

Application Note: CPT/XD-PEL

Date: 29/05/2007



Pak Elektron Ltd, Lahore were looking to improve their quality assurance for all cabinets leaving the production from their factory. In addition PEL wanted to back track and improve production processes and log all failures and to further reduce after sales services. Requirement was also to measure the <u>REAL POWER consumption</u> and not simple and misrepresented volt x Ampere calculation.

A fully computerized and automatic system was suggested of **Agramkow** which has a number of years experience and a big team of dedicated software developers for only software development. The software PEL bought was with the data mining software enabling management to see and compare in graphical format performance of their cabinets passing through the last stage of production. A system was required where brown outs in Pakistan occur and the system is able to handle our typical conditions.

Commissioning

The system has been commissioned in March 07. The system is flexible for Installation as both stand alone system and can be converted to carousel system.

Refrigerators being connected to the testing box CPT-XD. A full two hour cycle test is done with cut in and cut out of thermostat. 100% test for 40 min for all cabinets and recording are saved.



Back view of stand alone system to pass or fail according to set criteria. Agramkow CPT XD boxes are installed in the top of the picture.



110 nos CPT XD boxes testing 100% of refrigerators for set criteria according to each individual bar coded refrigerator. With real power consumption check, ensure right component usage and performance.



After pass/fail of testing, refrigerators are taken out of the test room with full functional test and next batch of finished refrigerators to be brought in. The CPT XD can be converted to carousel system also.



PEL wants to ensure that the cabinets are running according to its specification and takes out the manual quality check and also the skewing of set design criteria of manual quality and automating the functions. In addition ensuring that the right components are utilized the cabinets with no errors in the production.

In addition the aim of filling the customers expectation of PELs product of quality and minimize after sales.

Mr. Homeer Waheed (G.M Appliances Division)

"We are going through a learning experience as it has been only few month of operation, but our experience upto now is beyond expectation"

Mr. Liaquat Minto (Senior Manager Quality Assurance)

"We believe that over all quality assurance has improved with omitting of manual checks. The

feedback of measurement of <u>real energy consumption</u> has benefited us greatly, and are sure after sales returns will be minimized"