

SERVO COMBINED HF & PF TESTING MACHINE

FOR DISC INSULATORS (Both for Shells and Assembled) & PIN INSULATORS

SERVO has another unique product, a Combined H.F. & P.F. Testing Machine that has following advantages -

- a) Consistent Uninterrupted Testing - During Power Frequency test, defective pieces are isolated automatically from the test circuit and system needs not to be stopped.
- b) Assured Higher Output - Output is constant, workmen to just match machine speed for loading and unloading.
- c) Does not leave chance on operator for manipulation-Operator/workmen cannot shorten test time. Operators continuous presence is not required.
- d) Reduced Labour Force - thus direct money saving.
- e) Single Loading & Unloading - Reduces the rejection due to chipping etc. in multiple handling between the two tests.
- f) Suitable for testing both for shells and assembled Disc Insulators as well as Pin Insulators.

WHY YOU SHOULD HAVE A SERVO COMBINED TESTING MACHINE

A detailed study of existing methods with major insulator manufacturers showed following drawbacks -

1. Insulator are first brought and loaded on the High Frequency Test Machine and after testing, good pieces are sent to the Power Frequency Test Machine (Requires interim heat loading and unloading)
2. Power Frequency (High voltage) Test – In general practice, after placing 20-30 insulators on a test bench, high voltage is gradually applied across the disc insulators. During the test duration of approximately 3-5 minutes, some of the defective disc insulators give away and test has to be stopped and the defective pieces are removed manually / physically and only then the test resumes The interruption can be many a times depending upon the number of defective pieces in that particular lot under test.

Observation-Every time an insulator fails, the test has to be stopped which makes the testing inconsistent and process is to be repeated.

LABOUR FORCE

For under going these 2 tests, each insulator has to be loaded two times and unloaded two times and need inter-transfers. For testing 2000 to 3000 insulators per shift, the minimum labour force normally required is 1 person for high frequency, 3 persons including an operator for power frequency and inter transfer persons.

Total manpower thus required is 4-5 persons per shift for an average output of 2500 nos.

The all new concept “Combined HF & PF Testing Machine” will conduct both tests continuously and uninterrupted with only two labours, one for loading and another for unloading with assured output of 4400 nos. per shift.

The best part to be looked upon is that it can utilise all your existing electrical equipments both for High Frequency and Power Frequency, calling for less initial investment compared to savings and other advantage.

Considering the saving on labour and rejection (of approximately 0.75% due to handling in testing area), the buy back period will be 2 years or less. Also it makes the testing area streamlined and requires very less overall floor space.