























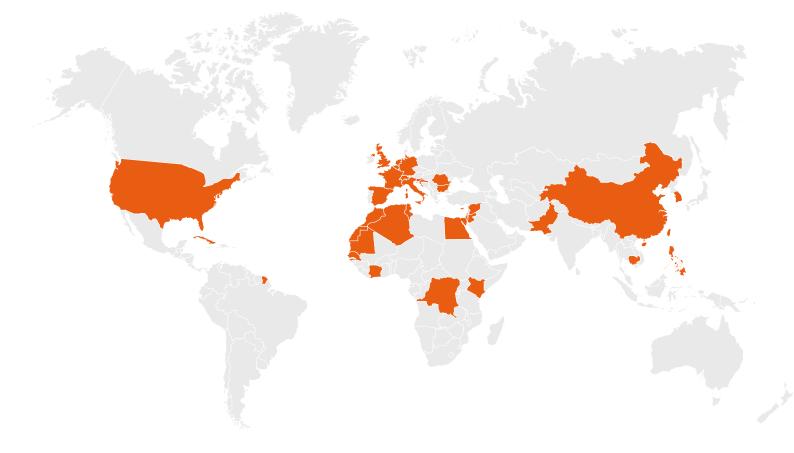
# **FB PROCÉDÉS**

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

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

With thousands of screens installed worldwide, we are recognized by our clients as the Screening Experts.

# KEY FIGURES 4000 Screens 30 Years of Experience 500 Clients 20 Countries



LEADING SCREEN SUPPLIER WITH MORE THAN 4,000 SCREENS INSTALLED WORLDWIDE WHY CHOOSE OUR SCREENS

| SIMPLICITY                     | One grapple rake with a gravity-based open/close system<br>held by a strap, one geared-motor and two limit switches to<br>start and stop the cycle. Our technology is extremely simple. |
|--------------------------------|---|
| CUSTOM<br>BUILT                | Screening depth, height and side of waste discharge, width, screening level, material, etc. Each screen is unique.  |
| RELIABILITY                    | The innovative design of our products makes them very reliable, which is essential given the context in which they operate.   |
| MODULABILITY                   | Several options are available to optimize the efficiency of the screens in every configuration.   |
| EFFICIENCY                     | All our screens are designed and sized according to the spe-<br>cificities of every project, to deliver the highest screening effi-<br>ciency.  |
| ASY MAINTENANCE<br>AT LOW COST | The wear parts are in limited number and easy to access, all accessible from above grade. Changing a part does not re-<br>quire the screen to be stopped for a long period of time.     |
|                                | Can be installed into a channel, station or manhole, indoor or outdoor, in new or existing civil works.   |
| QUICK & EASY<br>INSTALLATION   | Delivered in one or several parts, each screen must be leveled<br>and fixed to the wall of the channel or station. One day of work<br>is usually enough.                                |

## DESIGNED AND SIZED TO GUARANTEE THE HIGHEST SCREENING EFFICIENCY

ΕA

SIMPLICITY RELIABILITY EFFICIENCY

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18 PROCEDE



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

When choosing our 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.

### **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.

### «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.

### **UPSTREAM SCREENING**

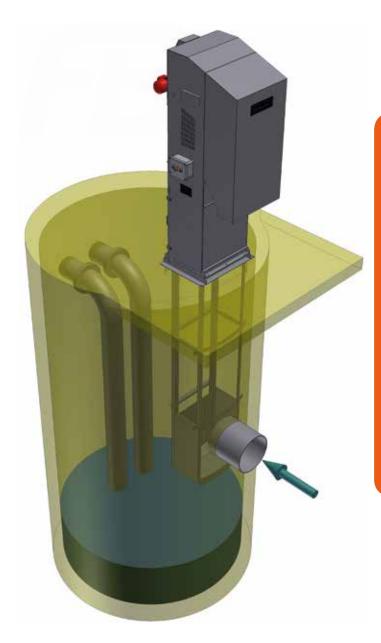
Our Bar Screens always collect the waste on the upstream side of the screen. This is a real advantage.

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



### 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



### **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 grade, the Bar Screen remains 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 grade.

### **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.

### LOW POWER CONSUMPTION

The least 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**

# SCREENING SOLUTIONS FOR ALL APPLICATIONS







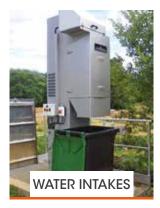








DISCHARGE STATIONS











RAINWATER STATIONS





# INSTALLATION INTO A CHANNEL OR DIRECTLY INTO A STATION

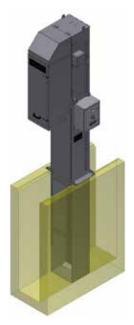
## INSTALLATION INTO A CHANNEL



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

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.



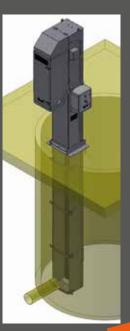
### INSTALLATION INTO A STATION



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

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.







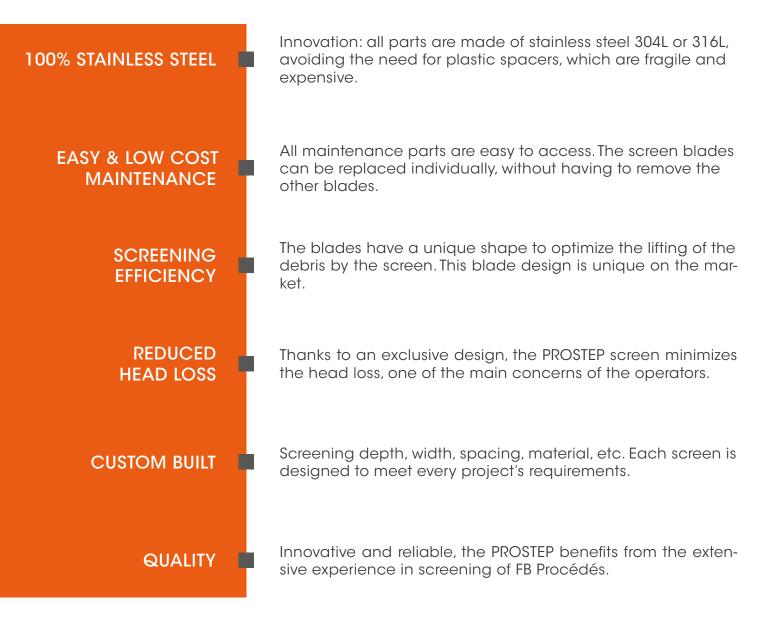
| SG400        | NG           | XG           | NI13         |
|--------------|--------------|--------------|--------------|
|              |              |              |              |
| 120          | 6,000        | 20,000       | 25,000       |
| 3 to 30      | 3 to 60      | 3 to 60      | 10 to 100    |
| 400          | 450 to 2,000 | 450 to 2,000 | 800 to 3,000 |
| 5,500        | 17,000       | 17,000       | 12,000       |
| 8,000        | 21,000       | 21,000       | 18,000       |
| Upstream     | Upstream     | Downstream   | Downstream   |
| ٥°           | 0°           | 0°           | 15°          |
| 304L or 316L | 304L or 316L | 304L or 316L | 304L or 316L |



The Step Screen type PROSTEP is the result of 30 years of screening expertise. More than an innovative step screen, the PROSTEP has been developped to meet the highest expectations from the operators.

The Step Screen PROSTEP has been designed to offer a reliable and efficient screening solution, while minimizing the operation and maintenance costs.





100% STAINLESS STEEL: NO PLASTIC SPACERS

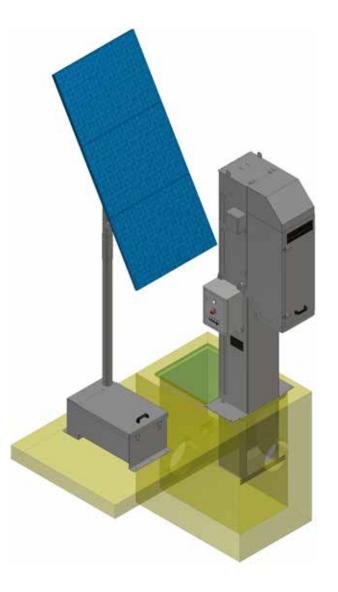
EXCLUSIVE BLADES DESIGN FOR **OPTIMIZED DEBRIS LIFTING** 







# 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.

### 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

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

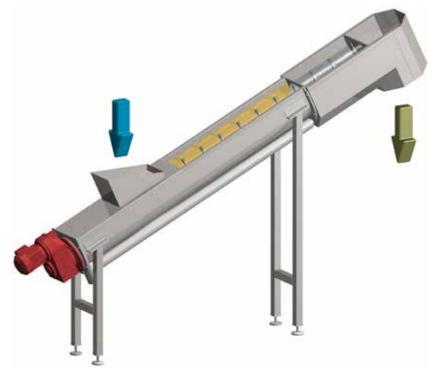




Over the past few years, screw compactors have become essential additional elements to our range of Bar Screens.

Since 2006, the year when we launched our range of screws, we went from manufacturing 6 screws a year to more than 100 today.

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 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 FOR TRICKLING FILTERS



### **KEY FEATURES**

- 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

| Min/Max Flow   | 5 to 5,000 m3/h                       |
|----------------|---------------------------------------|
| Span           | 2 to 50 meters                        |
| Flow           | Fixed or variable                     |
| Number of arms | 2 to 8 arms, tubular or open-trough   |
| Feed           | From the bottom, from the top or both |
| Speed          | Adjustable                            |
| Drive          | Hydraustatic pressure or motorized    |
| Material       | Stainless Steel 304L or 316L          |





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