



The Challenge

- Client reported electrical voltage distortion within their plant, causing over-heating of production equipment, cables and power components.
- Unplanned outages of plastics extrusion equipment saw the molten plastic solidify within the extruder which then had to be dismantled and the plastic chiselled and extracted manually from the machine.



Client Profile

- Thermoplastics Manufacturer
- Overheating of production equipment causing outages
- Project Date: Summer 2015

How We Helped

- Plant network studied and found the plastic extrusion equipment was generating a high level of voltage distortion.
- Advanced power quality meters were installed and monitoring took place over a period of time.
- Solution supplied included individually designed harmonic filter banks, dimensioned to provide the necessary power factor correction and to reduce the harmonic distortion to levels acceptable for the sensitive production plant and to the electrical supply utility.

The Result

- Custom solution provided
- Internal network modelled and, using this and the measured data, harmonic filters were dimensioned and designed to solve the problem.
- Manufacture, supply and commissioning of filters organised by Premium Power.
- Resulted in large energy savings for the plant, as the filters reduced load power factor and network heat losses.