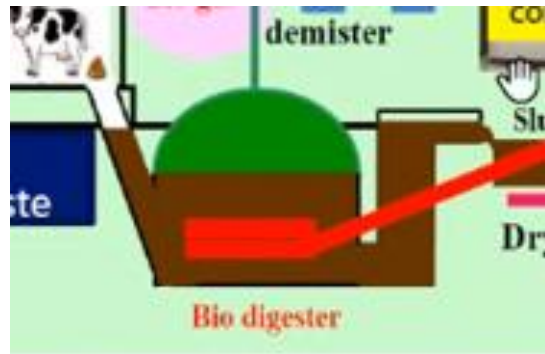


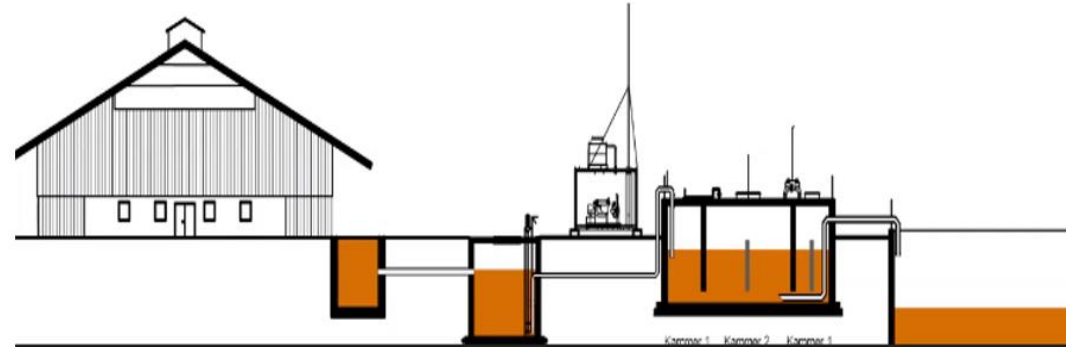
Comparison of Indian digester technologies with  
Bert Mobil (patent pending)  
for milk farmers in India

# Comparison of digester technologies

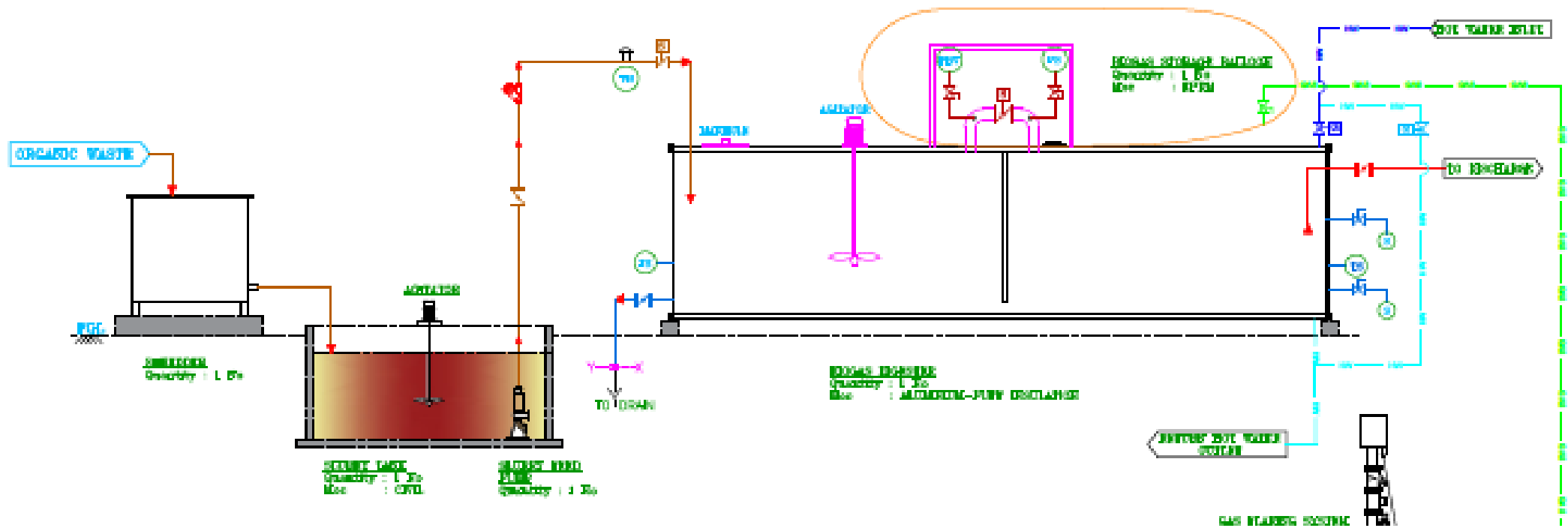
Classic Indian biogas digester



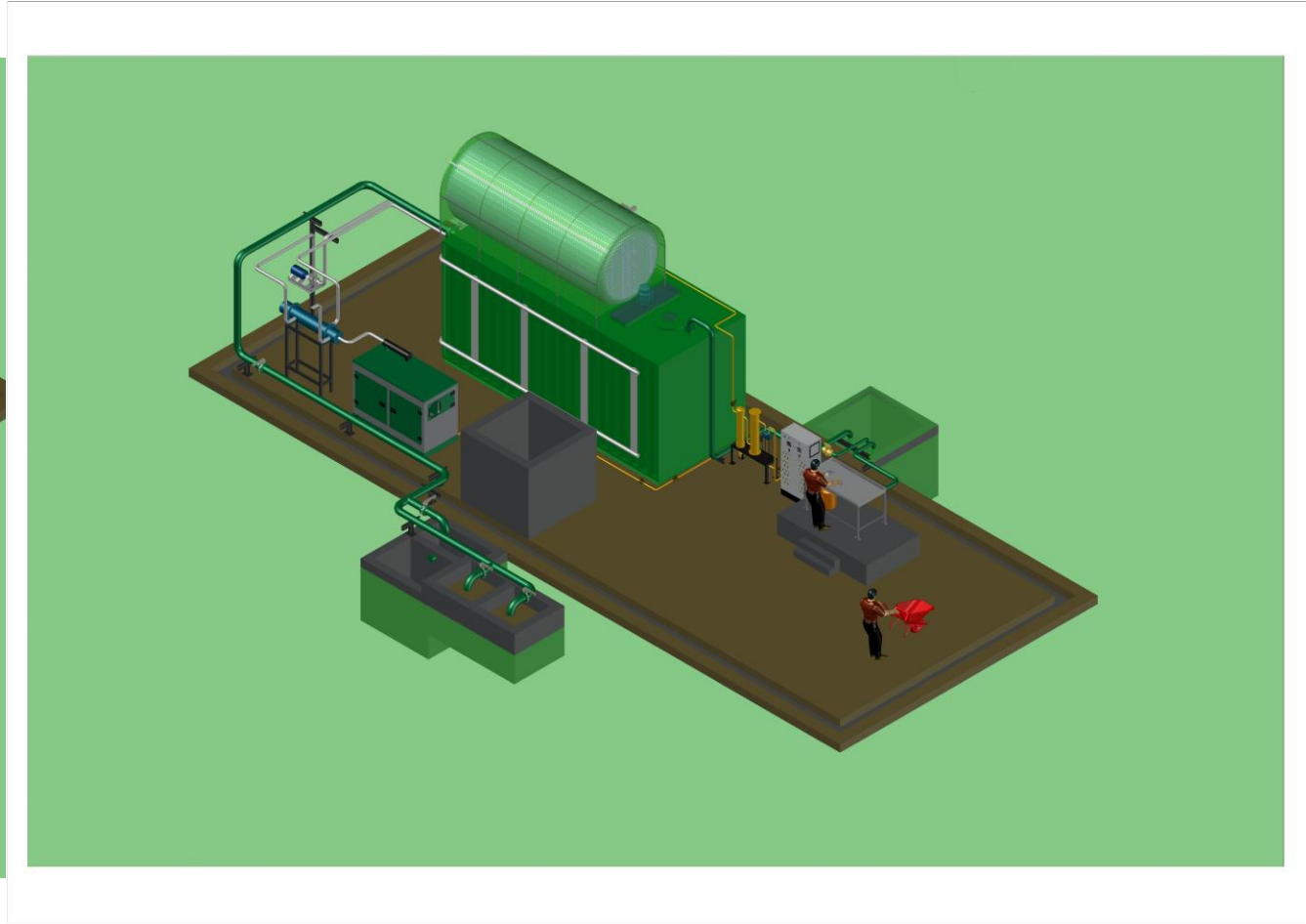
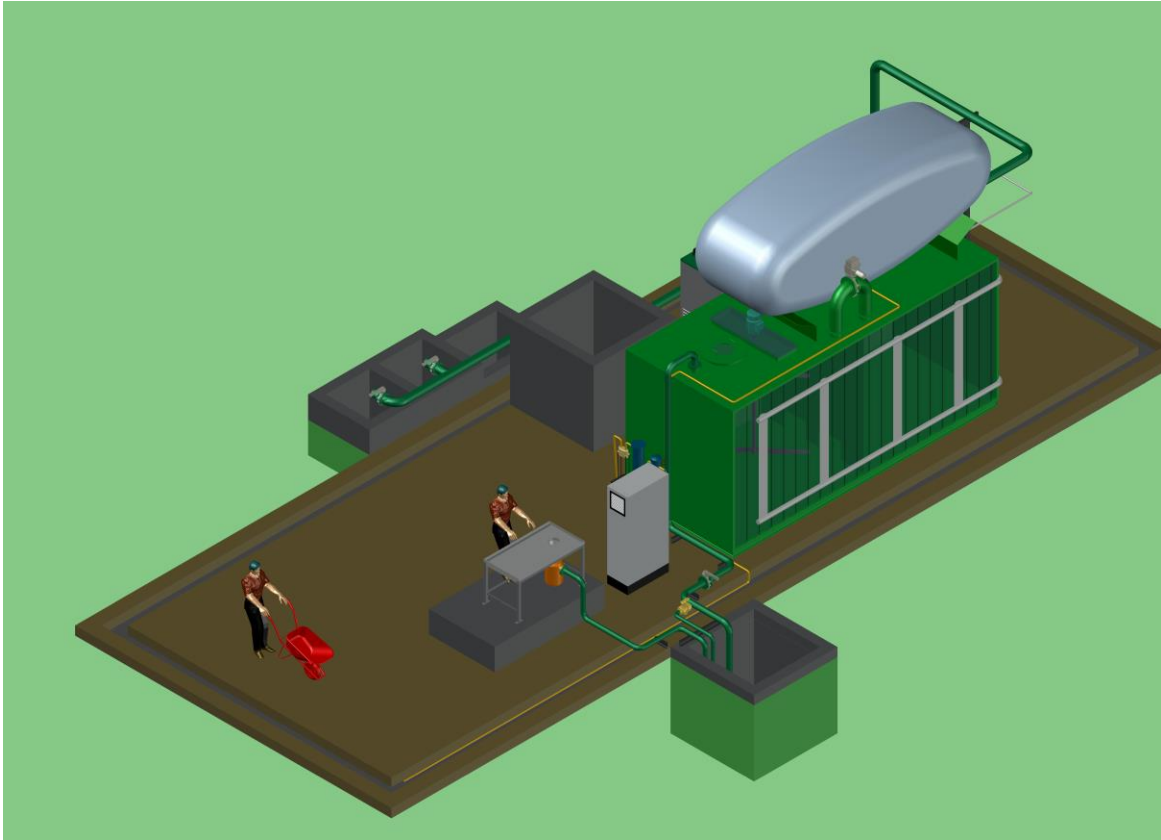
Bert Mobil working principle and technology  
Klick pics to see video



# Bert Mobil PFD



# Schematic



# Comparison of digester technologies

Feature	Fixed/ Floating Dome	Bert Mobil
Digester feature:	Material: Concrete Shell, MS /FRP gas holder	Material : Metal with corrugated construction for strength. Polymeric Gasbag
Mixing	Nil	<a href="#">PON Mixing</a> 3 Blade Agitator
Scum control	Nil	Special Agitator blades for scum breaking
Retention	30 days	20 days
Heating of digester	No	Provided

# Comparison of digester technologies

Feature	Floating / Fixed Dome	Bert Mobil
Efficiency of biogas production of 1 qm cow dung, m <sup>3</sup> biogas /day	34 m <sup>3</sup>	38 m <sup>3</sup>
DM load	6 - 8%	12-15%
Climate to operate in	Proven in Tropical climate only	up to – 25°C
How to repair leakage in hot water heating system	Digester must be emptied, costly repair	Digester can continue to operate, repair outside and accessible
Sampling	Cannot be done	Ports are provided
Sensors	None	Temperature sensor for digester Gas pressure sensor
Service hole to access inside digester	None	YES
Window to look inside digester	None	YES

# Comparison of digester technologies

Feature	Floating/Fixed dome	Bert Mobil
Movability	None	By truck
Resale of the digester	No	Yes
Leasing	No, full payment	Yes starting from 0,6 Lakhs/months
Scalable in size, when more substrate is available	No	Yes, adding second digester
Time to install	2 weeks to build	2 days
Footprint (space required)	20 m <sup>2</sup>	15 m <sup>2</sup>
Pumps required	1	1

# Comparison of digester technologies

Feature	Floating/Fixed Dome	Bert Mobil
Methane Yield	55 to 60%	Increase by 10%
Lifetime Warranty	5 years No warranty	20 years 5 Years
Reference plants 10 years old	NO	YES
Constant production of biogas for CHP running constantly	No: Depends on outside climate Digester feeding no control	YES: climate has no impact and digester feeding controlled
Price for 1 TPD	20 Lakhs	30 Lakhs