

ROTAMAT® Sludge Acceptance Plant Ro 3

THE ORIGINAL
ROTAMAT®!!!



with integrated screenings washing and pressing

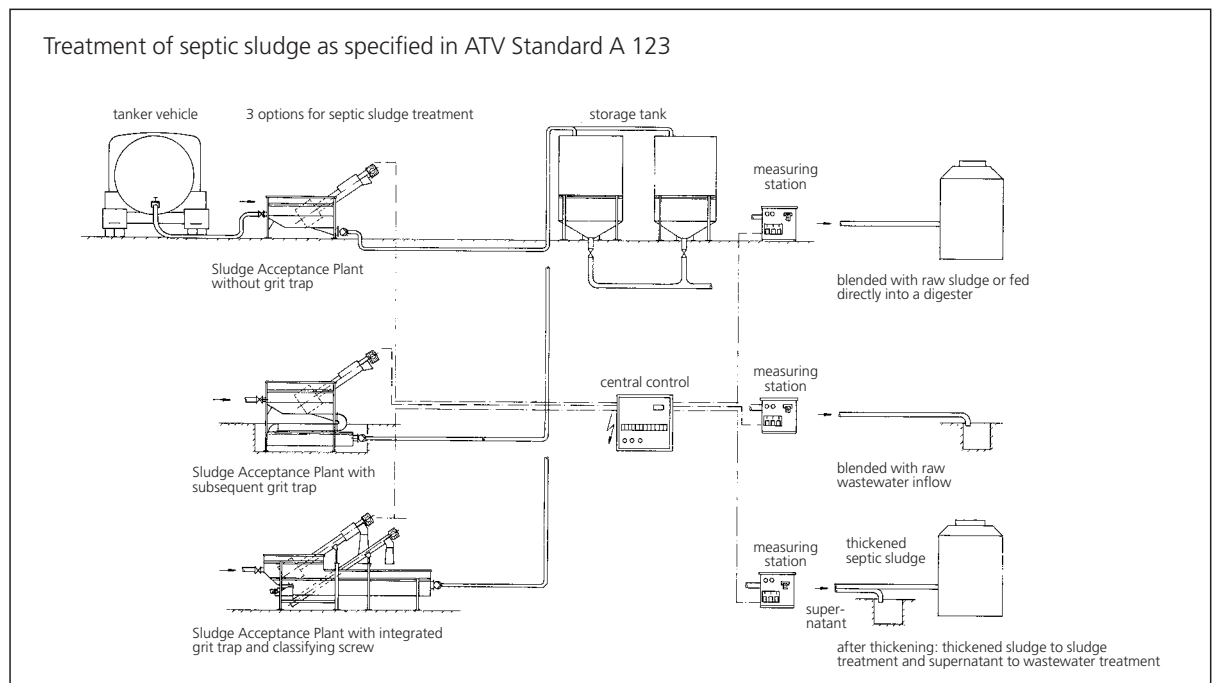


HUBER provides complete systems and processes for septic sludge treatment. Our equipment, as proven during many years of experience, is especially suited for septic sludge treatment. Hundreds of ROTAMAT® plants for septic sludge treatment have been installed worldwide. The following statement by a WWTP Operator (Isar-Loisachgruppe, Germany) speaks for itself: "We can confirm that the plant works perfectly and exceeds all expectations in respect of separation efficiency and capacity. Other operators were also convinced by the plant's capabilities".



Indoor installation of a ROTAMAT® Sludge Acceptance Plant

▶▶ Three Options for Septic Sludge Treatment



Septic sludge is typically delivered in tanker vehicles. Depending on the size of the WWTP, it may be pumped into a balancing tank from where it is continuously fed to the plant. Direct feeding without prior balancing is possible at larger plants.

In any case, removal of coarse material, such as hygienic products, plastic material, etc., from the septic sludge is necessary. There are several requirements for good septic sludge treatment:

- ▶ High capacity to minimize waiting time of tanker vehicles
- ▶ High separation efficiency to achieve excellent separation of non-degradable material
- ▶ Automation to minimize operator attendance
- ▶ Complete encasement to eliminate odor nuisance

- ▶ Integrated screenings press to produce screenings suitable for landfill and to reduce their weight and disposal costs
- ▶ Reliable operation without impairment by grit and gravel

To meet these requirements HUBER developed special ROTAMAT® machines and plants that have proven their efficiency and reliability in hundreds of installations. After its mechanical treatment the septic sludge is either fed directly into a digester, pumped into a storage tank or discharged directly into the inlet of the WWTP.

►► The Ro 3 Sludge Acceptance Plant ...

... is used for mechanical treatment of septic sludge. A ROTAMAT® Fine Screen Ro 1 or ROTAMAT® Micro Strainer Ro 9 is installed in a tank.

The septic sludge is fed into the tank and, as it flows through the Fine Screen or Micro Strainer, all coarse material is retained. A screw conveyor with integrated screenings press removes the screenings from the tank, reduces their volume and weight and drops them into a container or bagging device.

The entire treatment takes place in a fully enclosed system; odor nuisance is thus prevented.

The screenings are additionally washed which makes them suitable for landfill.

The filtrate with a high BOD load is blended into the wastewater for further treatment in the WWTP.

If an outstanding separation efficiency is required, every version of Sludge Acceptance Plant can be



The dewatered screenings are discharged into a container or bag.

alternatively equipped with the well-proven ROTAMAT® Wedge Section Screen Ro 2 that has a spacing between 0.01 and 0.24 inch.

►► Ro 3.1 Sludge Acceptance Plant with ROTAMAT® Fine Screen Ro1



Floating and suspended material is retained in the screen basket. The tines mesh into the basket bars and ensure a complete automatic cleaning.

The robust and efficient Ro 3.1 version has become the most popular system of its kind. Its superior design and engineering guarantee most dependable operation – day after day, year after year.

The main component of this Sludge Acceptance Plant is the reliable ROTAMAT® Fine Screen Ro 1. It excels with its high capacity, good separation efficiency and low head loss. Another exceptional feature is its integrated screenings press with all its benefits. The ROTAMAT® Fine Screen is extremely sturdy, able to deal with rocks and grit, and entirely made of stainless steel. It is fully self-cleansing as its rake tines fully engage the basket bars. (Please find more detailed information in our separate Ro 1 brochure.)

►► Ro 3.2 Sludge Acceptance Plant with ROTAMAT® Micro Strainer Ro 9

This is an efficient and low-cost alternative to our Ro 3.1. It can be used for low flow and load applications.



ROTAMAT® Sludge Acceptance Plant with integrated Micro Strainer, heating and insulation.

➤➤ Ro 3.3 Sludge Acceptance Plant Compact Version with Grit Trap and Grit Classifier

This type of plant is used for complete separation of screenings and grit. It consists of:

- Fine screen
- Integrated screenings press
- Grit trap, in compliance with ATV Standards
- Grit classifier

Due to integration of all components in a single tank it is a very compact plant and odor nuisance is prevented. Complete treatment of the septic sludge is performed within a single unit.



ROTAMAT® Sludge Acceptance Plant, compact version



Discharge of screenings



Screenings in a container



Discharge of grit

➤➤ Useful Additions to the Sludge Acceptance Plant



Sludge Acceptance Plant with metering, customer identification and automatic sampling.



Sludge Acceptance Plant on a trailer



Coupling for tanker vehicle and identity card reader



Bagging unit for the screenings

►► Balancing Tanks for Raw Septic Sludge

Balancing tanks can be installed above or below ground and permit continuous treatment of septic sludge. Above ground installations are often thermally insulated. After its treatment in the Sludge Acceptance Plant the septic sludge may be stored in a dosing tank to permit controlled discharge into the wastewater treatment plant.

Three types of plants are available for septic sludge treatment:

1. Sludge Acceptance Plant
2. Sludge Acceptance Plant with subsequent grit trap
3. Compact version of Sludge Acceptance Plant with integrated grit trap and grit classifier



Thermally insulated balancing tanks permit continuous operation of the septic sludge treatment plant.

►► Sludge Acceptance Plant with Subsequent Grit Trap

A subsequent grit trap is required where the septic sludge is not blended with raw wastewater and therefore does not flow through the grit trap of the WWTP, but is fed to the sludge treatment instead, e.g. into an anaerobic digester. A combined unit, as shown in the photo, is available for this application. There are two installation options: The grit trap can either be installed below (see photo) or next to the Sludge Acceptance Plant. This type of grit trap, however, separates only coarse grit.



ROTAMAT® Septic Sludge Acceptance Plant with grit trap underneath

►► Examples of installation

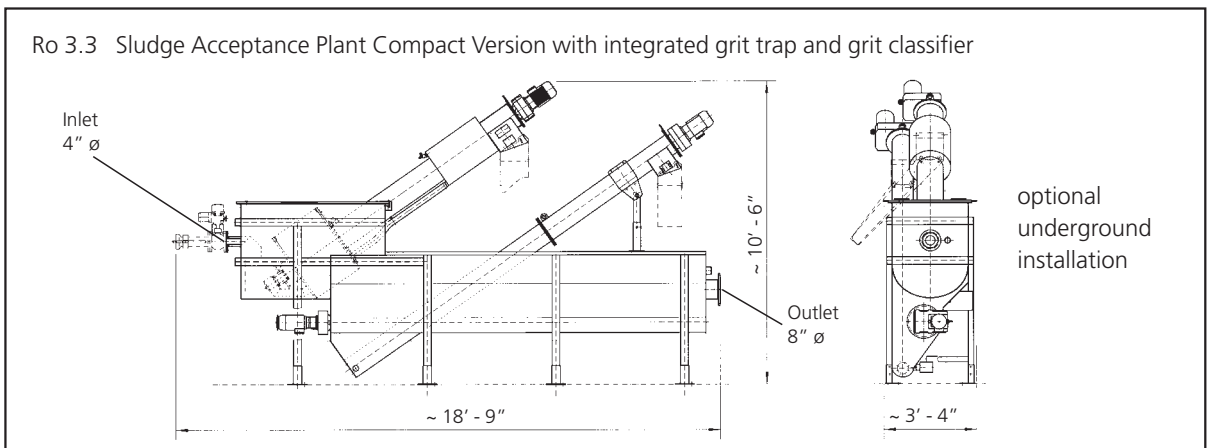
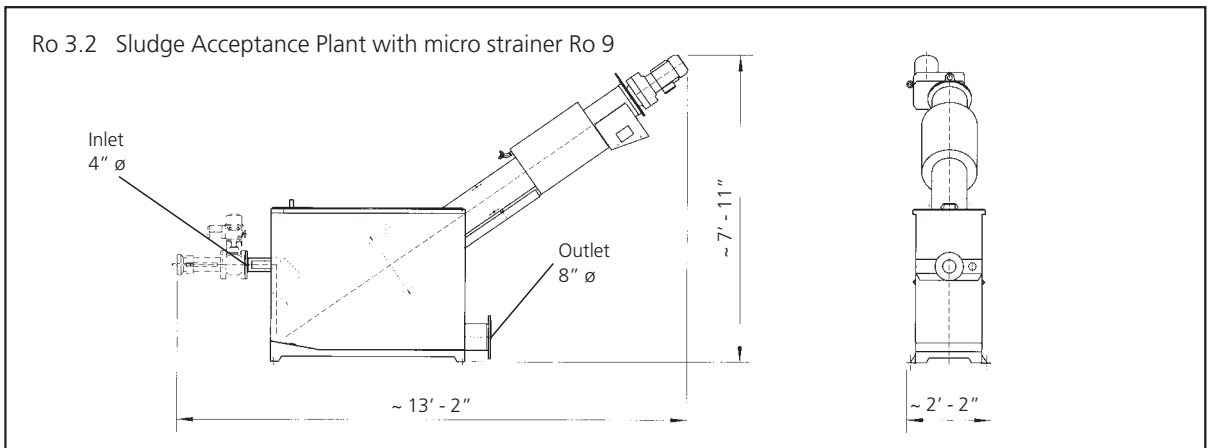
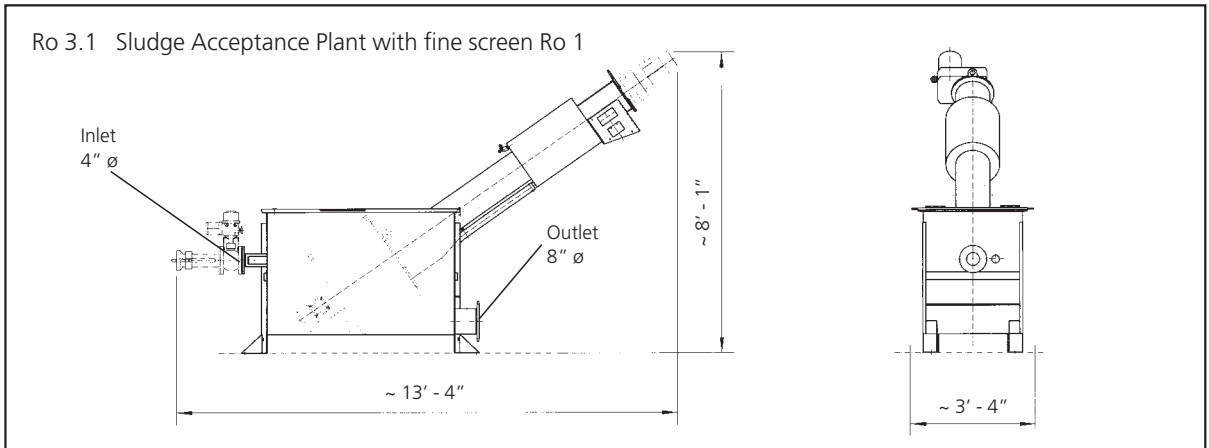


HUBER ROTAMAT® Sludge Acceptance Plant, compact version with integrated grit trap and grit classifier



Demonstration with staff of our subsidiary in the U.K., where over 150 of our Sludge Acceptance Plants have been installed

►► Dimensions



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Subject to technical modification

ROTAMAT®
Sludge Acceptance
Plant Ro 3