Operating mode

Two heavy-duty chains, driven by a powerful drive shaft, carry a system of rakes placed one foot apart. Each rake contains multiple teeth and/or brushes, and the stainless steel drive chains are connected with links bearings free to minimize maintenance. The chain rollers and chain guides are made of high-density polyethylene (HDPE), with no metallic lower bearings and no lower sprockets.

A scraper, placed at the point of discharge, cleans the screened material from the rakes and ejects the debris. Raketec’s rakes are designed to mesh perfectly with the bar screen system. The rakes clean debris from the bar screen, and convey waste material up to grade level. Raketec can be set to run continuously, on a timer program (cycle on/off), or with a water level sensor.
1. Simple Design

The gear motor, mounted at the top of the frame, rotates the drive shaft. The links of the chain fit into two cogwheels, located on each extremity of the drive shaft. Driven by the rotation of the shaft, the links of the two stainless steel chains slide into the HDPE track. With the HDPE track system, there is no friction between the chain and the frame of the bar screen. There is no requirement to grease the chain.

2. Free Sprocket, no lower maintenance

At the lower part of the bar screen, the chains slide over two HDPE stationary rollers. With no moving parts at the bottom of the machine, no maintenance or underwater operation is necessary.

3. High Capture Rate

A combination of stainless steel rake teeth and brushes attached to the drive chains, placed one foot apart from each other, allows for extremely efficient cleaning. The brushes captures all rags and wipes, while the stainless steel teeth assemblies clean between the bars of the screen to remove smaller debris such as grit, sand, and fibers.
4. Minimal & Easy Maintenance

With no moving parts at the bottom of the bar screen, no maintenance is required. The weekly maintenance consists only of a visual check of the chains and the discharge chute. The back of the bar screen has an easy and safe access hood. If needed, brushes and teeth rake can be replaced quickly and easily by unfastening three bolts.

5. Odor Control

The frame of the bar screen is totally enclosed. Adding a washer compactor Compactec with a bagger system will maintain a total odor control.
## Performances

<table>
<thead>
<tr>
<th>Applications: Municipal &amp; Industrial</th>
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<tbody>
<tr>
<td>Flow capacity: up to 50mgd</td>
</tr>
<tr>
<td>Space bar opening: 1/16” to 2” (1 to 60mm)</td>
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</tbody>
</table>

## Designs

Raketec is customized based on specifications and/or structural constraints. Below are some guidelines of the design requirements.

### MATERIALS

- 304 or 316 stainless steel
- Surface treatment: Scouring, Passivation
- T.I.G. welding techniques

### SPACE REQUIREMENTS - FOOTPRINT

- Depth: up to 30’
- Channel Width: 0.98’ to 6.56’
- Installation angle: 60°, 70°, 80°

### MOTOR CHARACTERISTICS

- Absorbed power: 1hp (0.56 KW)
- Voltage: 240 or 480 VAC
- Frequency: 60 Hz

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Aqualitec: Keep it Simple