

Jacopa® Grit Separation Washing (GSW)



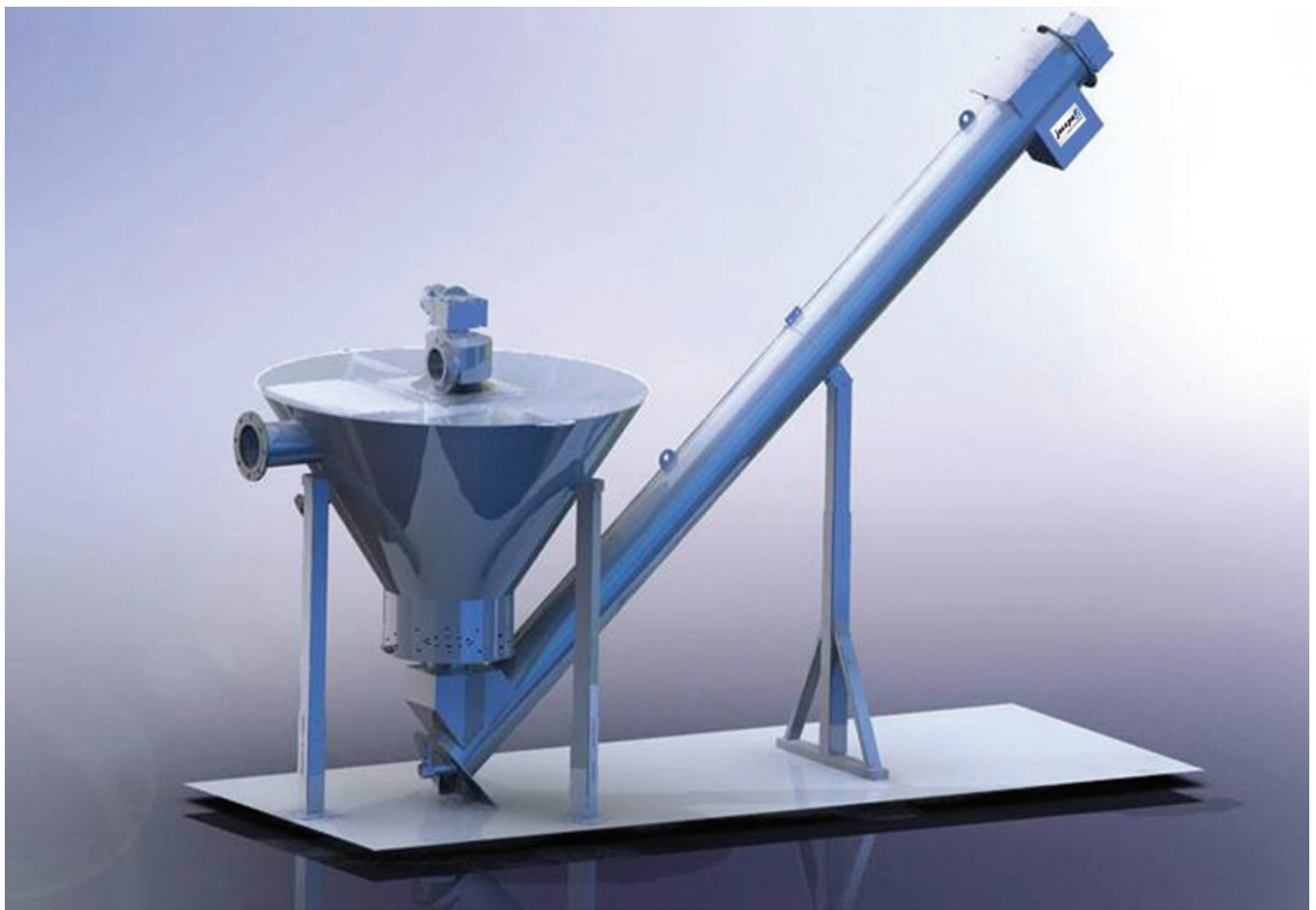
Jacopa Grit separation and washing

Key Features & Benefits:

- Stainless steel designs
- Completely enclosed to minimize odour release
- Handles mixed solids from screened sewage
- Classifier design promotes the separation of grit from organic matter
- Low residual organic discharge (<5%)

How We Create Value:

- Low maintenance cost thanks to standardised components
- Simple, low cost operation
- Easy installation/retrofit
- Reduced maintenance regimes
- Efficient organic & moisture removal
- Reduced footprint area



GENERAL DESCRIPTION:

The demand for cleaner waste products free of biodegradables is growing, as are requirements of legislative bodies. Although good efforts have been made to achieve the best possible grit / organics separation in the past, few operating plants have been very successful.

The Jacopa GSW separates and washes grit/sand coming from municipal and industrial wastewater flows of various kinds and is a highly effective machine for the separation of grit from foul and odorous organic solids. Not only does it produce a consistently clean grit, it also offers considerable benefits in addition. These include the valuable reduction of waste volume for removal from site and the reduction of odour problems, so that storage of cleaned grit (even within an enclosed preliminary works building) is acceptable.

The Jacopa GSW unit is composed of a large conical hopper for settling and washing the grit, with a tubular screw for conveying and the dewatering of the collected material. The hopper's conical shape, plus the special counter-washing system and the low rotation of the internal stirrer, allows the units to wash the grit and separate the organic matter. The assembly is completely enclosed in order to avoid odour and contaminated matter being released.

FUNCTION:

There is a flanged inlet connection on the upper part of the hopper unit, to accept the grit/slurry mixture into the unit for treatment. The conical shape of the hopper and the vortex action through the system plus the slow rotational of the stirrer, enables the effective separation of the grit/sand through washing and settling.

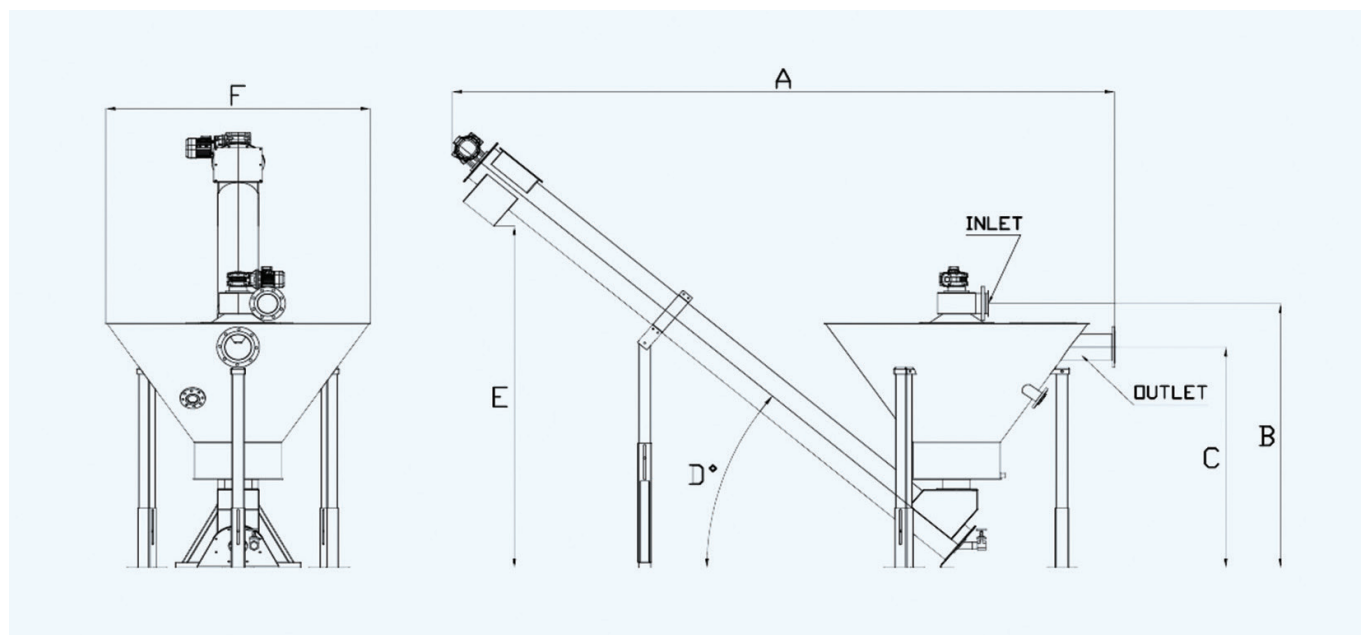
The heaviest grit particles will settle on the bottom of the hopper, on settling the counter-current system allows the washing to take place therefore only washed material reaches the extraction screw.

The screw extracts the collected material, lifting it towards the discharge point, where dewatering also takes place.



At high level on the hopper, is an outlet flange that allows the lightest material and organics to be discharged.

Jacopa® Grit Separation Washing (GSW)



Technical details

| | A mm | B mm | C mm | D o | E mm | F mm | Inlet | Outlet | Screw kW | Stirrer kW | Weight kg |
|---------------|---------|---------|---------|--------|---------|---------|--------|--------|-------------|---------------|--------------|
| GSW 30 | 4205 | 1980 | 1595 | 40 | 2150 | 2150 | DN 100 | DN 150 | 0.37 | 0.37 | 820 |
| GSW 60 | 5315 | 2230 | 1860 | 40 | 2965 | 2200 | DN 150 | DN 200 | 0.55 | 0.55 | 940 |
| GSW 90 | 5900 | 2700 | 2250 | 40 | 2965 | 3000 | DN 200 | DN 250 | 0.55 | 0.55 | 1250 |

Capacities

| | Flowrate m³/hr | Grit Removal m³/hr |
|---------------|-------------------|-----------------------|
| GSW 30 | 30 | 1 |
| GSW 60 | 60 | 1 |
| GSW 90 | 90 | 1.5 |

Performance

| | |
|--------------------------------|-------------------|
| Installed Power | 0.74 to 1.1 kW |
| Pumped inlet flow rate | Up to 90 m³/hr. |
| Solids loading | Up to 1.3 m³/hr. |
| Grit removal efficiency | >90% up to 200 um |
| Moisture content | <10% |
| Organic content | <5% |



Jacopa® Grit Separation Washing (GSW)