

AMRAN

INSTRUMENT TRANSFORMERS

BUSHING CURRENT TRANSFORMERS





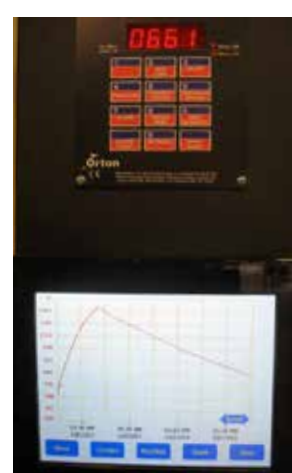
Amran Bushing Current Transformer

Amran specializes in manufacturing broad range of Bushing Current Transformers for medium to high voltage circuit breakers, large power generators and power transformers applications. Amran Bushing Current Transformers are produced with the highest quality standards and they are designed in-house to meet exact customer specifications & requirements.

Amran core manufacturing facilities and equipment are designed to be flexible to incorporate rapid changes in core sizes and shapes.

Electrical Steel/Core Manufacturing/Annealing

- Finest quality of cold rolled grain oriented electrical steel material is used to build cores for the Bushing CTs.
- Cores are manufactured and wound on high speed, programmable core winding machines.
- Core dimensions and weight are checked to ensure that the tight tolerances are met.
- State of the art annealing process is used to remove stresses from the electrical steel.
- Cores are annealed in a highly controlled environment where temperature and time cycles are monitored and recorded digitally using various controllers.
- High quality grain oriented steel and flaw-less core manufacturing and annealing processes help Amran meet stringent accuracy standards with minimum excitation losses.



Core Insulation

- Cores are insulated with electrical grade press-pan and/or polyester film to ensure that the winding is separated from the core.
- Epoxy varnish is applied on the core to prevent moisture ingress.

Secondary Winding

- Production facility includes various toroidal winding machines, fully programmable to achieve maximum winding efficiencies for various turn configurations.
- Magnet wire is fully distributed around the insulated core for all multi ratio units to ensure lowest possible leakage on each tap.



Call Amran to discuss your custom requirements!

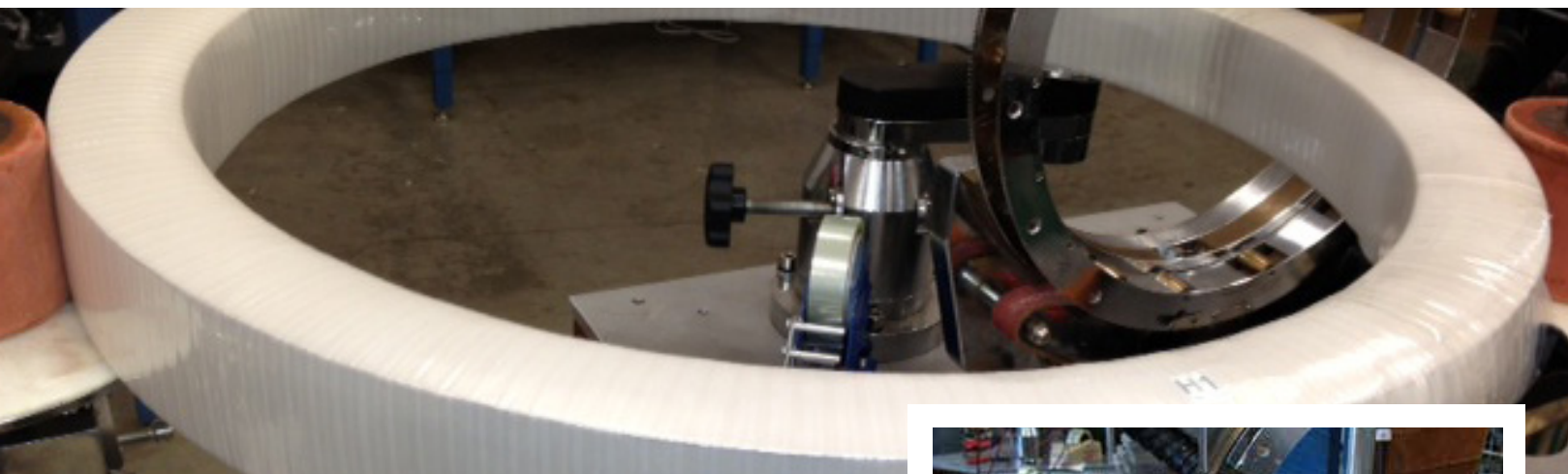




Terminal / Lead wire installation

- Winding wire is terminated with either leads or terminals depending on customer specifications.
- Various types and sizes of lead wires are crimped and soldered with the winding wire to ensure solid connections.
- Lead wires are color coded and marked for easier connections as per customer requirements.

Amran also offers terminal type connections. The terminals are attached with the magnetic wires using hydraulic crimping machines.



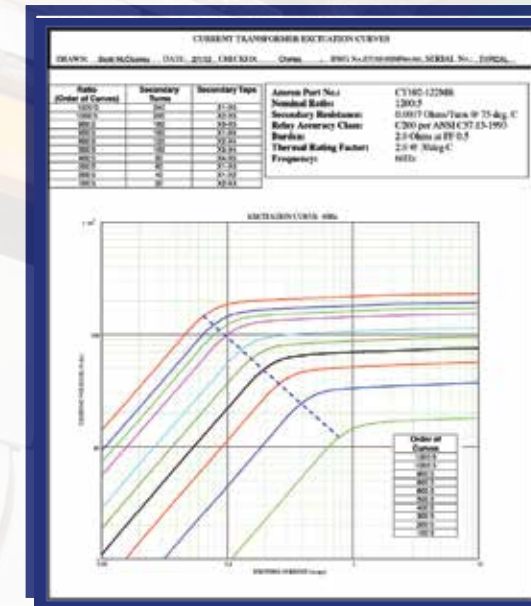
Outer Insulation

- Secondary winding is insulated with non-porous polyester film or cotton tape depending on end application and use of the current transformers.
- Amran also offers insulation options of electrical grades of press-pan material on the exterior winding of the CTs to ensure that the outer insulation withstands the most demanding and harsh field conditions.



Testing and Packaging

- All Bushing Current Transformer are tested as per IEEE/ANSI C57.13 or relevant test standards.
- Accuracy, Polarity, Double Induced, Di-electric, Turns-ratio, and excitation tests are standard for every current transformer.
- Each Bushing CT has a unique serial number which allows Amran to trace back the test records of the CTs.
- Test Certificates are provided with the Current Transformer shipments.
- Test data is available on-line to customers for easy access
- Amran uses collapsible, returnable packaging for Bushing Current transformers to reduce packaging costs and ensure maximum protection during transportation.
- Other packaging options are available upon request.



The Advantages of Working with Amran

- BCTs are designed and engineered to meet customer specifications.
- Fast turn-around time for custom quotations. Low manufacturing lead time.
- Flexible production set up to manufacture various size and shape of Cores and Bushing Current Transformers.
- Various construction options are available to meet the customers need.
- USA and Over-seas manufacturing capabilities to provide maximum benefits on price and lead time. (Stocking options available).
- Cost saving opportunities presented through design/engineering and low over-head manufacturing operations.