

Distribution Transformer



Automatic Voltage Controller

# MANGAL

ENGINEERS AND CONSULTANTS

## MANUFACTURERS OF :

- Servo Stabilizers
- Distribution Transformers
- Rectifiers
- Regulators
- Special Purpose Transformers
- Special Purpose Electrical Supplies
- Electric Panels



AN ISO 9001 : 2008 CERTIFIED CO.

## PRODUCT RANGE

### ● Automatic Voltage Controller : upto 5 MVA

- Servo Stabilizer - 3 Phase / 1 Phase
- H.T. 2 in 1 Transformer cum Stabilizer
- H.T. Automatic Voltage Stabilizer

### ● Transformers : upto 5 MVA

- Distribution Transformers
- Power Transformers
- Transformers with OLTC
- Furnace Transformers
- Earthing Transformers
- Isolation / Ultra Isolation Transformers
- Variable Transformers
- Step up / Step down Transformers
- Dry Type Transformers
- Balancing Transformers
- Butt Welding Transformers
- Dual Seam Welding Transformers
- Special Purpose Transformers

### ● Electrical Supplies

- ESR Supplies
- H.T. / L.T. Supplies
- D.C. Power Supplies
- 1Phase/ 2 Phase / 3 Phase Variable Supplies
- Motorized Voltage Regulators
- Electrical Drives

### ● Rectifiers : 0 - 1000 Volts, 0 - 40000 Amps.

- DC Rectifiers
- Plating Rectifiers
- Furnace Rectifiers
- Refining Rectifiers
- Electrolysis Rectifiers
- Anodizing Rectifiers
- Welding Rectifiers

### ● Panels

- H.T. / L.T. Panels
- APFC Panels
- Distribution Panels
- MCC Panels
- PCC Panels



## AUTOMATIC VOLTAGE CONTROLLER



Servo Stabilizer :  
Upto 5000 KVA

**5** Years  
Guarantee

## APPLICATIONS

- Cement Plants
- Flour Mills
- Engineering Units
- Hospitals
- Tea Estates
- Pharmaceutical Units
- Cold Storages
- Rolling Mills
- Nursing Homes
- Textiles Mills
- Paper Mills
- Rice Shellers
- Rubber Industries
- Clubs
- Food Processing Units
- Oil & Vanaspati Plants
- High Rise Buildings
- Tube Mills
- Footwear & Leather Units
- Distilleries & Beverages
- Hotels & Restaurants
- Glass Industries
- Chemical Industries
- Testing and Research Stations



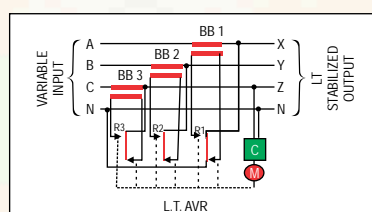
Inner view of Stabilizer



AVC (Unbalanced Type)

## ADVANTAGES

- Reduction in Breakdown of Electrical Equipments
- Reduction in MDI
- Energy Saving
- Improvement in Power Factor
- Uniform Quality of End Product
- Onload Stepless voltage variation
- Long Service Life
- High Mechanical Strength
- High Efficiency & Minimum Losses
- No Wave Form Distortion
- 80% Depreciation as per Income Tax Act.



Inner View of Unbalanced Stabilizer

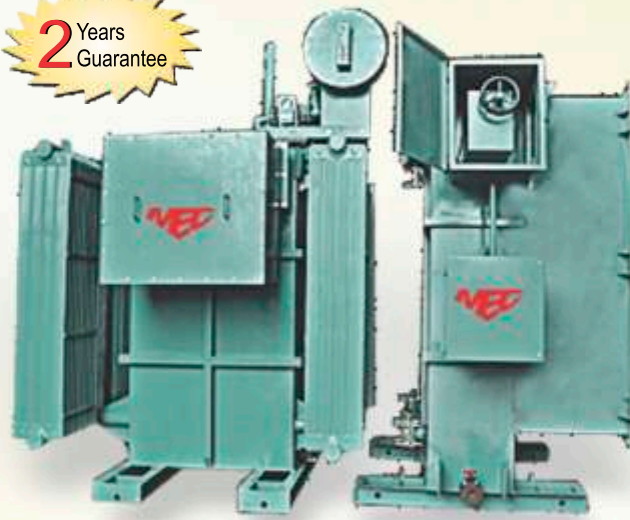


## HT **2 in 1** TRANSFORMER WITH STABILIZER

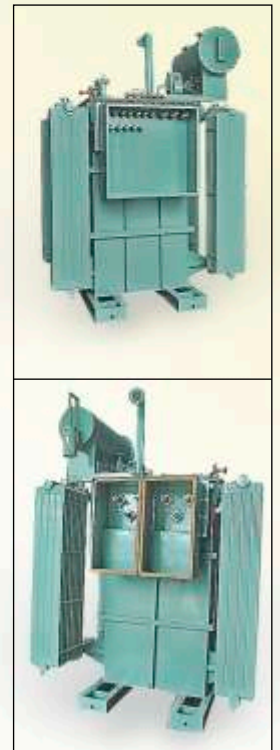
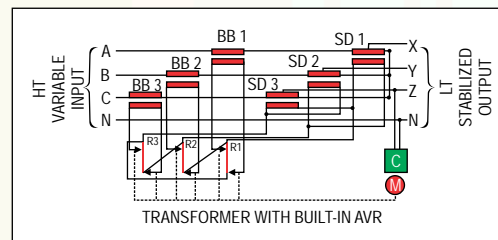
It is a very altogether different product basically a combination of standard Distribution Transformer and LT Automatic Voltage Regulator. The standard Transformer with OLTC can correct limited Voltage variation in certain steps where as Built-in operates steplessly monitoring the output voltage continuously. The incoming fluctuating H.T. supply is initially stabilized and then fed to the stepdown transformer and thereby the L.T. output is maintained with in  $\pm 1\%$  accuracy. **2 in 1** has the following advantages :

- Space Saving
- Reduced Installation Cost
- More Efficiency
- Reduction in Electricity Bill

**2** Years Guarantee



H.T. **2 in 1** Transformer with Stabilizer



## SPECIAL PURPOSE SUPPLIES

**ESR Supply :** ESR (Electro Slag Remelting) Furnance DC Supply : For the purification of Steels and Special Alloys this furnance is equipped with DC Power supply to control the process. We manufacture this Power supply to be attached with ESR Furnance Unit.

**Advantages :** • Homogeneous Product • Good Surface Quality • Controllable Process • Less Cost

**Applications :** • Tool and Die Steel • Stainless Steel • Scrap Remelting • Titanium Alloys • Super Alloys  
• Large Forging Ingot Manufacturers

### 2 Phase Supply



### 3 Phase Supply

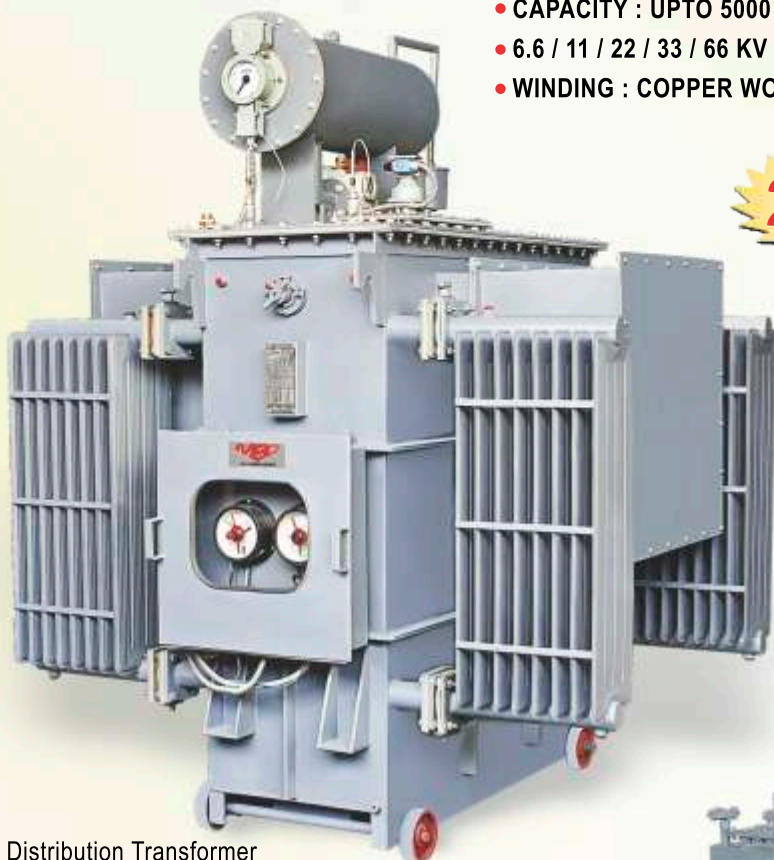


**2** Years Guarantee

## DISTRIBUTION & POWER TRANSFORMER

- CAPACITY : UPTO 5000 KVA
- 6.6 / 11 / 22 / 33 / 66 KV CLASS
- WINDING : COPPER WOUND

**2** Years  
Guarantee



Distribution Transformer  
2000 KVA (11 KV)



Distribution Transformer with  
Off Load Tap Changer 315 KVA (33 KV)

## STANDARD FITTINGS

- Rating & Diagram Plate
- Earthing Terminal
- Lifting Lugs for Transformer
- Bottom Drain & Filter Valve
- Top Filter Valve With Plug
- Conservator Tank
- Oil Filling Hole With Cap
- Air Release Valve
- Thermometer Pocket
- Silicagel Breather
- Explosion Vent (Pressure Relief Valve)
- Neutral Brought Out Terminal
- Bi-directional Roller
- Oil Level Indicator Normal
- Above 100 KVA**
- Off Load Tap Changer (0,  $\pm 2.5\%$ ,  $\pm 5\%$ )
- Above 500 KVA**
- Dial Type Thermometer
- L.V. Terminal Box



Distribution Transformer  
with OLTC 1000 KVA (33 KV)

### Above 630 KVA

- Lifting Lugs for Top Cover
- Inspection Cover

### Above 750 KVA

- Double Float Buchholz Relay With Alarm & Trip Contacts
- Dial Type Thermometer With Alarm Contact
- Marshalling Box With Complete Wiring

### Higher Capacity (On Demand )

- Magnetic Oil Level Gauge With Low Level Alarm Contact
- H.V. Terminal Box
- Jacking Pad
- On Load Tap Changer with RTCC Panel

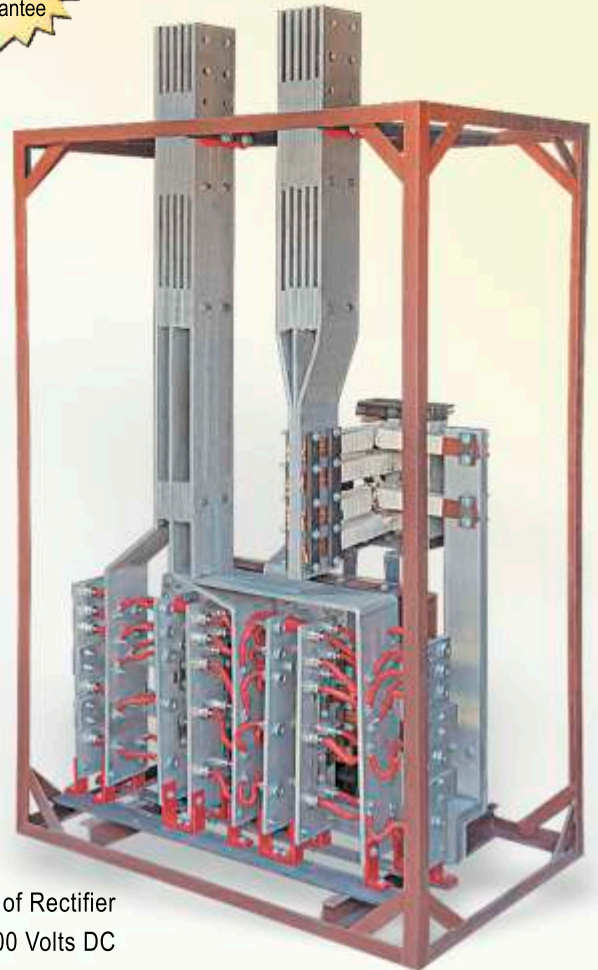
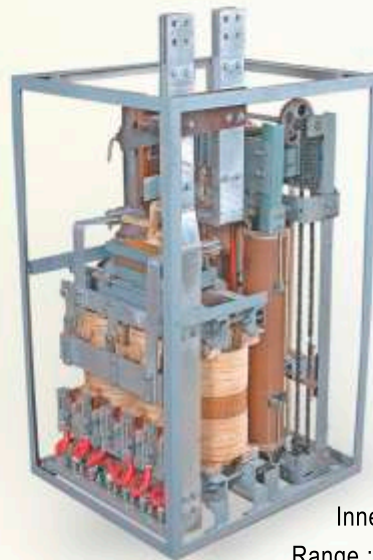
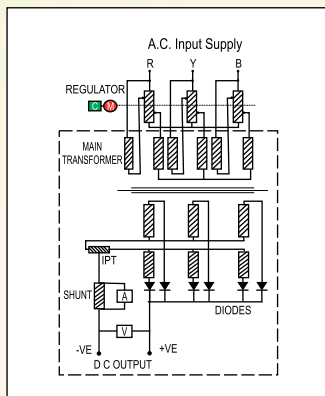


## RECTIFIERS

### APPLICATIONS

- Electroplating
- Etching
- Anodising
- Electrolysis
- Hydrogenation
- Electro Forming
- D.C. Drives
- Copper, Aluminum, Zinc Refining
- Heating Furnace, Magnetization
- Electrochemical Processes
- Ionization
- Battery Chargers
- Traction Power Supplies
- D.C. Welding Rectifier

**5** Years  
Guarantee



Inner view of Rectifier  
Range : 0 to 500 Volts DC  
0 to 20,000 Amps

## REVERSE POLARITY RECTIFIER



Capacity :  
12V - 6000 amps



Inner view



Control Panel



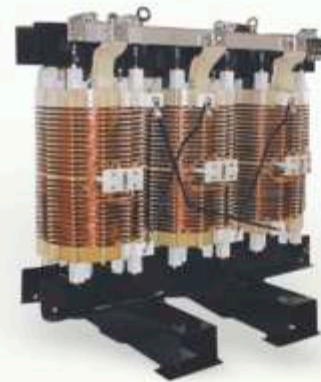
Stabilizer / AVC For  
Domestic & Commercial  
Application



Salt Bath Furnace Transformer



Furnace Transformer



Isolation / Dry Type  
Transformer

## PANELS

Power Distribution Panel  
( H.T. & L.T. Panels )

1 Year  
Guarantee

APFC PANEL



Main LT Panel



Internal View



Outer View

# **Sales & Service Network**

**Punjab / Haryana / J & K - Ludhiana**

**NCR / Uttar Pradesh - New Delhi**

**Himachal / Chandigarh / Haryana - Panchkula**

**Uttarakhand - Rudrapur**

**Bihar / Nepal - Raxaul**

**Gujarat - Ahmedabad**

**Andhra Pradesh / Tamilnadu - Hyderabad**

**Karnataka - Bangalore**

**Maharashtra / Goa - Mumbai**

**North Eastern States - Guwahati**

**Madhya Pradesh / Chattisgarh - Katni / Bhopal**

**Rajasthan - Jaipur**

**Orrisa - Bhubaneswar / Cuttack**

**Nepal - Kathmandu**

**We also Offer**

**Electrical Consultancy Services**

**Energy Audit**

**Electrical Safety Audit**



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