# **Grinders FAQ**

#### 1. What motor power options are available?

- 3 HP for larger pump stations including 20 in. throat and above
- 3 HP for all sludge applications
- 5 HP for sludge applications generally above 6% D.S.
- 5 HP for all "heavy" solids loading such as prisons and public utilities subject to abuse (airports, shopping centers, etc.)

### 2. When do we use IP68, and how does the motor cool?

- IP68 for all wet well submersible pump protection applications
- IP68 is ATEX (Flameproof) as standard
- IP68 motor frame size is twice the HP standard to dissipate heat when unsubmerged

### 3. Are ETOS cutters interchangeable?

- ETOS cutters are fully interchangeable with the older-style CAM cutters
- ETOS and CAM cutters can be mixed and used together if required

## 4. What is the expected life for the cutters?

- Cutter life expected around 3 years on raw sewage
- · Cutter life expected at 18 months on sludge
- Cutters can be restacked bottom to top to increase unit life and reduce costs
- Cutters cannot be resharpened

## 5. What are the Two Years' Spares requirements?

Two years' operating spares are generally:

- 30% of total cutters
- 2 x mechanical seals
- 1 x set of gaskets

#### 6. What is the routine maintenance?

- Advise six months of visible inspection on cutters and general state of Muncher
- · Nuisance tripping indicates cutter wear
- Sealed-for-life bearings and no requirement for greasing no nipples

#### 7. Do you have other useful information?

- Mechanical seals compensate for side load as well as radial load
- Springs in the seal absorb the side load
- PLC is preset and should not be commissioned or tampered with
- Control Panel enclosure is standard IP54 rating
- ATEX enclosure available as an option
- No special tools required for maintenance
- · No commissioning spares required

