

## Technical Description

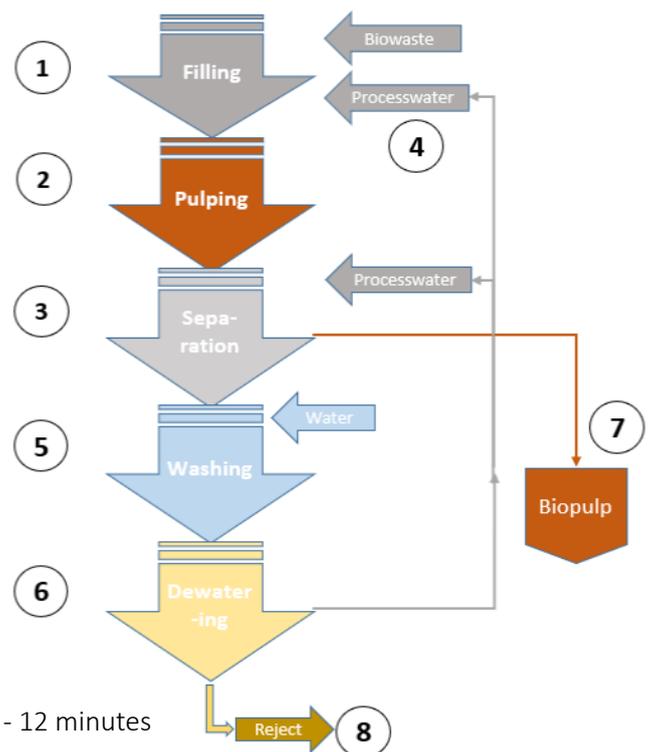
The Ecogi technology has been developed for source-segregated organic waste from households and commercial enterprises. The system is designed with robust components to cope with the challenges in this kind of waste. The numbers below refer to the flow diagram in figure 1.

Waste is loaded with front loader to the feed hopper (1) with built-in transport screw. Beside feeding the organic material to the subsequent transport conveyor, the screw also opens the waste to reduce the volume, thus allowing more waste to be fed in each batch.

During filling of the pulper the waste is mixed with process water. The pulping process (2) lasts 8 - 12 minutes depending on the type of waste treated and the recipe selected by the operator.

Stirring in the pulper is performed by a rotor in the bottom, equipped with exchangeable wear segments.

After finishing of the pulping, a valve at the bottom of the pulper opens, and the pulped mass is emptied into the separator below (3), and at the same time process water is added. The biopulp from the separator is being pumped to the finished biopulp tank (7) with a dry matter (DM) of up to 17-18%, from where it can be



sent to a biogas plant. The reject is retained in the separator by the rotating separator impeller and a perforated plate with 6 mm holes.

When the pulper is empty, the valve closes, and the next filling sequence can start (1). At the same time 1<sup>st</sup> washing step starts (5), where the reject is washed with process water. The excess water is pumped to the process water tank to be used in next filling and separation STEP (4). In the second washing sequence the reject is flushed with clean water to reuse as much organic as possible.

After finishing of the 2<sup>nd</sup> washing sequence the valve below the separator opens, and the reject is dewatered (6), first in a dewatering screw, then in a screw press. The dewatered reject is transported to a storage (8) for later transport to an incineration plant or central sorting installation for recycling.

