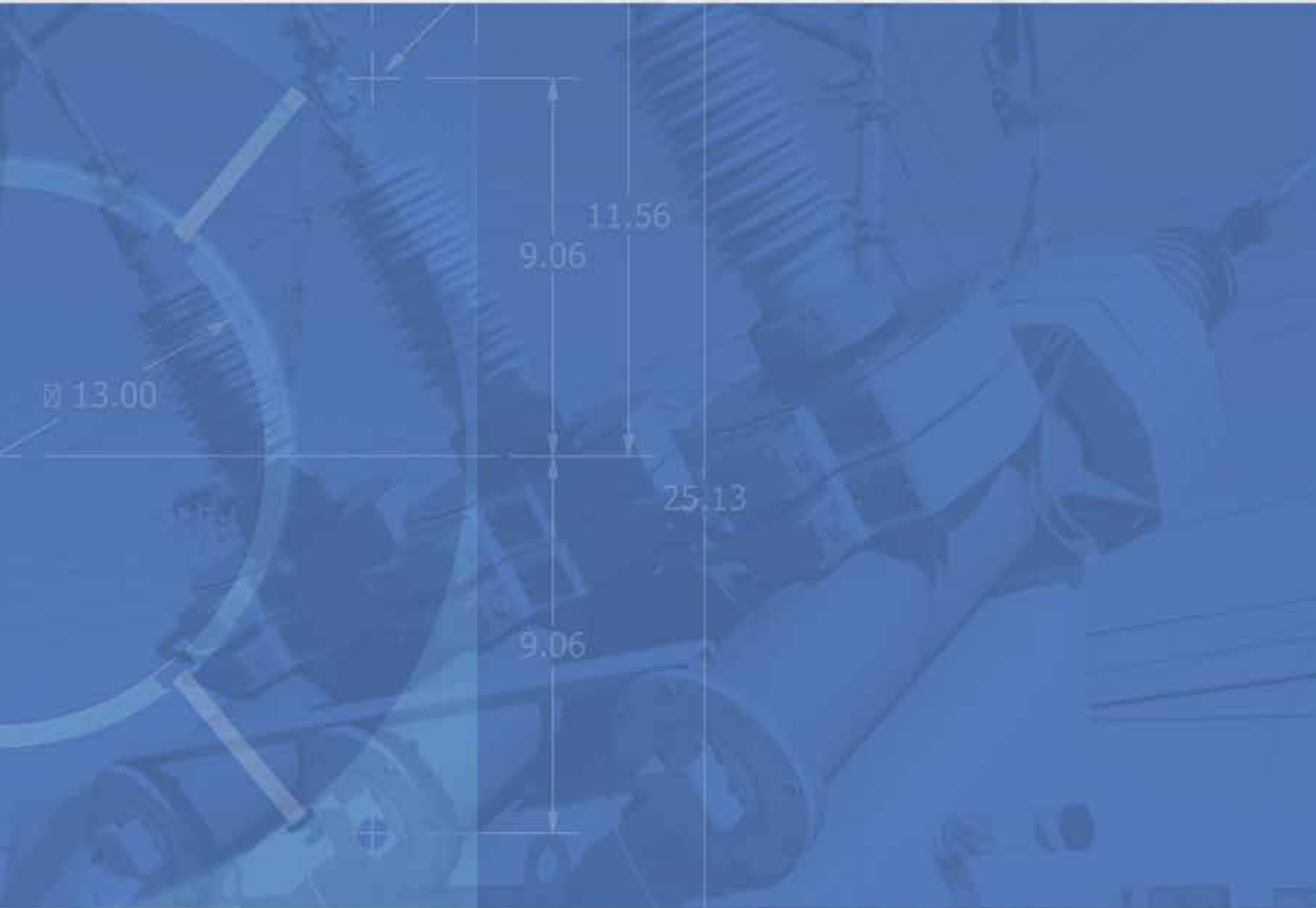




# MERAMEC

Instrument Transformer Co.



THE INSTRUMENT CT SPECIALISTS

Meramec is focused on continuous improvement and innovation to support the electric power generation industry's needs.



## THE NEW MADE IN AMERICA

The electrical grid is going through a major rebuilding process. With a network of more than 9,000 power plants, substations, and almost a million miles of electrical lines, the rebuilding process is an enormous task. The need for smarter, higher technology and better performing electrical products is paramount.

## Over 40 Years of Experience.

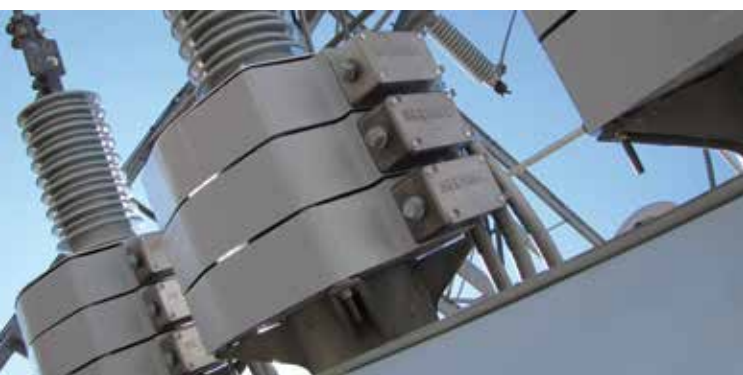


“We are the Instrument CT Specialists.  
Instrument Transformers are what we do.”

For over 40 years, Meramec has been regarded as the preeminent manufacturer of Instrument Transformers in the electrical power industry. We produce the highest quality products for high-end medium-voltage circuit breakers, power transformers, and power generation. Our focus is on continuous improvement and the highest level of customer service.

# Our Products and Markets Serviced

Meramec specializes in a broad range of instrument current transformers for a wide variety of applications, including power transformers, high voltage circuit breakers, large generators, and outdoor-rated station post and bushing slipover applications. Specialized protection applications include bushing linear couplers and gapped core transient response current transformers. Meramec is dedicated to continued expansion into new product areas.



## Power Generation, Transmission and Distribution

To meet the needs of the utility market, Meramec produces Internally Mounted Dry-Type Bushing Current Transformers that are high quality, reliable, and designed to fit your operational specifications and budget.



## OEM Circuit Breaker and Power Transmission

You need to know that you can have the exact CTs when you need them. Meramec services the HV and MV Power Circuit Breaker market with custom-designed current transformers designed to fit your specifications.



## Designers, Engineers and Contractors

Your business relies on innovation and technology to support the growing need for a "smart grid" electrical system. Meramec engineers can help you design and build custom current transformers to meet your specific needs.

Meramec is ISO 9001:2008 registered. This helps us ensure consistency in our processes and products.



## CREATING SUCCESS

Meramec Instrument Transformer Co. is dedicated to continued expansion into new product areas. Our goal is to supply a complete line of instrument class transformers up to 36kV.



BGCT

Board Mounted Bushing-Type Generator Current Transformer

The Board Mounted Generator CT is designed to be mounted over the high voltage terminal bushing of power generators. This Bushing-type GCT may also be used on Isolated Phase Bus (IPB) of higher system voltage levels. Because of its open construction, it can easily be designed to suit any custom mounting footprint, and offers a lightweight alternative to casted units.

Additional Features and Options

- Pre-assembled multi-core stacks are available.
- Other conduit openings are available – threaded up to 1.5" NPT or non threaded holes up to 52mm.
- Designs can be made to match existing CT characteristics.
- Gapped cores for remanence control and transient response are available.
- Windings may be provided with special test taps.
- Coils may be provided alone (no board) with terminals or flexible leads.



MGCT

Encapsulated Bushing-Type Generator Current Transformer

The Encapsulated Bushing-Type Generator CT is designed to be mounted over the high voltage terminal bushing of power generators. The MGCT can be used in Isolated Phase Bus (IPB) enclosures on higher system voltage levels. Because the coil is totally encapsulated, it is ideal for harsh and hazardous environments.

Additional Features and Options

- Other conduit openings are available – threaded up to 1.5" NPT or non-threaded holes up to 52mm.
- Designs can be made to match existing CT characteristics.
- Gapped cores for remanence control and transient response are available.
- Windings may be provided with special test taps.



SBCT

Outdoor Mounted Slip-Over Bushing Current Transformer

The outdoor mounted slip-over BCT is self-contained and designed to be mounted externally over the high voltage terminal bushing of power transformers, power circuit breakers, and cable terminators (potheads). In most cases, the slip-over BCT, with its ease of installation, is a reliable and economical solution when upgrading system protection and adding additional metering points.

Additional Features and Options

- Dual-core configurations may be possible, same ratings or mixed, with 3kV isolation between coils.
- Other conduit openings are available – threaded up to 1.5" NPT or non-threaded holes up to 52mm.
- Designs can be made to match existing CT characteristics.
- Gapped cores for remanence control and transient response are available.
- Air core linear couplers are available.



eSP

Outdoor Mounted Slip-Over Bushing Current Transformer

The eSP is a special application version of our outdoor mounted slip-over BCT, developed specifically for the SP/SPS power circuit breaker. This circuit breaker is one of the most popular in its class (up to 72kV), and has been in existence since 1980. We are offering this self-contained model as a solution to add additional Current Transformers (CTs) when originally supplied with only one per pole.

Additional Features and Options

- Custom ratios and accuracies are available, in addition to those listed on the product sheet.
- Can be designed to IEC and CSA standards.
- Can be designed for 50Hz power frequencies.
- Conduit box can be supplied with hub sizes up to 1.5" NPT.
- In some cases, dual-core units may be possible.
- In some instances, 3 units can be installed on a pole.



DBCT

Internally Mounted Dry-Type Bushing Current Transformer

The internally mounted Dry-Type BCT is designed to be mounted onto the high voltage bushing of a dead-tank power circuit breaker along the ground collar, protected by an external cover. It can also be installed inside a weather-tight cabinet or inside an MC switchgear compartment. When properly installed, the Dry-Type BCT can be used on higher system voltage levels.

Additional Features and Options

- Available in a variety of winding arrangements – Single Ratio (SR), Dual Ratio (DR), or Multi Ratio (MR).
- Designs can be made to match existing CT characteristics.
- Designs for primary currents greater than 8,000 Amps are available.
- Secondary terminals or leads can be selected.
- Gapped cores for remanence control and transient response are available.
- Air core linear couplers are available.



OBCT

Internally Mounted Oil-Type Bushing Current Transformer

The internally mounted Oil-Type BCT is designed to be mounted onto a high voltage bushing shank along the ground collar, or inside the tank of a power transformer, power circuit breaker or voltage regulator that uses oil as the insulating medium. When properly installed, the Oil-Type BCT can be used on higher system voltage levels.

Additional Features and Options

- Available in a variety of winding arrangements – Single Ratio (SR), Dual Ratio (DR), or Multi Ratio (MR).
- Designs can be made to match existing CT characteristics.
- Designs for primary currents greater than 8,000 Amps are available.
- Higher temperature class rating of 155°C.
- Gapped cores for remanence control and transient response are available.
- Air core linear couplers are available.

# Customization, Quality and Delivery

Meramec Instrument Transformer Company is ISO 9001:2008 Registered. Effective quality assurance requires control measurement at each stage of the manufacturing process. Meramec's commitment to quality continues with a rigorous post-production testing sequence. Each current transformer undergoes a series of comprehensive final tests to ensure that it will dependably perform to the required specifications.



## QUALITY STEEL

The core of a Meramec current transformer is made of the finest quality U.S. grain-oriented electrical grade silicon steel manufactured to our exact standards.



## CORE WINDING

Tight tolerances in the core material are held throughout the process to achieve perfect roundness and specified inner diameter, outer diameter, and overall height.



## CORE ANNEALING PROCESS

The annealing process in our custom-designed 1500° ceramic furnace is critical to ensure the core will deliver optimum accuracy and minimum excitation loss.



## EDGE BONDING & CORE INSULATION

A two-part epoxy edge seal is applied to prevent moisture ingress and to protect against ambient humidity penetration in even the most demanding applications.



## SECONDARY WINDING

Secondary windings are fully distributed around the toroid, which provides low leakage reactance on each ratio. An infinite number of lead wire materials, configurations, and color code schemes are available.



## EXTERIOR INSULATION

Insulating materials are specified to meet the most demanding operating environments, whether it will be in a dry environment, in oil, above oil, in SF6 gas, or in a high temperature application.



## FINAL TESTING

Each current transformer is tested for excitation loss, polarity, dielectric properties, and turns ratio. Current transformers for metering applications are also tested for phase angle and ratio correction.

Every current transformer we manufacture is made to our customer's exact specifications.

## The Meramec Difference

Our people, from the manufacturing floor to the front door, all believe that our customers deserve the very best in products and post-order service. Our people are committed to doing it right, and have earned Meramec recognition as the leading global supplier of precision Instrument Transformers.

We strive to create a culture that attracts, retains and engages our employees to be a part of the company and the products we manufacture. We provide a safe, diverse, and exciting workplace by working together with a dedication reflected in our quality products and industry reputation for performance.



Meramec Instrument Transformers are designed and manufactured in our 100,000+ square foot, state of the art facility.



## Our Facilities

Our new administrative offices are designed to offer expanded engineering, technology, sales/marketing, accounting, and customer services. This new building is another testament to Meramec's commitment to continuous improvement and dedication to manufacturing in America.

Our facilities are designed with careful consideration given to all HVAC, insulations, and energy uses. We use only Energy Star rated appliances and are EPA Act Certified. We recycle all waste materials used in the production of Meramec Instrument Transformers, and we are continuously looking for ways to make changes or adjustments to our facilities to support green manufacturing processes.



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