

SERVO Automatic Sanding/Grogging Machine FOR DISC INSULATORS (Upto 400 KN)

Operation

On a rotating (spindle) support, the shell is placed on its head, by the operator.

Outside grogging operation (Fully Automatic Operation) -

- Collection of glue from tray.
- Placing it on a rotating intermediate roller.
- Collection of uniform glue from intermediate roller to final roller.
- Applying the glue on shell outer area.
- Spraying of sand / grogs with moving gun.

All these operations are done in fully automatic sequences.

Inside grogging operation (Semi Automatic Operation) -

- While the outside grogging process is carried out , inside grogging is also completed in semi-automatic mode. The operator who loads and unloads the insulator carries out the manual part of the semi automatic operation.

Advantages of Grogging Automation System:

1. Reduction in labour force: A single operator is required for each machine to carry out the entire grogging process (both inside and outside grogging). Hence there is great reduction in labour cost.
2. High Productivity: The average productivity of one machine is around 150 pieces per hr (including the loading and unloading time of insulator from the grogging station).
3. Minimal handling of insulators: Since both outside and inside grogging is carried out at a single station, handling of insulator is reduced thereby reducing reduction due to chip-off etc during the manufacturing process.
4. High Efficiency and minimal downtime : The best and the most reputable brand products are used for the automation system, thereby ensuring high efficiency and lower downtime.
5. HMI and Sensors: The functions of these are primarily for fault annunciation, trouble shooting and output display.HMI and Sensors are provided in the system for the convenience of the operator and for fault free operation.

LABOUR FORCE

Generally when the above process is carried out manually, more than 5-6 people are involved to complete the entire process. However, the **SERVO** Automatic Sanding/Grogging Machine requires only one unskilled labor for loading and unloading the insulator at the grogging station. In between the same operator carries out the inside grogging in semi- automatic mode while the outside grogging is carried out in fully automatic mode.