

SCREENING SOLUTIONS FOR
POWER GENERATION



SIMPLE

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

CONSISTENT WATER SUPPLY

- *Continuous cleaning reduces risk of headloss or intake screen blockage to provide flow to turbines*

SYSTEM RELIABILITY

- *Designed to maintain critical operations without downtime or loss of power generation*

LOW MAINTENANCE

- *Allows primary focus to remain on revenue-generating activities*

FLEXIBLE

- *Duperon equipment adapts to a wide range of debris and flow variations*

WILDLIFE-FRIENDLY

- *Manatee Safe designation from the US Army Corps of Engineers (USACE), US Fish & Wildlife Services (FWS) and Florida Fish and Wildlife Conservation Commission (FWC)*

COST-EFFECTIVE RETROFIT

- *Mount a Duperon raking device on an existing stationary trashrack to save money and avoid large infrastructure upgrades*

CONSISTENT WATER SUPPLY FOR POWER GENERATION

Water intakes for power generation often address conditions such as high volume, high velocity, large debris, human refuse, aquatic vegetation, seasonal foliage, or even marine life. Continuous cleaning equipment assures unrestricted water flow at the intake and protects downstream turbines, cooling towers, and traveling water screens from harmful debris.

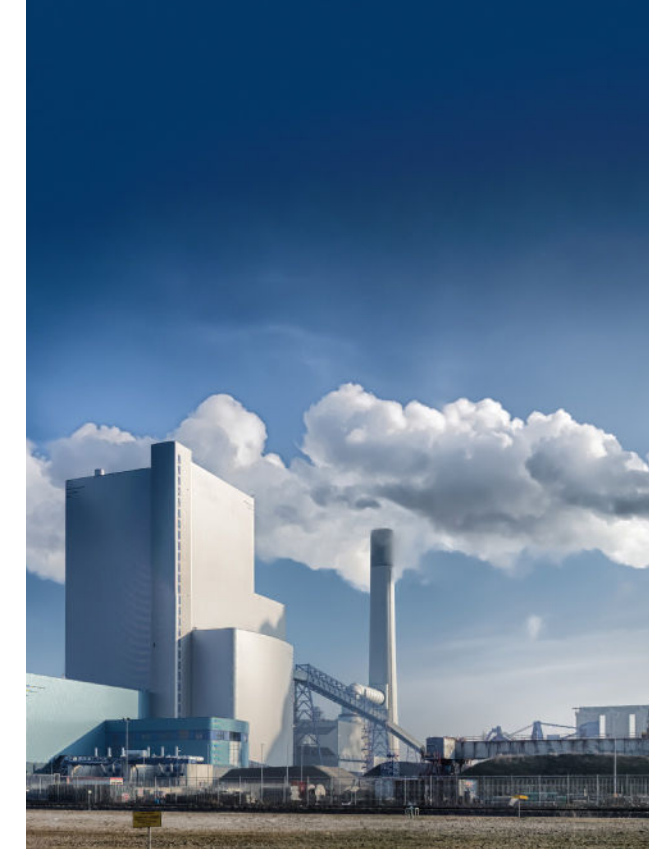
The Duperon Full-Screen Cleaning™ technology, cleans all of the screen, all of the time. It addresses debris as it comes in and prevents accumulation to keep water flowing. Every cycle cleans the entire intake. The simple design of Duperon screens allows them to reliably perform under a range of debris and flow conditions. The use of durable materials like A36 Steel, stainless steel or Super Duplex stainless ensures long product life in coastal and corrosive environments. Duperon offers screening expertise and a range of systems to manage the unique demands of power intakes.

HYDROELECTRIC

Hydropower depends on water in motion to create electricity. As water is drawn from an intake it must be free of debris to avoid damage to the rest of the system. Trashrakes and screens help to remove debris, but ineffective screening can also restrict flow. This creates a delicate balance between the ability to screen out debris and minimize headloss to generate at full capacity.

THERMOELECTRIC

Cooling water intakes play an important role in thermal power generation. Many facilities use automated screening as a best practice to minimize debris events at their cooling towers. By preventing blockages at the intake, clients can avoid deration or shut down for greater system reliability and maximum power generation.



APPLICATIONS

Duperon proven screening technologies can provide protection for a variety of thermal and hydroelectric power applications, including:

- Nuclear
- Coal
- Natural Gas
- Hydrogen
- Hydroelectric

AUTOMATED TRASH RACKS AND TRASH RAKES SYSTEMS
POWER GENERATION





POWER GENERATION SOLUTIONS WE PROVIDE



DUPERON® SELF-CLEANING TRASHRACK

Front clean, rear return design.
For sites that experience severe
conditions with high volumes, high
velocities and large debris present.



DUPERON® FLEXRAKE® ONLY

FlexRake raking device with FlexLink™
technology is mounted onto customer's
existing bar rack using I-Beam or
sidefab mounts.



DUPERON® FLEXRAKE® FP

In-channel coarse, slotted bar
screen with FlexLink™ and UHMW
Thru-Bar™ technology. Ideal for
'sticky' or matting debris. SSTL
construction.



DUPERON® FLEXRAKE® HD

In-channel coarse, slotted bar screen
with serrated UHMW scrapers and
FlexLink™ Jam Evasion™ technology.
SSTL construction used for
wastewater.



DUPERON® FLEXRAKE® FS

In-channel wedgewire screen.
FlexLink™ Jam Evasion™
technology. SSTL construction.



DUPERON® CONVEYANCE

Alternative to discharging onto the
deck by application. Mechanical
transportation and processing of
captured debris.

PRODUCTS QUICK GUIDE

PRODUCT NAME	SCREEN TYPE	BAR OPENING	BAR TYPE
Self-Cleaning Trashrack	Coarse	2 in - 3 in	Slotted Bar, A36 Steel coated. SSTL options available
FlexRake® Heavy Duty	Coarse	2 in - 4 in	Slotted Bar, A36 Steel coated or hot-dipped galvanized. SSTL options available
FlexRake® Only	Coarse & Fine	Uses existing trash rack or wedgewire screen	Uses existing trash rack or wedgewire screen
FlexRake® Full Penetration	Coarse	Greater than 1/2 in	Slotted Bar, SSTL
FlexRake® Fine Screen	Fine	0.020 in - 1/8 in	Wedgewire, SSTL