TAKE A LITTLE MORE OFF THE TOP
A Review of Small-Footprint RBFs
Nick Janous, Director of Sales

Your plant
Your issues might show up here…

Primary Treatment → Secondary Treatment → Tertiary Treatment

…but you suspect they begin here.
You know your plant would function better with reduced loading to secondary treatment?

But you see hurdles to plant optimization

Capital cost
Real estate
EcoBELT™

Rotating Belt Filter (RBF)
Increase plant capacity by reducing primary BOD & TSS
EcoBelt™ Operation

Primary treatment for 0.05-1.5 MGD
EcoBELT Applications

- Grit Removal
- Fine Screening
- Dairy Industry
- Textiles
- Aquaculture
- Agriculture
- Tanneries
- Primary Clarification
- Poultry & Beef Processing
- Sewer Overflow
- Pulp and Paper Industry
- Membrane Pretreatment
- Sludge & Scum Thickening
- Fruit & Vegetable Processing

Industrial Applications

- Economic solids mitigation.
- Retrofits to existing systems without expansive redesign or construction.

Pasta Producer

Algae Capture

Nexom™
**Belt Pattern**

Chevron pattern reduces strain.
Maximizes filtration area, minimizes dead area.
Increases belt life.

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**Dewatering**

Screw press dewater up to 40% dry solids
…or take a wet slurry to your digester
Belt cleaning

Doctor blade removes solids

Optional Waterjet removes fats, oils and greases with less energy

Intermittent hot water degreasing

- Low-energy designs
- Programmable cleaning
- Periodic degreasing
- Options for industrial water
- Quick-access maintenance
Key EcoBelt Advantages

- Improve overall plant performance
- Improve headworks (grit, rags, plastics)
- Less solids/RAS/WAS handling/capacity
- Save aeration energy costs
- Save clarification energy costs
- Likely eliminate need for secondary process expansion
- Save land for additional clarifiers

Cartridge Maintenance

- Belt life is 1-3 years
- Only 1 hour for change out
  - Motor and gearbox
  - Pulley bearings
  - Skid plates
  - Cleaning system
  - Wear parts
  - Adjustments
  - Filter belt
  - Polyester self-aligning belt
**Belt Change**

**Plummer, Idaho**

**Project Type:** Municipal Wastewater

**Design Flow:** 1.1 MGD

**Deliverable:** 50% TSS Reduction, Screening, Grit Removal
**Plummer, ID**

**BOD (mg/L)**

Influent vs. Effluent

Project Type: Municipal Pilot

Design Flow: 0.36 MGD

Deliverable: 50% TSS Reduction, Screening, Grit Removal

**Largo, Florida**

Project Type: Municipal Pilot

Design Flow: 0.36 MGD

Deliverable: 50% TSS Reduction, Screening, Grit Removal
Largo, FL
BOD (mg/L)

Valparaiso, Indiana

Project Type:
Municipal Wastewater

Design Flow:
1.5 MGD

Deliverable:
50% TSS Reduction, Screening, Grit Removal
Valparaiso, IN

TSS (mg/L)

- 3-Day Avg Influent
- 3-Day Avg Effluent

Valparaiso, IN EcoBELT
BOD (mg/L)

- 3-Day Avg Influent
- 3-Day Avg Effluent

Q?
A!

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