Pretreatment
Complete Line of John Meunier Products and Solutions
A long tradition in excellence

John Meunier products have been serving North American municipalities and industries since 1948.

With a wide range of technologies, we design, manufacture and service wastewater treatment plants, offering complete solutions with a wide range of highly efficient screening and grit removal equipment.

There are more than fifteen hundred units installed across North America.
Coarse & Fine Screening
Bar Type

Mechanisms to retain debris contained in flow streams in order to protect equipment or processes located downstream. Their versatility allows them to be used successfully in waste, storm and potable water applications.

**CONT-FLO® Type CF**
Vertical Bar Screen

The concept involves a reciprocal movement of the drive system to generate the raking motion of the single rake arm. The main feature of the screen is to be back clean front discharge. The screen mechanism is assembled prior to shipment within a monobloc type frame. The raking method allows the bars to be free at the top and consequently prevents jamming of solids within the bar spacings. This concept provides for higher capture rates.

**CONT-FLO® Type ER**
Inclined Bar Screen

The rake drive mechanism is of the travelling endless chain type. The main feature is the front cleaning of the screen. The multiple rakes laterally attached to heavy duty chains ensures the capability to rapidly remove high volumes of solids. The screen mechanism is assembled prior to shipment within a monobloc type frame. A back clean design version of this screen is also available.

**CONT-FLO® Type SSR**
Inclined Step Screen

The design of this screen is based on the use of two sets of thin flat bars shaped like a staircase from where the name «Step-Screen» originates. One set is stationary and the other one, driven by a cam system, is mobile. Its oscillatory movement provides back cleaning of the stationary steps. All mechanical components are assembled prior to shipment within a monobloc frame. The installation requires little clearance above the operating floor.

**Rotarc® Type RCR**
Arc Bar Screens

The bar curvature of the screen offers a higher screening area for a given width of channel to provide low head loss during operation. The pre-assembled bar screen is equipped with two rakes set on a common central shaft directly coupled to the drive unit. Their rotating through 360 degrees ensures rapid front removal of the solids.
Fine Screening
Mobile Screening Plate Type

Mechanisms that provide continuous fine screening with superior efficiency to slotted and bar type screens. Their versatility allows them to be used successfully in waste, storm and potable water applications as well as for pre-screening of Membrane Bio-Reactors (MBR).

**Escalator® Type ES**
**Perforated Plate Fine Screen**
The pre-assembled unit’s design is of the endless mobile belt type, using multiple panels with holes. It gives highly efficient fine screening in any direction. Structural shelf on perforated panels lifts larger «unmattable» solids. Panels are carried on heavy duty chains. The self-adjusting system of the rotating brush provides an annual average capture rate increase of at least 20% resulting in a reduction of plant workaround costs.

**Rotarc® Type SD**
**Perforated Rotary Drum Fine Screen**
The design uses of a rotating screen shaped like a drum and a conveying spiral, all assembled prior to shipment. As the flow passes through the perforations the solids progressively accumulate. The rotation brings the solids to fall into the conveying section where they are transported to be discharged. The special drum screen seal arrangement ensures a very high capture performance even with the presence of fibers and hairs.

**Elevator Type EL**
**Vertical Perforated Plate Fine Screen**
The endless mobile belt type design using multiple panels with holes gives highly efficient fine screening in any direction. The mechanism is pre-assembled within a monobloc type frame. Panels are carried on heavy duty chains. Tines set at determined intervals lifts larger «unmattable» solids. With the high speed rotating brush it provides a high solids capture efficiency level.

**StormGuard® Type SG**
**Overflow Fine Screen**
The endless mobile belt design type using multiple panels with holes gives fine screening in any direction. The mechanism is pre-assembled within a monobloc type frame. Panels are carried on heavy duty chains. This highly efficient unit is an upward flow horizontal screen for single or double-sided weir overflow. Screenings are retained in foul flow while excess flow passes through the perforated panels.
Fine Screening
Stationary Screening Plate

Mechanisms that provide continuous fine screening with superior efficiency to slotted and bar type screens. Their versatility allows them to be used successfully in waste, storm and potable water applications as well as for pre-screening for some Membrane Bio-Reactors (MBR) applications.

Rotarc® Type SBC Basket & Spiral Fine Screen
The technology relies on the use of a slow rotating shaftless inclined spiral, pre-assembled prior to shipment. The unit consists of a stationary screen to retain the debris from the ongoing flow, brushes mounted on the first few screw flights for basket cleaning and a transport zone to convey them up to the discharge point where it can include washing and compaction. The basket seal design ensures reliability of the solids capture threshold.

Rotarc® Type SBV Basket & Spiral Fine Screen
The technology is the same as for the SBC type and incorporates the same options. The screen is positioned vertically allowing it to use very little floor space. It is suitable for applications such as in pumping station or in interceptor manholes. The apparatus does not require a compaction zone because the vertical position provides sufficient dewatering.

Rotarc® Type SBCT Basket & Spiral Fine Screen
The technology is the same one as for the SBC type. The pre-assembled screen is mounted in a self standing stainless steel tank with flanged inlet and outlet and removable access cover. The unit can include a compaction section. The screen is also supplied with replaceable bush sections, replaceable wear bars, pivoting device, spray wash system for flights and screenings washing and for filtrate flushing. This configuration is adequate for use in septage receiving applications.

Rotarc® Type RDB Arc Brush Fine Screens
The technology use of a stationary perforated screen plate and a slow rotating cleaning mechanism, pre-assembled prior to shipment. The unit includes a curved screen to retain debris from the ongoing flow and brushes to wipe screenings to the discharge point. The four brushes are mounted on a rotating shaft to ensure rapid front removal of the solids. The screen is positioned horizontally into a channel or over either a metal or concrete sump. The perforated plate seal design ensures reliability of the solids capture threshold.
Highly versatile devices that can provide conveyance, dewatering and compaction of solids retained from wastewater, stormwater or potable water flow stream applications.

**Rotopac® Type RPW**
**Screw Washer Compactor**

The single stage design is based on the use of a slow rotating spiral inserted into a perforated tube suitable for filtrate drainage. The screw receives solids from the screen, conveys them through dewatering, washing and compaction zones to finally expel them in a non-dripping dry state. The addition of wash water increases the rate of return of washable organics with the filtrate to the main flow stream through a common drainage point. This pre-assembled unit eliminates problems associated with foul odor and unsanitary handling.

**Rotopac® Type RLK-REK Shafted Shaftless Screw Conveyor**

The design is based on the use of a slow rotating spiral inserted into a “U” shaped trough. The screw receives the material and transports it along stainless steel trough to ensure a discharge in the original state. This pre-assembled unit can eliminate problems associated with foul odor and unsanitary handling.

**Rotopac® Type RCW**
**Batch Washer Compactor**

The dual stage design is based on the use of a slow rotating spiral inserted into a perforated tube suitable for filtrate drainage. The screw receives solids from the screen, conveys them through dewatering, washing and compaction zones to finally expel them in a non-dripping dry state. The forward-reverse motion of the screw plus the addition of water into the feed hopper increases the rate of return of washable organics with the filtrate to the main flow stream. This pre-assembled unit eliminates problems associated with foul odor and unsanitary handling.

**Rotarc® Type RDW**
**Shaftless Screw Compactor**

The single stage design is based on the use of a slow rotating shaftless spiral inserted into a trough provided with perforated area suitable for filtrate drainage. The screw receives solids from the screen, conveys through dewatering, washing and compaction zones to finally expel them in a non-dripping dry state. The addition of wash water increases the rate of return of washable organics with the filtrate to the main flow stream through the common drainage point. This pre-assembled unit eliminates problems associated with foul odor and unsanitary handling.
Highly efficient degritter systems. Their versatility allows them to be used successfully in waste, storm and potable water applications.

**Mectan® Type JMDC Classic Grit Chamber**

The Classic (270) type Induced Vortex Grit Chamber takes full advantage of the tangential inflow velocity along the periphery of the chamber to initiate the grit removal process. The circular design uses only a fraction of the footprint of conventional aerated degritters. The reliable system operates efficiently over a wide range of daily flow rates with low head loss. The sloped transition along with the rotating motion eliminates accumulation of grit in the separation chamber under all conditions and maintains grit removal performances even during a power failure.

**MectanV® Type JMDV Variangle Grit Chamber**

The Variangle type Induced Vortex Grit Chamber unit is an innovative re-engineering of the Classic Mectan technology. The concept capitalizes on the classic tank shape to enhance the effective conical transition between chamber sections to obtain a dynamic and revolutionary configuration. The use of a separation disc ensures process stability and reliability at any flow rate with a 20% overall increase in grit removal efficiency, mainly in fine particles. With its multidirectional outlet channel positioning capability, the Variangle unit provides wastewater treatment plant design flexibility.

**SAM® Type GDS Grit Dewatering Screw**

The concept is based on the use of an inclined spiral inserted into a specially shaped trough to separate the grit from a grit/water mixture. The mixture is fed to the inlet hopper where grit classification and settling is achieved. The excess water overflows back to the influent channel. The slow rotation of the screw causes the grit to dewater as it moves toward the discharge point. The unit is supplied with an air separator or cyclone separator according to the feed mean used. This pre-assembled unit can eliminate problems associated with foul odor and unsanitary handling.

**SAM® Type GWF Grit Washer-Dewater**

The concept uses a conical hopper set on top of an inclined shaftless screw to separate, wash and dewater the grit from a grit/water mixture. The mixture is fed to the inlet hopper where a slow rotational movement is induced to achieve grit particle settling. The combination of wash water injection and the central stirring motion provides grit scouring. The excess water and organic matter overflow back to the influent channel. The conveying screw dewaters the grit as it moves toward the discharge point. It can be supplied with air or cyclone separator according to the method used. This pre-assembled unit can eliminate problems associated with foul odor and unsanitary handling.
Grit & F.O.G. Removal

Combined treatment systems providing screening, grit removal and fat, oil and grease (FOG) removal. Their versatility allows them to be used successfully in small waste water treatment works for Municipal, Industrial and septage receiving applications.

SEPRAPAC Type PCS
Pretreatment System

The concept integrates two or three devices for screenings removal, grit separation and FOG removal. The wastewater mixture passes first through a screenings removal, washing and compaction process stage. The flow then crosses the second stage chamber for grit separation. The settled matter is conveyed horizontally to a grit hopper where an inclined extraction screw achieves washing and dewatering of particles along the transit path to the ejection point. The optional third process step is performed in an adjacent lateral compartment where air is injected to achieve FOG removal. The small footprint of this all-in-one pre-assembled package system makes it quick and easy to install.

SEPRAPAC Type PCM
Pretreatment System

The concept integrates three devices for screenings removal, grit separation and FOG removal. The wastewater mixture passes first through a screenings removal, washing and compaction process stage. It flows then into the degritter hopper. The settled matter is conveyed by an inclined extraction screw to provide washing and dewatering of particles along the transit path to the ejection point. The third process step is performed in an adjacent lateral compartment where air is injected to achieve FOG removal. The small footprint of this all in one pre-assembled package system makes it quick and easy to install.

SEPRAPAC Type PCC
Pretreatment System

The concept integrates two devices for screenings removal and grit separation. The wastewater mixture passes first through a screenings removal, washing and compaction process stage. It flows then into the degritter hopper. The settled matter is conveyed by an inclined extraction screw to achieve washing and dewatering of particles along the transit path to the ejection point. The small footprint of this all in one pre-assembled package system makes it quick and easy to install.
## General John Meunier Product Guidelines

<table>
<thead>
<tr>
<th>COARSE &amp; FINE SCREENING</th>
<th>CONT-FLO® Type CF</th>
<th>CONT-FLO® Type ER</th>
<th>CONT-FLO® Type SSR</th>
<th>CONT-FLO® Type RCR</th>
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<tbody>
<tr>
<td>BAR TYPE</td>
<td>Shallow to deep</td>
<td>Shallow to very</td>
<td>Shallow Medium &amp;</td>
<td>Shallow Medium &amp;</td>
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<td>High Loading 50°</td>
<td>Medium &amp; high</td>
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<td>Rotarc® Type SD</td>
<td>Elevator Type EL</td>
<td>StormGuard® Type SG</td>
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<td>Channel Lift Capability</td>
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<td>Light &amp; medium</td>
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<td>loading Vertical</td>
<td>Loading Horizontal</td>
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<td>Horizontal</td>
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<tr>
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<td>With replaceable wear items</td>
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<td>Replaceable wear bars</td>
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For design parameters outside these listed, please contact Veolia Water Technologies Canada.
Veolia Water Technologies Canada is the final choice for the design, manufacture and servicing of wastewater pretreatment works. We target excellence and innovation. We invest in R&D to meet growing environmental regulations and market needs.

The Complete
John Meunier Headworks Set-up

SAM Grit Dewatering Unit
Rotopac Compactor
Escalator Fine screen
Mectan Grit Chamber

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