



- Process Improvement methods are applicable to any corporation size with tangible profits.
- Improve quality to reduce customer complaints.
- Process controls save money that impact the bottom line.



### BACKGROUND

The company ST Ceramics SA\* is a ceramic manufacturer unit under the small- and medium-enterprise sector, manufacturing different commercial insulators.

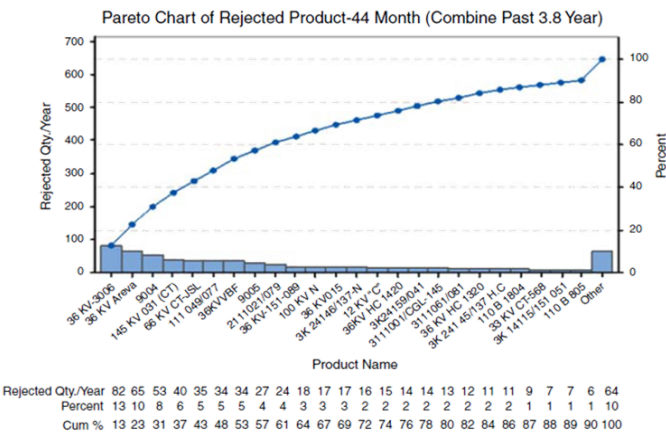
This project shows the introduction of the Six Sigma methods as an effective quality improvement drive that perfectly applies to any small-scale business.

### THE SITUATION

The main objective in the work presented in this case was to reduce insulators rejection rate during HV testing process from 0.50% to 0.10%.

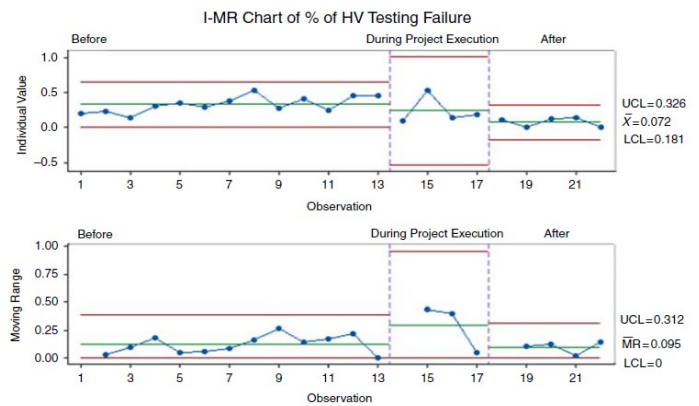
Also, the project implementation was to meet the stated goals within budget and time constraints.

Unavailability of data and information made it inevitable to spend considerable time and effort to dig for details at company's records to define and gauge the project. However, at the end of the project, an SOP we developed to record production information accurately and provide standard operational practices.



### THE SOLUTION

The company produces over 50 types of insulators. We collected and analyzed the last four years the rejection data of various insulators collected. We also analyzed the aggregate rejection data for the last 44 months.



We implemented five solutions, including statistical quality control charts and a preventive maintenance program (for operators and the maintenance team).

Further, employees were trained to follow the designed Standard Operating Procedure (SOP). We developed Standard Work Instructions (SWI) for the major production lines to ensure that the production team follows the right steps to sustain the quality standards.

### THE RESULTS

- The failure rate was improved from 4.4 to 5.0 Sigma level.
- The annual savings generated from this project were estimated at \$180,000 annually.
- Six Sigma methods equally apply to both large corporations and small companies.

\* The company's identity has been disguised for the sake of privacy; however, the case study is genuine.