

# **FB** PROCÉDÉS

WASTEWATER SCREENS



**WASTEWATER  
SCREENS**

**ROTARY  
DISTRIBUTORS  
FOR  
TRICKLING FILTERS**



**SCREW  
CONVEYORS  
& COMPACTORS**





## FB PROCÉDÉS

designs, manufactures, distributes and installs Bar Screens for all wastewater treatment facilities.

Our range of Bar Screens provides simple, efficient and reliable screening solutions for the wastewater industry.

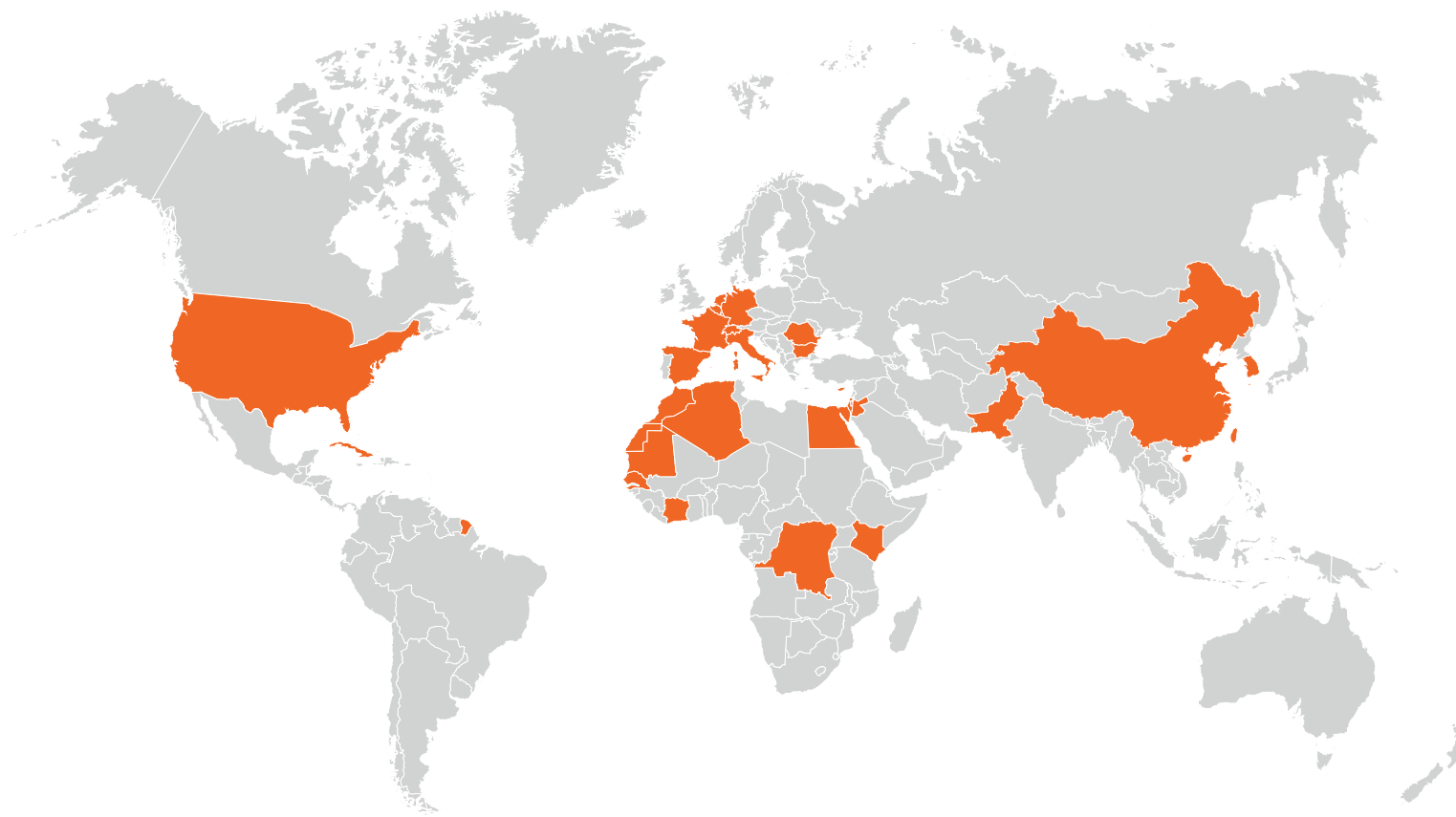
With thousands of Bar Screens installed worldwide, we are recognized by our clients as the Bar Screen Experts.

### KEY FIGURES

- + 3500**  
Bar Screens
- + 30**  
Years of Experience
- + 500**  
Clients
- + 20**  
Countries

**THE SCREENING EXPERTS SINCE 1985**

THE REFERENCE IN THE SCREENING INDUSTRY



**LEADING** BAR SCREEN SUPPLIER WITH MORE THAN 3500 BAR SCREENS INSTALLED **WORLDWIDE**



## WHY CHOOSE OUR BAR SCREENS ?

### ✓ SIMPLICITY

One grapple rake with a gravity-based open/close system held by a strap, one geared-motor and two limit switches to start and stop the cycle. Our technology is extremely simple.

### ✓ RELIABILITY

The innovative design of our products makes them very reliable, which is essential given the context in which they operate.

### ✓ EFFICIENCY

All our Bar Screens are designed and sized according to the specificities of every project, to deliver the highest screening efficiency.

### ✓ ADAPTABILITY

Can be installed into a channel, station or manhole, indoor or outdoor, in new or existing civil works.

### ✓ CUSTOM BUILT

Screening depth, height and side of waste discharge, width, screening level, material, etc. Each Bar Screen is unique.

### ✓ MODULABILITY

Several options are available to optimize the efficiency of the Bar Screen in every configuration.

### ✓ EASY MAINTENANCE AT LOW COST

The wear parts are in limited number and easy to access, all accessible from above the grade. Changing a part does not require the screen to be stopped for a long period of time.

### ✓ QUICK & EASY INSTALLATION

Delivered in one or several parts, each Bar Screen must be leveled and fixed to the wall of the channel or station. One day of work is usually enough.

DESIGNED AND SIZED TO **GUARANTEE** THE HIGHEST SCREENING EFFICIENCY



SIMPLICITY  
RELIABILITY  
EFFICIENCY



## A UNIQUE TECHNOLOGY

Since 1985, and thanks to the feedback of hundreds of local operators, our Bar Screens have been optimized over the years to offer today the best screening solutions in the industry.

When choosing our Bar Screens, you opt for a unique expertise and a technology approved by the leading wastewater treatment companies.

### ✓ INDUSTRY LEADER

Our technology is recognized by local operators as the leading screening technology. Their satisfaction is our greatest reward. It is by working closely everyday with our clients that we can offer screening solutions adapted to their needs.

### ✓ «SOFT STRAP» DETECTION

To avoid any risk of jam during the screening process, the «soft strap» detection system allows the screen to operate even if something prevents the grapple rake from reaching the bottom.

This is a real advantage to ensure screening efficiency in the presence of sand or rocks within the wastewater.

## WHY USE A POLYESTER STRAP INSTEAD OF CABLES OR CHAINS ?



- ✓ No rust or corrosion
- ✓ Flexible material with great resistance to coiling
- ✓ Highly resistant to all chemicals and freezing
- ✓ Very high breaking strength (2.5 to 12 tons depending on model)
- ✓ Easy to replace (less than 30 minutes)
- ✓ Low cost

### ✓ GRAVITY-BASED SYSTEM

The grapple rake operates solely thanks to the force of gravity. The opening and the closing are due to the weight and angle of each part that comprise the grapple rake. This gravity-based system avoids the use of fragile and expensive hydraulic or motorized systems.

FB Procédés is the only company offering this innovative system.

### ✓ UPSTREAM SCREENING

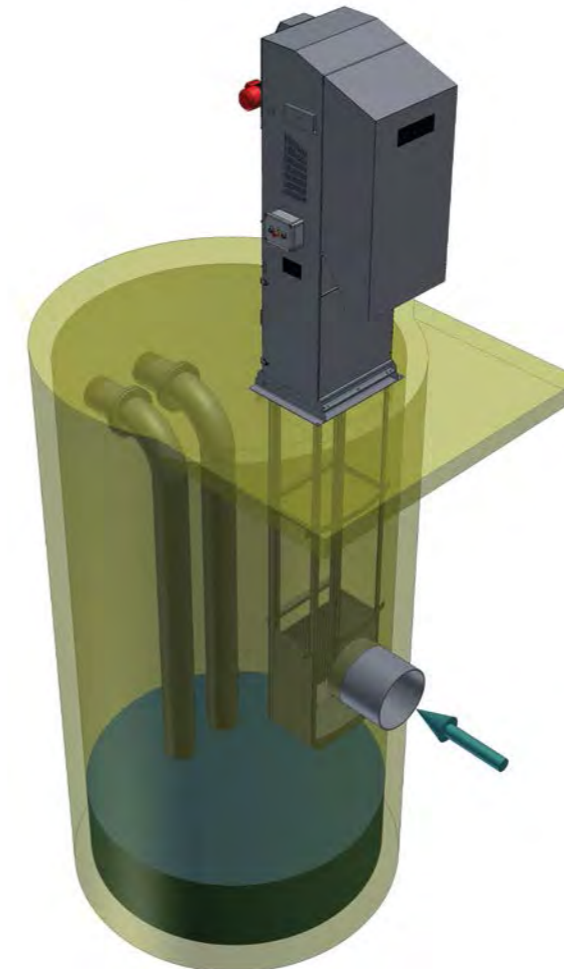
Our Bar Screens always collect the waste on the upstream side of the screen. This is a real advantage.

Based on our experience, we avoid screening on the downstream side as it cannot guarantee the efficiency and reliability of the process.

### ✓ RELIABLE & LONG-LASTING

The lifetime of our Bar Screens depends on how frequent they operate and how frequently they are maintained. Some of our Bar Screens have lasted 25 years.

FB Procédés always puts quality first: assembled by experienced technicians, each Bar Screen is checked, adjusted and tested before shipping.



### ✓ VERTICAL DESIGN

■ Within a station, fixed against the wall, the Bar Screen takes as little space as a manual screen. The access to the pumps remains intact.

■ Into a channel, at any depth, the footprint on the civil works remains the same, around 1 meter, thus helping to save on the civil works cost.

■ Above the installation plane, the Bar Screen remains quite compact. It makes it easier to install additional equipment around, and in some cases also limits the size of the surrounding premises in which the Bar Screen is installed.

■ All wear parts are located above the installation plane.

### ✓ LOW POWER CONSUMPTION

The less powerful of our Bar Screens uses only 180 Watts, and the most powerful, for larger projects, no more than 1.5 kW. The energy related costs are minimized, as well as the impact on the environment.

### ✓ MANUFACTURING STANDARDS

All our Bar Screens are designed and manufactured in France, and meet all European Standards.

THE SCREENING TECHNOLOGY  
CHOSEN BY HUNDREDS OF OPERATORS

CUSTOM BUILT...

...FOR ALL APPLICATIONS



PUMPING STATIONS



CONCRETE STATIONS



PRISONS



HOSPITALS



STORMWATER TANKS



WASHING AREAS



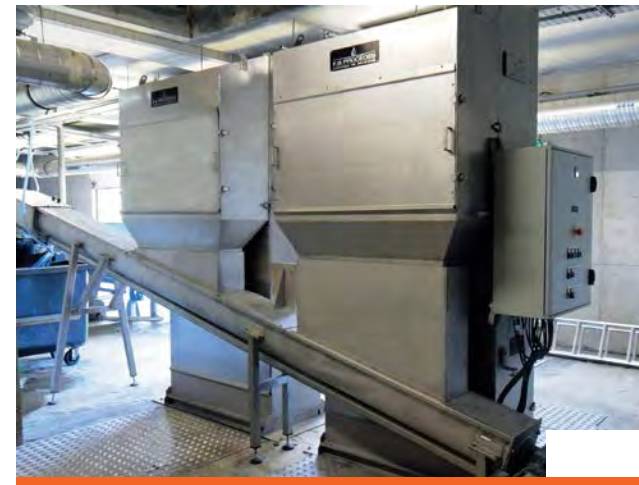
POLYESTER STATIONS



SLAUGHTERHOUSES



DISCHARGE STATIONS



WWTP



WATER INTAKES



MOTORWAY AREAS



RAINWATER STATIONS



FOOD PROCESSING PLANTS

## INSTALLATION TYPES

### ✓ INSTALLATION INTO A CHANNEL

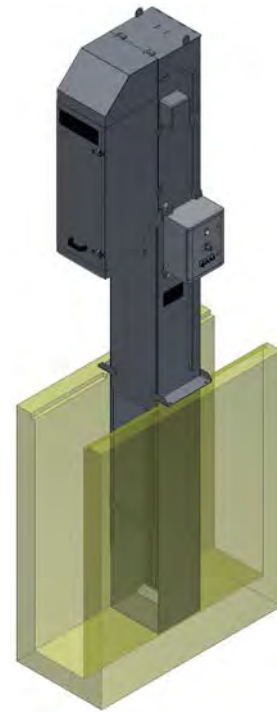
The Bar Screen is installed into the channel, across the flow, discharging the waste either upstream or downstream depending on the technical requirements.

The Bar Screen is fixed to the civil works on the top, as well as on the walls of the channels.

In the case of an existing civil works, and according to the flow, the hydraulic profile and the screening space, we may suggest a Bar Screen not as wide as the channel.

In this case, we can provide stainless steel lateral deflectors, to compensate the difference of width between the Bar Screen and the channel.

We can therefore easily and without any modification of the civil works replace manual screens or competing Bar Screens, no matter the technology they used.



### ✓ INSTALLATION INTO A STATION

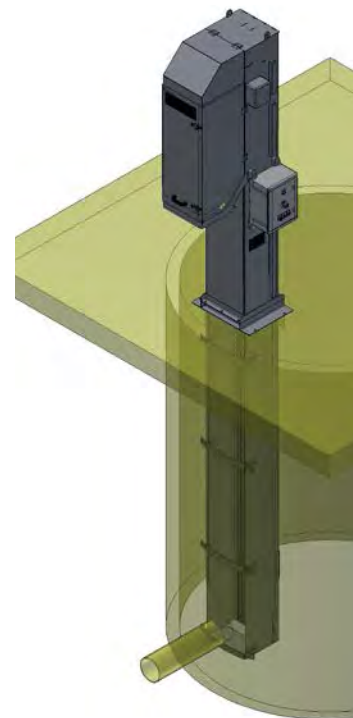
The Bar Screen is installed into the station, facing the water inlet, against the station's wall.

The waste can be discharged either upstream or downstream. However we favor the upstream discharge side, as it clears the top of the station, leaving access to the trapdoors for example.

The Bar Screen is fixed on the top of the station as well as on the wall of the station.

In most cases the Bar Screen takes as little space as a manual screen, and does not obstruct the lifting of the pumps. This installation type is also the most economical, as it does not require to build an additional manhole for the screen ahead of the station.

Maintenance wise, it is not necessary to go down into the station. All wear parts are located above the grade.

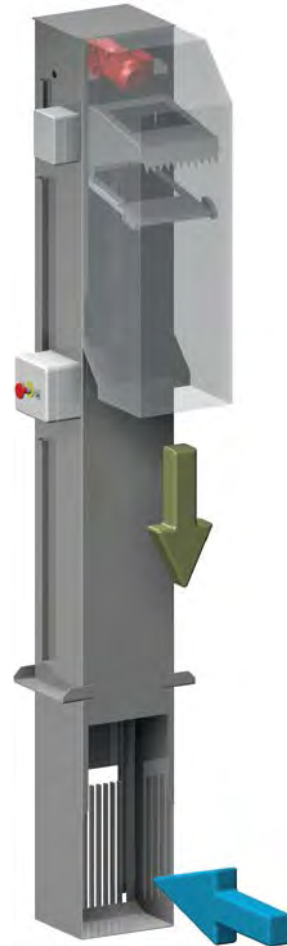


# A COMPLETE RANGE OF BAR SCREENS

## ✓ SI350



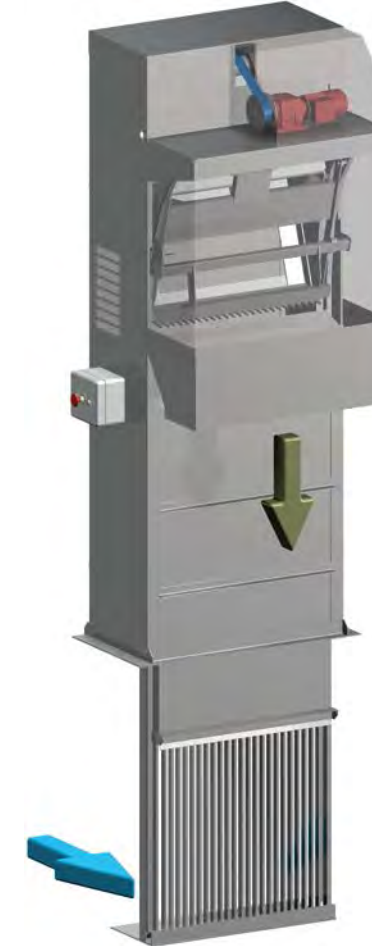
## ✓ SG400



## ✓ NG



## ✓ XG



## ✓ NI13



Max Flow (m <sup>3</sup> /h)	50	120	6,000	20,000	25,000
Bar Spacing (mm)	6, 10, 15 & 20	3 to 30	3 to 60	3 to 60	10 to 100
Width (mm)	350	400	400 to 2,000	400 to 2,000	800 to 3,000
Max Depth (mm)	1,400	5,500	17,000	17,000	12,000
Max Total Height (mm)	2,730	8,000	21,000	21,000	18,000
Discharge Side	Downstream	Upstream	Upstream	Downstream	Downstream
Slope	15°	0°	0°	0°	15°
Material	304L or 316L	304L or 316L	304L or 316L	304L or 316L	304L or 316L

## SOLAR-POWERED BAR SCREEN

### ✓ SELF-SUFFICIENT OPERATION

In remote locations, where it is difficult to supply power, we offer with our smallest Bar Screens a «Solar Power Pack»\*, allowing the Bar Screen to be completely self-sufficient.

The «Solar Power Pack» is sized according to the location and solar data provided by the European Commission over 5 years.

\* Available for Bar Screens Type SI350 and SG400, with Max. Total Height of 3,500 mm.

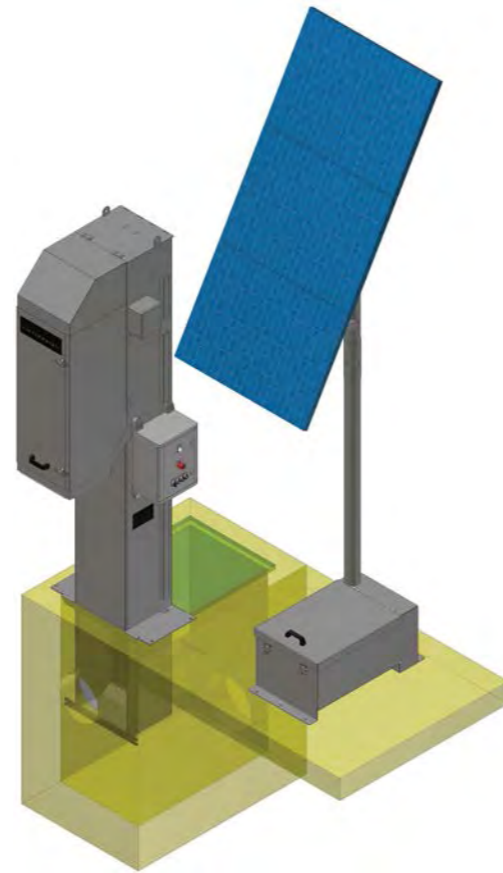


INNOVATION  
Energy Efficiency

### BATTERY LIFE WITHOUT ANY LIGHT FROM 6 TO 8 DAYS

### ✓ THE SOLAR POWER PACK INCLUDES:

- High-efficiency Solar Panels, 90 to 250 W, anti-yellowing glass, electrical junction box IP65, 10 years manufacturer's warranty
- Waterproof gel batteries, 12V, 65 to 200 Ah, maintenance-free
- Charge controller MPPT (Maximum Power Point Tracking). It prevents deep discharge and improves the efficiency of the solar panels
- Control Panel IP55
- Pole and battery case made of stainless steel 304L



**SELF-SUFFICIENT** BAR SCREENS  
POWERED BY SOLAR ENERGY

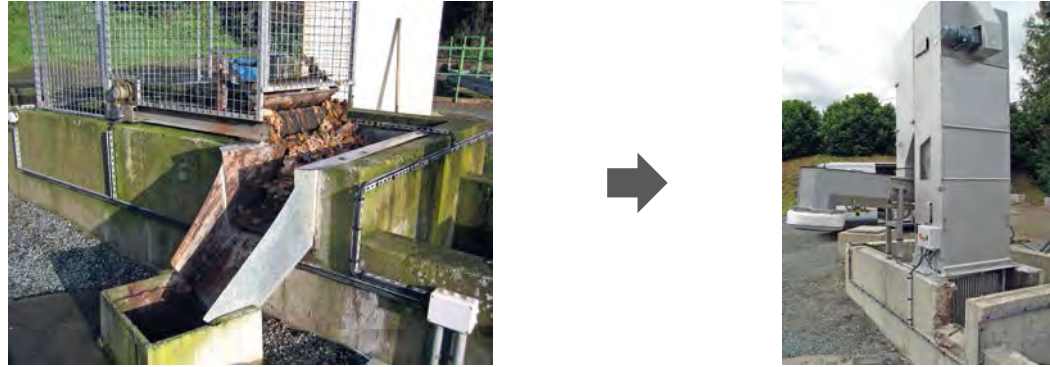


SOLAR  
POWERED  
BAR SCREEN

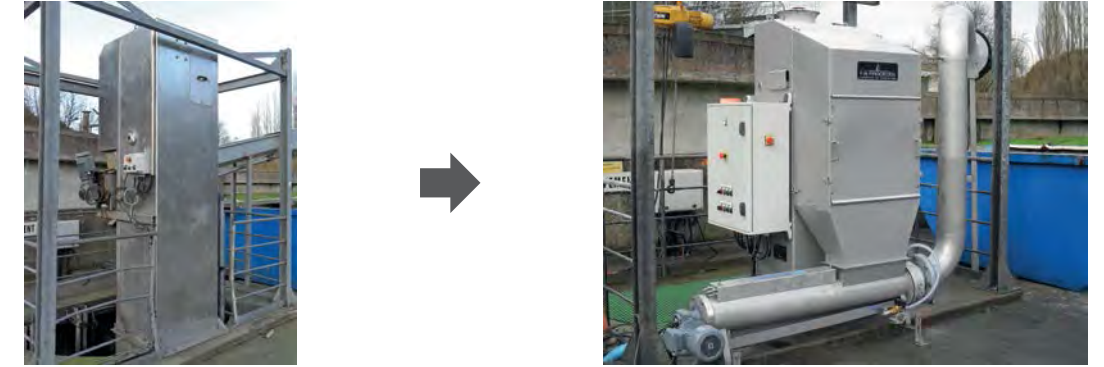




✓ Replacement of a curved screen by a Bar Screen Type NG



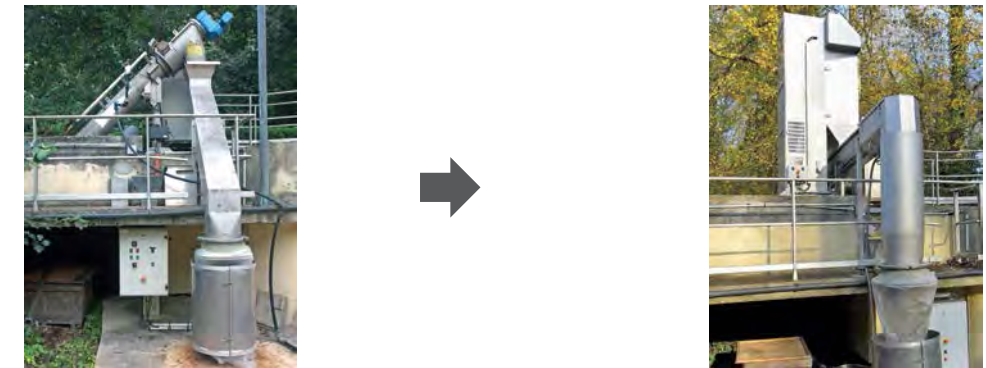
✓ Replacement of a competing vertical screen by a Bar Screen Type NG



✓ Replacement of a manual screen by a Bar Screen Type SG400



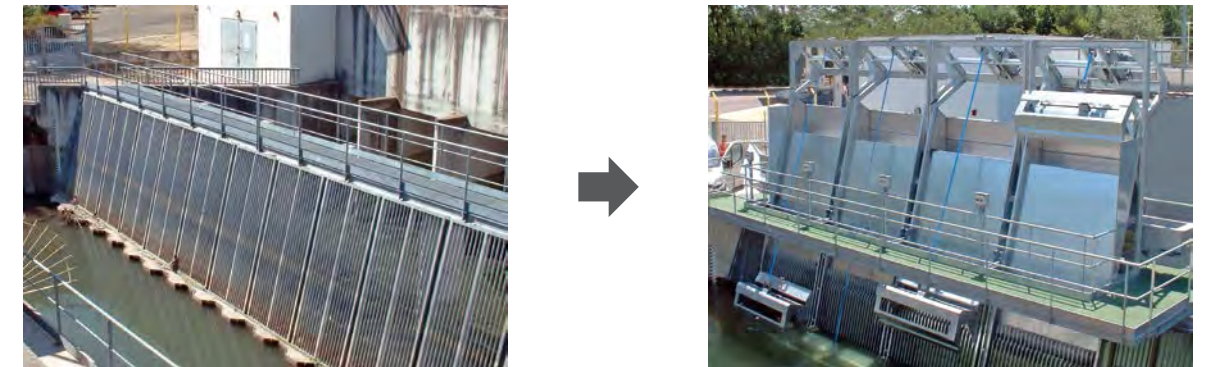
✓ Replacement of a competing screw screen by a Bar Screen Type XG



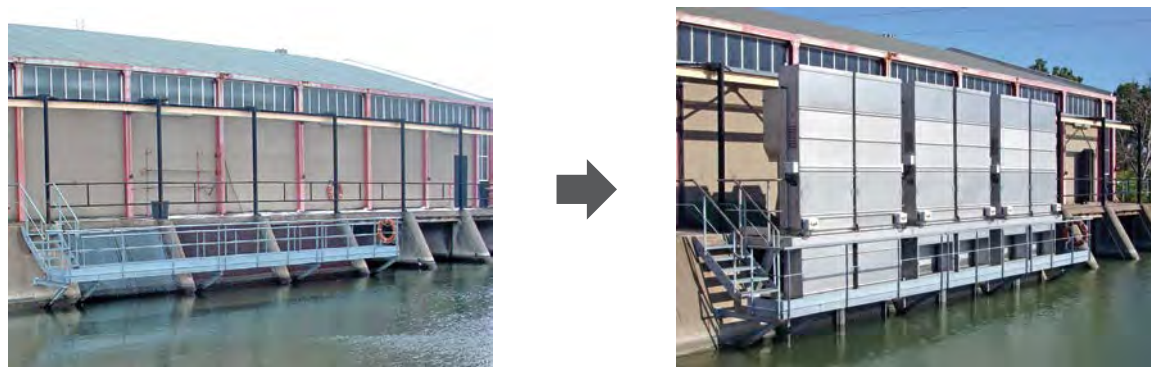
✓ Installation of a Bar Screen Type SG400 on a polyester station



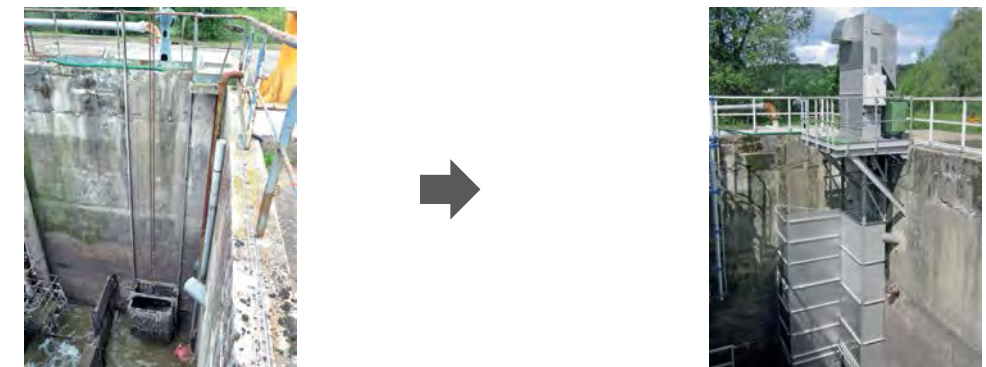
✓ Installation of 4 Bar Screens Type NI13 on a pumping station



✓ Installation of 6 Bar Screens Type XG on a water intake



✓ Replacement of a manual screen by a Bar Screen Type NG



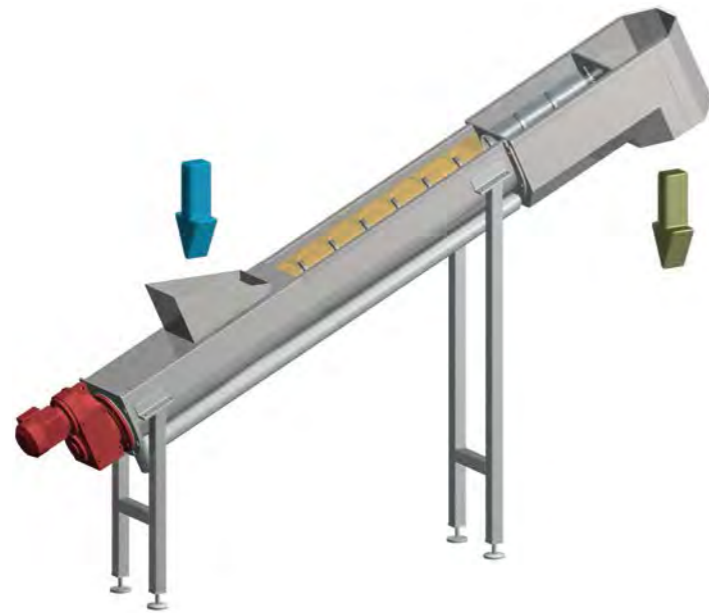
# SCREW CONVEYORS & COMPACTORS

## ✓ TRANSPORTATION & COMPACTION OF SCREENING REJECTS

Over the past few years, screw compactors have become essential additional elements to our range of Bar Screens.

Since 2006, the year when we launched our range of screws, we went from manufacturing 6 screws per year to more than 70 these days.

Why ? Simply because they are key to lower the cost of collecting waste and to improve the storage cleanliness.



## ✓ COMPACTION ADVANTAGES

- Reduction of the volume of waste (around 50%) = less frequent waste collection
- Dryness of the waste (around 30%)
- Automatic Bagging = reduction of odour
- Washing of the waste = reduction of organic matter in the stored waste

## ✓ WHY CHOOSE OUR SCREWS ?

- Compatible with our entire range of Bar Screens as well as competing screens
- Custom built (slope, length, feeding trough, etc.)
- Simple design, low operating costs, easy maintenance

THE **IDEAL** CONVEYING & COMPACTING SYSTEM FOR OUR RANGE OF SCREENING SOLUTIONS



## ROTARY DISTRIBUTORS

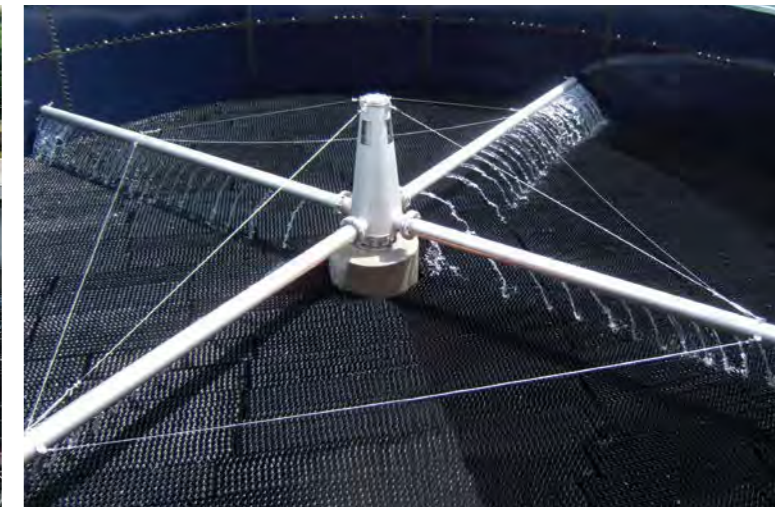


### ✓ KEY ADVANTAGES

- Simple and robust design = long-term reliability
- All types of flows, urban or industrial
- Very low operating costs
- Bearing out of water
- Quick replacement of wear parts without rotary distributor dismounting
- Oil chamber easy to access
- Closing parts at the end of arms easy to remove

### ✓ TECHNICAL SPECIFICATIONS

Max Flow	5 to 4,000 m <sup>3</sup> /h
Span	2,000 to 50,000 mm
Flow	Fixed or variable
Number of arms	2 to 8
Fastening	Flange on central post or hang-up
Supply	From the bottom, from the top or both
Speed	Adjustable
Drive	Hydrastatic pressure or motorized
Material	Stainless Steel 304L, 316L or mixed





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

THE SCREENING EXPERTS SINCE 1985





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