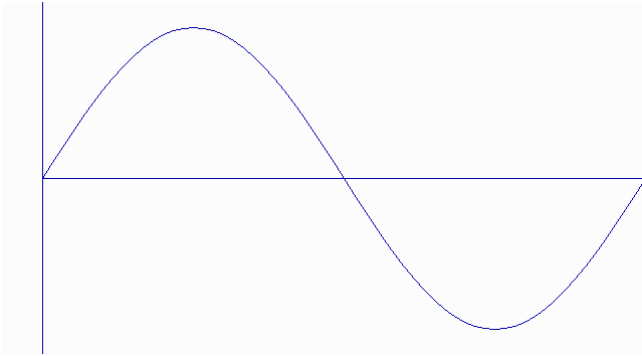


# Supply Quality Categories for Tectrite Products

## 1/ Clean Supply

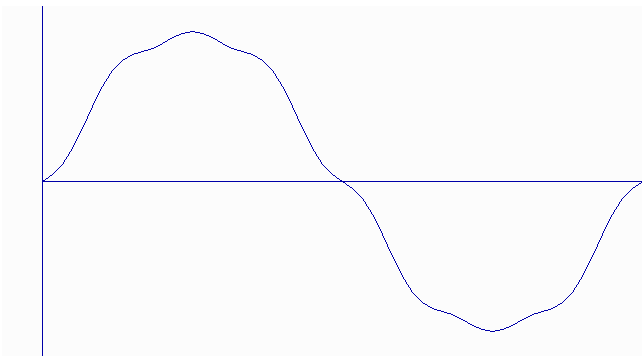


Categories are cumulative ie:

Category 3 includes category 2.  
Category 4 includes category 2 & 3.

Only a single phase waveform is shown for clarity however in most cases the supply will be 3 phase.

## 2/ Harmonics



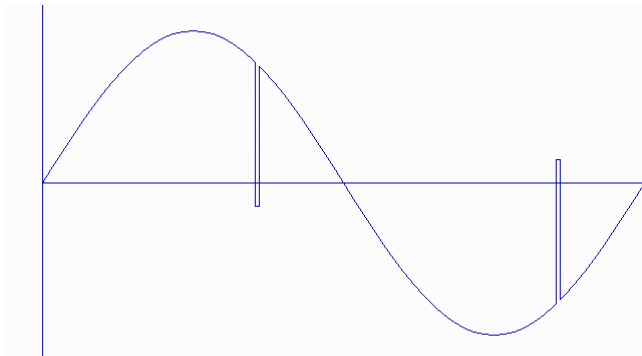
### Possible sources of interference

**Harmonic** voltage distortion is caused by large non-linear loads such as :

Soft Starters (during starting).  
Most large variable speed drives.  
A large number of computers.

The effect is worse in the case of a weak supply.

## 3/ Notching

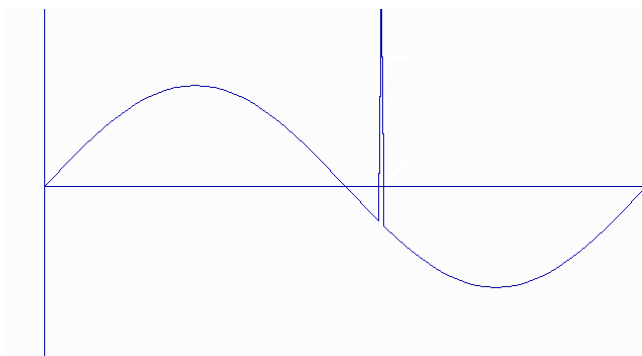


**Notching** is caused by large thyristor controlled 3 phase rectifiers. These are typically found in :

Large DC drives.  
Current source inverters.

Again the effect is worse in the case of a weak supply but will be reduced if line chokes are fitted to the rectifier.

## 4/ Large Spikes



**Large voltage spikes** can be caused by switching transients and lightning strikes. Supplies in remote locations may be particularly at risk.