

## Description

## HYDROCYCLONE UNIT

Separation of plastics in the centrifugal field.

The hydrocyclone unit basically consists of:

- **1 Mixing container** for even distribution of the plastic particles in the water (suspension).
- **1 Turo feed pump** with a special vortex impeller.
- **1 Inductive flow meter** for monitoring and regulating the pump.
- **1 Hydrocyclone** for separating the light fractions from the heavy fractions.

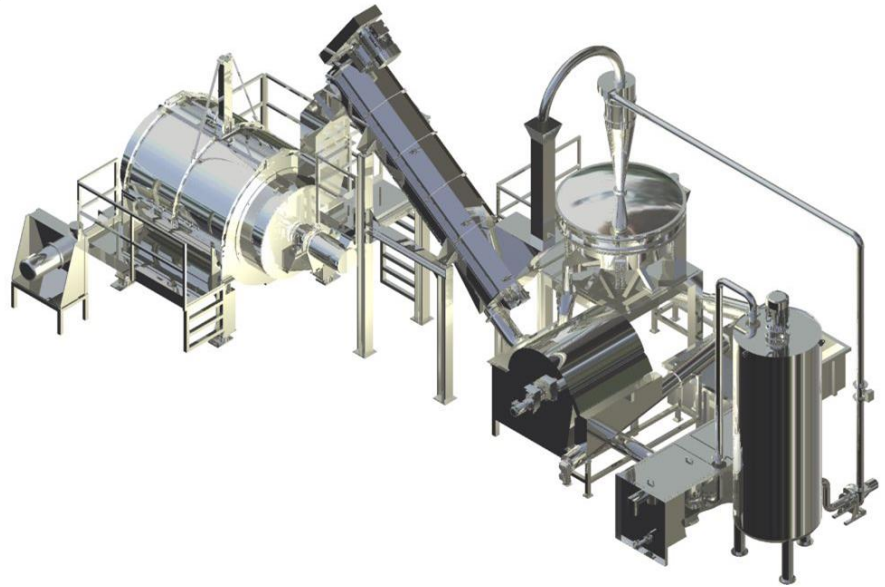
Approximately 90% are discharged at the top and about 10% at the bottom.

Overflow – The water/plastic mixture flows into the post-scrubber and separates the water from the plastic. Fine particles/paper fibres, etc. flow with the water into the disc filter where it is collected and discharged.

Underflow – The heavy particles are separated via the apex nozzle and then separated into water and solids over the vibrating screen.

- **1 Pre-separator** for pre-separating the greater part of the water through the overflow.
- **1 Post-scrubber** (friction washer) for separating the water from the plastic, and to friction-wash the plastic.
- **1 Mechanical dryer** to friction-dry the plastic.

## Hydrocyclone Unit



## Function Hydrocyclone

- The water/plastic/dirt mixture is pumped tangentially at a certain pressure into the cylindrical top part of the hydrocyclone. This forms a primary eddy on the outer side of the conically tapering bottom section (downward spiral eddy). Since the apex nozzle narrows in the middle, a secondary eddy forms that transports the lighter fractions to the top where they are discharged.

