



What is a Gravity Pressure Vessel?

- Developed and patented by GeneSyst Int. Inc. /James Titmas.
- The GPV hangs freely in a 700 meter deep shaft.
- The shaft consists of an iron tube fixed in a concrete jacket.
- The shaft is brought under vacuum pressure, like a vacuum flask.
- The GPV is a closed outer tube with an open inner tube.
- Celluloses waste in water is pumped through the outer pipe down and through the inner pipe up.
- At the bottom of the pipe, in the reaction chamber, celluloses converts to sugars in a low pH environment.
- The acid is neutralized with alkaline to retain the sugars.
- The up going stream heats the down going stream.
- It is an energy efficient sterile chemical flow process without moving parts and gas emissions.
- After the celluloses is cracked in the reactor chamber, the sugar dissolves and is pumped through the inner pipe to the closed sedimentation tanks on ground level.
- Here the remaining inorganic dense and lightweight particles are removed for beneficial reuse.
- The Saccharides are then stripped of other valuable organic byproducts and passed forward for fermentation to ethanol.
- All the tanks and plants used in the Biomass Ethanol Process are enclosed or covered.

