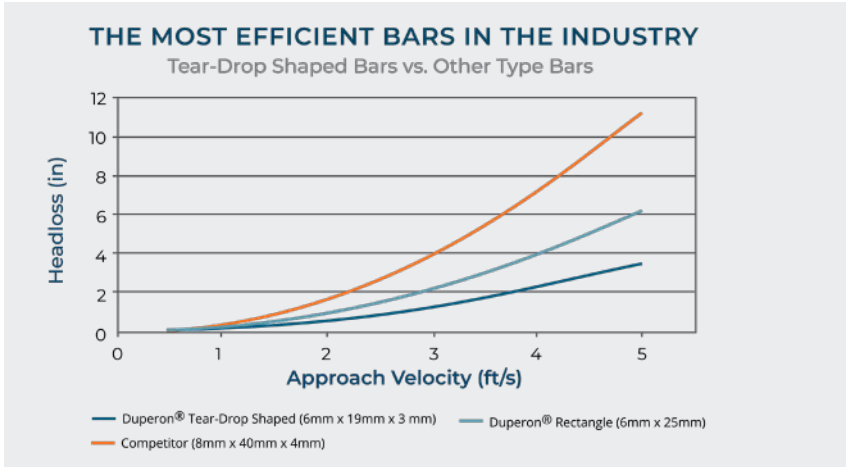


DUPERON®

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.





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	*⅝ in - 4 in*	*¼ in, ⅜ in and ½ 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	*½ 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	• *Preliminary treatment* • *Headworks* • *Pump/lift stations* • *Combined sewer overflows*	• *Pulp & paper mills* • *Food & beverage* • *Raw water intakes* • *Prisons*

DUPERON