



# Integrated System Engineers Ltd

## Off Grid Digesters

# Design Parameters

- ◆ Complete Biological Transformation
- ◆ Minimum Power Demand
- ◆ Ultra Long Performance Life
- ◆ Off Grid Digester
- ◆ Minimum Service Requirements
- ◆ Incorporating Innovation

# Complete Biological Transformation

- ◆ Retain Available Nutrients
- ◆ Provide Soil Food & Plant Assimulative Nutrients
- ◆ Destroy all Pathogens
- ◆ Achieve a Fully Transformed State
- ◆ Raw to Organic Fertiliser in One Vessel
- ◆ Removes Dependency on Chemicals
- ◆ Assists Farm & Animal Health
- ◆ Provides Consistent Application Rates

# Minimum Power Demand

- ◆ Minimal Demand to Operate & Monitor
- ◆ Equipment Available in 12 & 24vdc
- ◆ PLC Commands In 4/20 M/a
- ◆ Safety
  - ◆ DC Reduces Hazards From System Sparks
  - ◆ No Shock Threat To Humans

# Ultra Long Performance Life

- ◆ Stainless Steel Materials & Equipment
- ◆ Electronic & Manual Monitoring
- ◆ No Heat Exchangers, Pumps, Pipes with Passive Heating System
- ◆ Closed Cell, Foil Covered & Heat Sealed Insulation
- ◆ Cabeling is Imbeded in Insulation

# Off Grid Digester

## ◆ Self-Sufficient Dc System

- Not Dependent On Grid
- Insulated From Supply Shortages
- Unaffected by Climate Change & Disasters

## ◆ Not Subject to Increasing Costs

## ◆ Establishes Independent Power Supply

- An Industry Design Pre-Requisit
- Key to Commercial Development

# Minimum Service Requirements

- ◆ 2 Working Parts, Burner & Compressor
- ◆ No Internal Servicing Requirement
- ◆ Minimal Service Time
  - All External Equipment is Plug & Play
  - Replace on Site/Service in Shop
- ◆ Service Schedule: ½ Hour/Month  
4 Hours per Year

# Incorporating Innovation

- ◆ Design Simplicity
- ◆ Stainless Steel Construction
- ◆ Off Grid Dc Power
- ◆ One Vessel Treatment
- ◆ Passive Heating
- ◆ H<sub>2</sub> Gas Enhancement Device
- ◆ Low Maintenance

# Plant Layout

