

Reasons for using Soft Starters

New applications

- A reasonable policy to adopt would be to specify fitting Soft Starters at the design stage. The 'extra' cost of these devices can be considered negligible when compared to the potential costs for breakages and loss of production. Fitting a Soft Starter with an 'Energy Optimising' feature will give some energy savings when the plant is running. The magnitude of these savings will depend on the nature, and use, of the plant.

Applications which stop and start frequently?

- Soft Starters, because they apply the necessary starting and acceleration torque gently, thereby avoiding mechanical shocks, enable motors and motor/gearbox drives to be started more frequently.

Applications which are left running when they do not need to be?

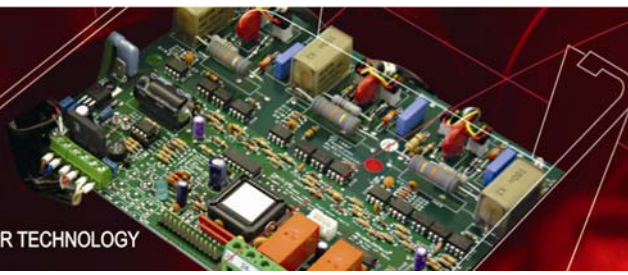
- The use of soft starters means that they can be turned off when not required. Maximum energy savings are obtained if plant is not running.

Mechanical breakages or failures

- Soft Starters will alleviate almost all Gearbox refurbishments, frequent replacement of belts or chains, shaking of structures; these are all consequences of the damage caused by the starting of equipment D.O.L

Old Slip Ring Motors

- It is quite practical to use Soft Starters with slip ring (or wound rotor) type motors. A small amount of resistance needs to be retained. Refer to Fairford Electronics for technical assistance.



Applications which currently use a fluid coupling.

- This is an place for consideration of a Soft Starter. Fluid couplings have been used widely in industry and are now becoming obsolete or harder to maintain and refurbish. They are comparatively expensive to buy and because they are mechanical will need future maintenance.

In most instances this coupling can be replaced with a solid coupling and a Soft Starter. Motor sizes may need adjusting.

Refurbishments of existing starting equipment

- When the need arises to replace equipment, serious consideration should be given to fitting Soft Starters with an 'Energy Optimising' feature. However this is a decision which should be made within an overall planned maintenance policy.

Increase of plant capacity

- Some rural plants have a supply capacity restriction placed upon them by the Electricity Supply Company. In some circumstances, use of Soft Starters can permit more motors or larger motors to be used and started without exceeding the capacity of the supply.

Benefits derived from using Soft Starters

Mechanical:

- Smooth acceleration -- No snatch -- No shock loading - Reduced starting stresses
- Lifetimes of belts, chains, gears and couplings and mounting structures are extended
- Fluid couplings and some clutches can be eliminated

Electrical:

- Starting currents minimised -- No spikes or inrush current
- Contactors can be closed/opened off load giving much extended lifetimes
- Weak supplies can accommodate more or larger motors
- For limited supplies motors can be started whilst others are running

Economic:

- Lower overall cost for new installations
- Much reduced maintenance and replacement of power train components
- 'Fit and Forget' -- Reliability means less downtime
- Reduced current surge at start can mean lower supply tariffs
- 'Energy Optimising' feature gives savings at partial loads
- Equipment currently left running can be switched off if not required

Application:

- Soft Starters can be 'tailored' to suit individual applications
- Fluid surges eliminated in pumping applications (soft stop option selectable)
- Controlled take up of materials

Reasons for Buying Fairford Soft Starters

Company

- Has totally focussed on the single product and specialised in the design and manufacture of Soft Starters since 1981.
- Is recognised, world-wide, as the market leader in the design, manufacture and supply of Energy Optimising Soft Starters.
- Constantly reviews the latest technologies and develops the ranges and capabilities of their Soft Starters where appropriate.
- Are supplying, custom designed circuit boards and complete Soft Starter units, through some of the worlds leading control gear and specialist Soft Starter companies.
- Now has units operating successfully in over 50 countries around the world.

Support

- Maintains all the specialist skills and experience within the company to ensure that technical support and application advice is readily available.
- Has engineers with specialist knowledge of many applications in industry gained over the years.
- Works closely with carefully chosen distributors to ensure that product is always available and that the quality and speed of service is of the highest level.

Products

- Have a proven track record in industry for quality, robustness and reliability.
- Are now operating successfully on almost all applications within industry.
- Have been designed, manufactured and tested to be compliant with the demanding European standards, EN60947-4-2
- Exceed all the requirements of the EMC and Low Voltage Directives.
- Are configured for ease of installation.
- Are full rated.