

# **DECANTER CENTRIFUGES**& PLANTS FOR SOLID/LIQUID SEPARATION



# **PLASTICS RECYCLING** - THICKENING OF WASTE SLUDGE WITH HILLER DECANTERS

HILLER decanter centrifuges are specially used for highly efficient and continuous solid-liquid or liquid-liquid separation.

The mode of operation of decanter centrifuges is as follows:

The suspension to be treated passes through the feed line into the rotating inlet is accelerated in the direction of rotation and fed through openings in the drum, which is also rotating. Solid particles move by the centrifugal force towards the drum wall. (See process diagram).

The centrifuged solids are transported by the feed screw through the cone to the outlet openings of the drum. The liquid is discharged from the drum via the overflow (baffles).

The HILLER DecaPress series was developed for 2-phase separation and

the HILLER TricaPress series was created especially for 3-phase separation.

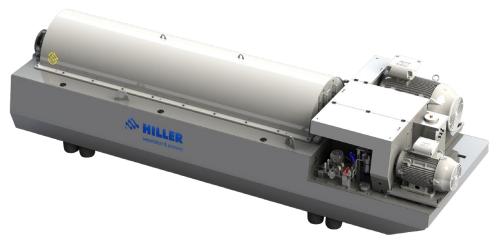


#### **OUR APPROACH:**

First, we work out a breakdown of the current costs together with the customer and then take a sludge sample to examine it in our in-house laboratory and determine the achievable dry matter. Based on this data, an initial cost-benefit analysis is carried out. If the result is positive, an on-site test is planned, on the basis of which the process design and the final dry matter and centrate quality can be determined.

A large fleet of mobile test plants with a capacity of 200l/h to 120m<sup>3</sup>/h is available to carry out the tests.





#### **HILLER ADVANTAGES**

- highest dry matter content in discharge
- less energy use via energy efficient construction of the equipment
- lower maintenance costs and longer lifespan
- longer intervals between servicing and shorter repair times
- greater automatisation and easier servicing
- Also available in 3-phase version for separation of sludge, water and oil

## **TYPICAL APPLICATIONS:**

- rinse water / sludge from cleaning and rinsing
- wastewater (end-of-pipe)
- oily sludge
- sludge from biological purification

## PROCESS DIAGRAM OF A HILLER DECANTER:

