

# CASE STUDIES

## RAYALA TECHNO PARK (Chennai)

### Introduction:

Rayala Group of companies is an 500 Million group having diverse interests in the field of engineering industries, electronics, real estates and scientific farming. To the pioneer who produced quality products and captured markets, the key has been innovation and it is this spirit that built Rayala since 1948. Today the group plans to further diversify its activities in to food processing. The corporate office of the group is located in Chennai i.e. in the southern part of India. Today the total value of the group assets stands at Rs. 2000 Million.

### Problem Faced by Customer:

The customer is well aware that maintaining the electrical system efficiently is by employing appropriate metering and monitoring facilities. In RAYALA TECHNO PARK the Power Factor meter is installed only on medium voltage panel and E.B TRIVECTOR METER which is far away from the sub-station. They could not monitor the correct power factor since the power factor meter provided on the MV panel does not take care of 11 KV / 433V transformers.

### Solutions from Elmeasure:

Customer has installed a power factor meter on the 11 KV high voltage panel with Elmeasure make TM, LG series meters which helped to monitor the various parameters to maintain the Power Factor efficiently by installing proper ratings of Capacitor banks. Now they are able to maintain the power factor between 0.98 and unity and rewarded with an average incentive from the Service provider (State Electricity Board) about Rs. 35,000/- per month.

### Customer Comments:

In India about 75% of overall energy consumption is in the form of electricity. The efficient use of electrical energy is partially lies with the end user. Losses of electrical installation can be minimized by operating plants and loads in the buildings efficiently.



End user can save power by maintaining power factor of any feeder / equipment near unity by employing power factor correction devices. Hence these devices should be accessed correctly for inductive loads / non linear loads. Improved power factor will reduce active current and line losses and also avoid reactive power charges as penalty.

**Investment : INR 0.65 Lakhs**

**Payback Period : < 45 Days**