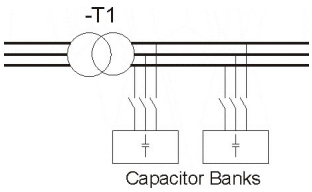
Bulk Correction (Bulk Compensation).

The Power factor of the total current supplied to the distribution board is monitored by a power factor controller which then switches capacitor banks in a fashion to maintain a power factor better than a preset limit. (Typically 0.95) Ideally, the power factor should be as close to unity as possible. There is no problem with bulk correction operating at unity, however correction should not be applied to an unloaded or lightly loaded transformer. If correction is applied to an unloaded transformer, you create a high Q resonant circuit between the leakage reactance of the transformer and the capacitors and high voltages can result. Bulk compensation systems are usually incorporated with the switchgear supplying all or part of the plant.

More information : Power factor Calculations : Power Factor Controllers



Power Factor Introduction
Displacement Power Factor
Power Factor Correction
Bulk Correction
Static Correction
Power Factor Calculations
Distortion Power Factor