IFU
Internally Fed Rotary Screens

The IFU Series of internally-fed rotary drum screens for industrial wastewater applications is designed to provide superior solids recovery from waste streams. The IFU Series is specifically for moderate flow and low to medium solids loading. The IFU Series can handle flows from 225 to 1940 gpm (51 to 441 m³/hr) dependent on screen design selected. This fully enclosed compact unit includes all the essentials for trouble free screening of common wastewater streams.

The IFU Series is constructed of an all stainless steel frame. The cylindrical shaped screening element can be wedgewire, perforated plate or mesh. Screen openings typically range from 0.010 to 0.25 inches (250 – 6000 microns). The screen cylinder rotates on four UHMW trunnion wheels with sealed bearings and is driven by a TEFC motor, geardrive and corrosion resistant chain and sprocket. It has a fixed spray bar for an automatically applied cleaning shower. All the functions are economically integrated into uniframe housings.

METHOD OF OPERATION
The influent enters a headbox, where the energy is dissipated and the flow is evenly distributed onto the interior of the rotary screening drum. Solids are retained on the screen surface while the liquid flows radially out through the screen openings. Screened solids are transported axially, by internal flights, to the open end of the rotary drum screen. The entire screening surface is intermittently washed by a fixed external spray bar.

Features
All Stainless Steel Construction
• Includes all wetted surfaces and support frames.
• Robust construction reduces down-time and maintenance costs.

Unitary Base Frame
• Fully welded frame and lower enclosure provide trouble free screening.
• Rigid and durable frame structure for smooth rotation and low total cost of ownership.

Economical Screening Solution
• Screening media and leg height can be easily customized to fit a specific application.

Applications
• Vegetable & Fruit Process Water
• Seafood Processing Plant Effluent
• Meat Processing Plant Effluent
• Poultry Plant Effluent
• Biomass Dewatering
• Many Others
### IFU DETAILS

1. Stainless Steel Unitary Body
2. TEFC Motor & Gear Drive
3. Drum Wheel Complete with Cover
4. Effluent Flanged
5. Vapour Enclosure
6. Inspection Hatch
7. Solids Discharge Chute

## Standard Construction
- 304 stainless steel construction
- Unitary body
- TEFC motor and gear drive
- Corrosion resistant zinc plated roller chain
- UHMW Drum wheels with internal bearing
- Internal flights
- External spray bar
- Enclosure (Cover)
- Integral drainage pan and solids chute

## Options
- 316 stainless steel construction
- 304 stainless steel roller chain
- UHMW Drum wheels with greaseless internal bearing (Drum Dia. 30 inch)
- Control panel
- Internal spray bar
- Automatic chain oiler

### Standard Construction
- 304 stainless steel construction
- Unitary body
- TEFC motor and gear drive
- Corrosion resistant zinc plated roller chain
- UHMW Drum wheels with internal bearing
- Internal flights
- External spray bar
- Enclosure (Cover)
- Integral drainage pan and solids chute

### Options
- 316 stainless steel construction
- 304 stainless steel roller chain
- UHMW Drum wheels with greaseless internal bearing (Drum Dia. 30 inch)
- Control panel
- Internal spray bar
- Automatic chain oiler

### IFU DETAILS

<table>
<thead>
<tr>
<th>IFU Model</th>
<th>Standard Dimensions</th>
<th>Approximate Net Weight - lbs (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFU3036</td>
<td>52 (1321) 38-1/4 (972) 47-1/4 (1200) 71-5/8 (1819)</td>
<td>1000 (454)</td>
</tr>
<tr>
<td>IFU3048</td>
<td>52 (1321) 38-1/4 (972) 59-1/4 (1505) 83-5/8 (2124)</td>
<td>1200 (544)</td>
</tr>
<tr>
<td>IFU3060</td>
<td>52 (1321) 38-1/4 (972) 59-1/4 (1810) 95-5/8 (2429)</td>
<td>1400 (635)</td>
</tr>
<tr>
<td>IFU4248</td>
<td>70 (1778) 51-1/2 (1308) 59-1/2 (1511) 84 (2134)</td>
<td>1800 (817)</td>
</tr>
<tr>
<td>IFU4272</td>
<td>70 (1778) 51-1/2 (1308) 83-1/2 (2121) 108 (2743)</td>
<td>2200 (988)</td>
</tr>
<tr>
<td>IFU5472</td>
<td>88-3/8 (2118) 64 (1626) 86 (2184) 111-1/2 (2832)</td>
<td>3600 (1633)</td>
</tr>
<tr>
<td>IFU5496</td>
<td>88-3/8 (2118) 64 (1626) 110 (2794) 135-1/2 (3442)</td>
<td>4200 (1905)</td>
</tr>
</tbody>
</table>

This chart is only to be used as a guide. For specific sizing inquiries please contact JWC Environmental.

### Inlet Flange Size - inches (mm)
- IFU 3036: 6 (150)
- IFU 3048: 6 (150)
- IFU 3060: 8 (200)
- IFU 4248: 8 (200)
- IFU 4272: 12 (300)
- IFU 5472: 14 (350)
- IFU 5496: 16 (400)

### Outlet Flange Size - inches (mm)
- IFU 3036: 6 (150)
- IFU 3048: 8 (200)
- IFU 3060: 8 (200)
- IFU 4248: 8 (200)
- IFU 4272: 10 (250)
- IFU 5472: 14 (350)
- IFU 5496: 16 (400)