

### **Surge Arrester Inspection**

#### **Surge Arrester**

The Primary Function of a Surge Arrester is to absorb high energy generated by Lightning or Switching Surges; and hence to protect the equipment in substation. Surge Arrestors are exposed to stresses such as the normal operating voltage, temporary Over Voltages, switching overvoltage, lightning Over Voltages and external pollution. The magnitude of Over Voltage could be 1.5 to 4 times of the normal operating voltage. If Surge Arrester is not healthy, it will fail to protect the equipment it is connected to in the severe Over Voltage condition. Hence the Surge Arrester must be maintained in Healthy Condition to protect the equipment it is connected to.



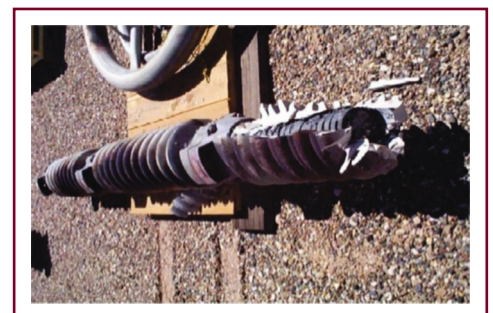
#### **Surge Arrester Inspection**

We Taurus offer services to identify underperforming Surge Arresters, so that they can be replaced with new Surge Arresters.

Resistive Leakage Current measurement, Thermovision Scanning to check temperature of equipment and Visual Inspection is carried out to detect the healthiness of the Surge Arrester. Ultrasound scanning is also done to detect partial discharge.

#### **Benefits**

Lightning and other surges are always unexpected. By testing healthiness of Surge Arrester, preventive measures can be taken and major loss in terms of equipment, time and money can be averted. Revenue losses due to unexpected shut down caused by failure of surge arrester can be avoided.



## Equipments Used



- *Leakage Current Measurement Unit,*
- *Thermovision Camera*
- *Ultrasonic Scanning Device*
- *Corona Camera*

## Surge Arrester Inspection Report

Substation : 400 Kv Receiving Station KPTCL Nelmangala						Date: DD/MM/YYYY				Ambient Temp : 32° C
SN	LA No	Make	Year Installed	Surge Counter Reading	Bay Name	Ph	Total Current mA	50Hz Curent mA	3rd Harmonic Resistive current uA	Remark
1	569234	CGL	1998	3	Mysore	R	0.5	0.489	11	
2	669266	CGL	2012	0	Mysore	Y	1.2	1.19	10	
3	769298	ELPRO	1998	4	Mysore	B	0.7	0.607	93	
4	869330	CGL	2004	1	Hassan	R	4	3.542	458	To monitor and replace
5	969362	ABB	1998	3	Hassan	Y	0.8	0.743	57	
6	1069394	ELPRO	1998	4	Hassan	B	0.623	0.546	77	
7	1169426	CGL	1998	3	Gooty	R	4.5	3.9	600	To replace immediately
8	1269458	ELPRO	2007	0	Gooty	Y	2.1	2.077	23	
9	1369490	OBLUM	1998	2	Gooty	B	3	2.939	61	
10	1469522	CGL	2009	0	Mysore	R	1.7	1.682	18	

# AUMSRI

## ASSET UPTIME MANAGEMENT & SPECIALIZED REFURBISHMENT OF INFRASTRUCTURE

Division of



POWERTRONICS PVT. LTD.  
AN ISO 9001 : 2015 COMPANY

## TAURUS POWERTRONICS PVT LIMITED

Corporate Off.: No. 26, "Mahadimane", 12th Main, 1st Block, Rajajinagar, Bengaluru - 560 010. INDIA., Tel : + 91 80 23012301  
Email : info@tauruspowertronics.com, care@tauruspowertronics.com, WhatsApp : +91 73496 44344  
Sales & Service Off.: No. 648/54, KLE College 2nd Block, Rajajinagar, Bengaluru - 560 010. INDIA.

BENGALURU  
DELHI  
KOLKATA  
MUMBAI