

## COMBY PLANTS RCT1

### Compact Systems for pre-treatment of cesspool-interceptor septage

#### MACHINE DESCRIPTION

The **RCT1** septage acceptance unit is a system studied to receive and mechanically pre-treat effluents from cesspools with a single compact unit. The sludges, discharged from tanker trucks, are filtrate to remove large particles. Screenings are pre-washed and compacted to reduce the organic content and the volume. The conditioned effluent is afterwards discharged into the biological wastewater treatment plant. **R.E.M.** offers the unit in 3 different sizes:

- **RCT1-15: screening up to 50 m<sup>3</sup>/h of cesspool liquor.**
- **RCT1-30: screening up to 100 m<sup>3</sup>/h of cesspool liquor.**
- **RCT1-60: screening up to 200 m<sup>3</sup>/h of cesspool liquor.**

#### WORKING LOGIC FOR COMBY PLANTS RCT1

Tanker trucks get connected to the unit through a flex hose **DN100** and clamped by a quick spherical connection. Solid large particles included in the waste are captured and removed by the inlet fine screw screen. The screw removes and compacts the screenings before discharge. Along the conveying section is installed a washing system consisting of a set of nozzles where pressurised water is sprayed onto the screenings themselves.

The washing system allows to remove fecal matter from the screenings discharging a neat solid which can be landfilled without bothering of smells or leakages. At the discharge a built-in compactor is installed reducing the screenings volume by up to **50%**.



#### MAIN ADVANTAGES FOR COMBY PLANTS RCT1

1. No leaks, smells or aerosols generated by the system.
2. No drives in contact with the sludge.
3. Compact design and small footprint.
4. No concrete casting required.
5. Low operation and maintenance costs.
6. Low costs for installation and erection.
7. Excellent screening performance with up to 52% solids capture ratio.

#### GENERAL DIMENSION DATA FOR COMBY PLANTS RCT1

Here we provide some information of a technical nature for this type of units:

- **Filtration with 6 mm perforated screen.**
- **Removal and conveying of screenings to the discharge point with a single drive.**
- **Volume reduction of screenings up to 50%.**
- **Effective drainage of the screenings along the conveying section combined with a compaction section for more volume reduction and water removal.**
- **Washing of screenings performed by the REMSPRAY integrated system using 3 independent washing cycles.**

R.E.M. RCT1 septage receiving stations can be equipped with the following accessories:

- vertical discharge.
- bagging (single or endless bag type).
- heat and weather protection.
- centralized solenoid valves and piping.
- control cabinet.
- ATEX or UL NEMA 7 EX-proof version.
- by-pass with manual bar screen.

#### STANDARD DIMENSION DATA FOR COMBY PLANTS RCT1

RCT1 MODELS	A - mm	B - mm	C - mm	Ø INLET	Ø OUTLET	FLOWRATES m <sup>3</sup> /h
RCT1/15	3490	2240	610	DN100	DN200	50
RCT1/30	4766	3470	1065	DN100	DN200	100
RCT1/60 with rotating basket screen RS2	4550	2920	1310	DN100 / DN150	DN300	200

Materials of construction for fabricated parts:

\*Stainless Steel AISI304 / \*Stainless Steel AISI316

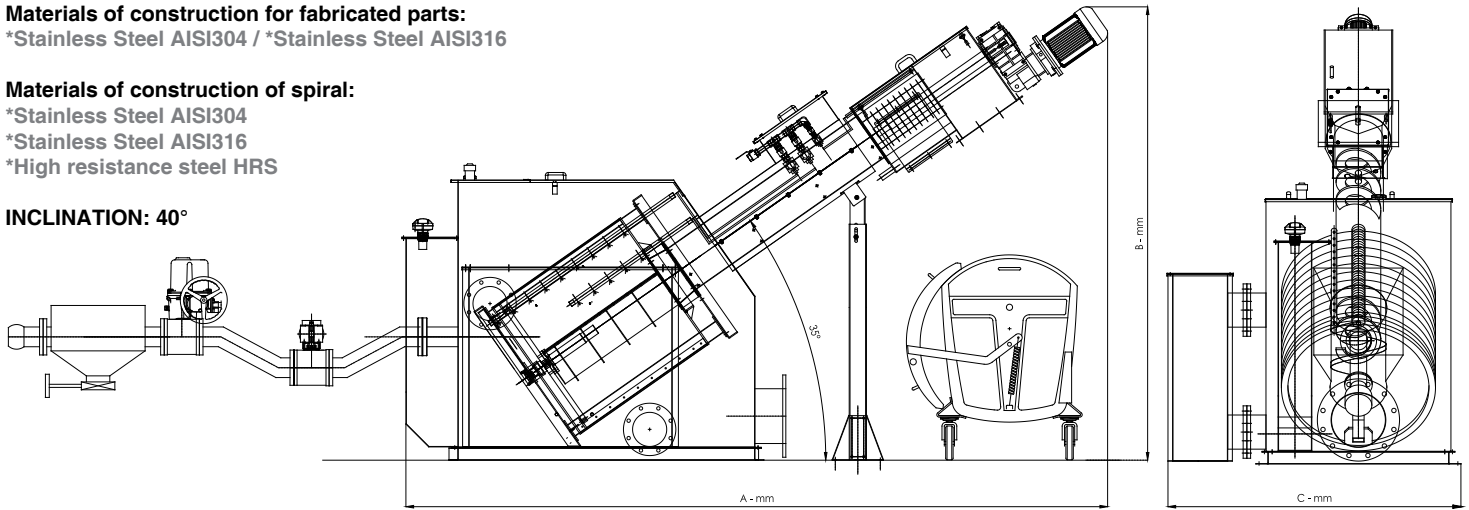
Materials of construction of spiral:

\*Stainless Steel AISI304

\*Stainless Steel AISI316

\*High resistance steel HRS

INCLINATION: 40°



n.b.: the manufacturer may modify some dimensions or sizes without prior information.