

SCOTT-ENG.COM



QUALITY
INNOVATION
RELIABILITY

SCOTT
ENGINEERING



ABOUT US



We are proud to state that we are a 100% Employee Owned organization with full DBE certification, approved by the CPUC. Core values such as teamwork, integrity and excellence have structured a stable foundation and shaped our future to meet the dynamic & evolving needs of our customers.



Electric Utility/Power Distribution

Scott Engineering, Inc. (Scott Engineering) has been in the Electric Utility and Power Distribution Industry since 1966. Our humble beginnings stem from a small company providing unique custom solutions. As time progressed and our capabilities increased we branched out to customers across the nation, providing custom solutions not only for electric utilities but also for industrial, residential areas, universities, military installations and others.

With the capabilities to always adapt to changes in the industry, as evidenced by our long history, Scott Engineering maintains a high level of integrity and pride in our custom product lines. Related standards from NEMA, ANSI/IEEE and other national system requirements are always factored into our designs, to maximize product efficiency & reliability.



Scott Engineering, Inc.



WE HAVE BEEN IN BUSINESS SINCE 1966

Scott Engineering is a manufacturer of medium voltage pole-mounted and pad-mounted equipment for the utility industry. We design, manufacture, engineer and assemble all equipment ready for installation.

The organization was founded on the premise that a need exists for custom fabrication of top quality equipment to precisely fulfill the operating needs of each specific customer. Our reliable products have been servicing the industry for generations.



APPLICATIONS



OVERHEAD DISTRIBUTION

Scott Engineering manufactures Overhead Metering Racks, Capacitor banks, and Pole-Line Hardware for Distribution Systems. Mainly due to environmental exposure, the use of outdoor equipment requires strict regulations.



UNDERGROUND DISTRIBUTION

Our underground equipment is installed on concrete pads and allows for underground conduits to feed into and out of our padmounted equipment, maintaining the underground distribution and reducing exposure to environmental issues. The concrete pads have various dimensions and mounting provisions, so requirements for custom sizes are available!



SUBSTATIONS

Scott Engineering manufactures self-supporting, free standing metal-enclosures which are exposed to the external environment and the harsh conditions that can exist within a substation. Our medium voltage substation equipment (up to 35kV) is typically used for Power Factor correction, applying reactive power to the distribution system.

We specialize in Metal-Enclosed Multi-Stage Capacitor Banks that apply to various configurations and applications. Typically our substation equipment incorporates overvoltage protection, overcurrent protection, control power, relaying, and disconnect and ground switches.



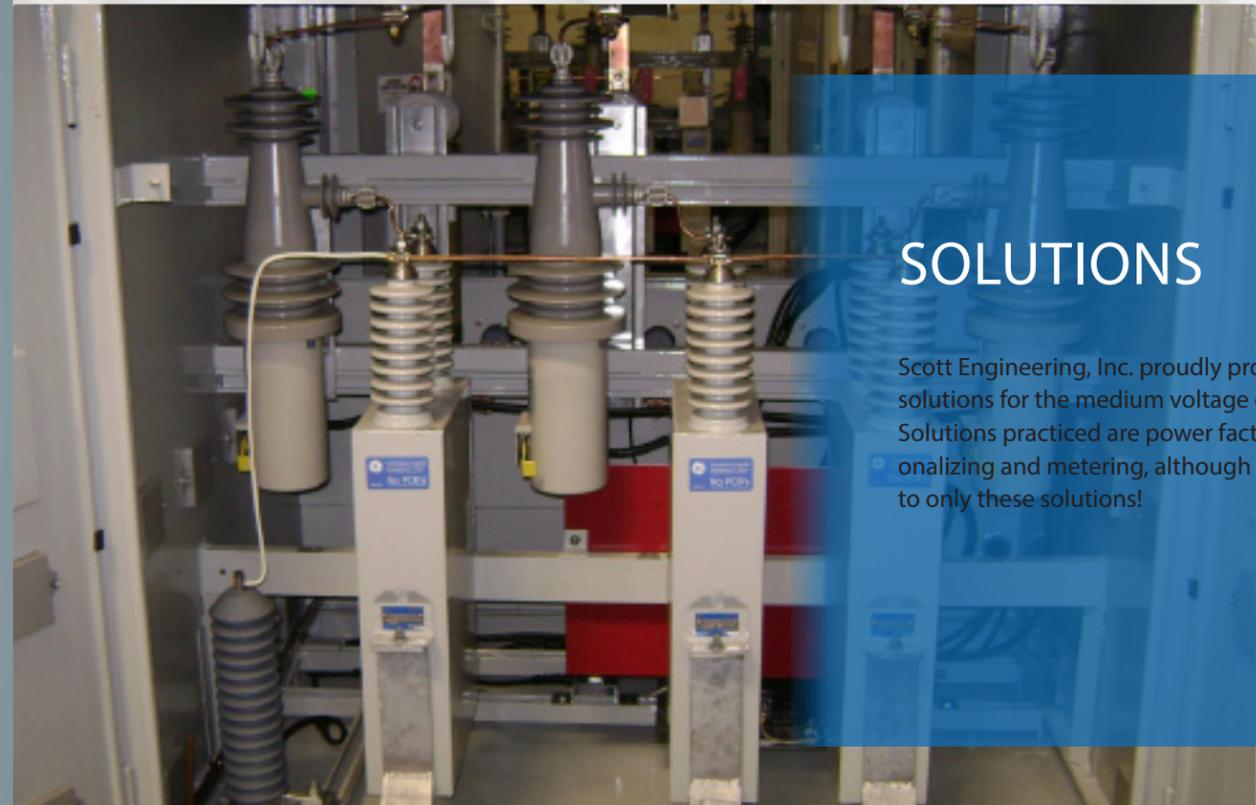
WIND, SOLAR & RENEWABLE ENERGY

Scott Engineering also provides integrated solutions for wind, solar and renewable energy. Applications such as metering, harmonic filtering and power factor correction are commonly applied in these applications to monitor and/or increase efficiencies in a given system. Efficiency is growing and Scott Engineering offers products that are innovative, as well as: providing room for expansion to allow for future requirements due to facility growth.

APPLICATION SOLUTIONS IN POWER DISTRIBUTION SYSTEMS:

POWER FACTOR CORRECTION

Power factor is a major component of power quality in distribution systems, and can influence the efficiency of a power system as well as reduce the electrical stress on many types of electrical equipment. Improving power factor can be achieved by supplying reactive power from a capacitor bank back to the system so that power can be delivered more efficiently.



SOLUTIONS

Scott Engineering, Inc. proudly provides utility-grade solutions for the medium voltage electric industry. Solutions practiced are power factor correction, sectionalizing and metering, although we are not limited to only these solutions!

INNOVATION IN SECTIONALIZING & PROTECTION

Sectionalizing is useful in power systems for isolating faulted sections, disconnecting loads safely and distributing loads in various configurations. Cabinets containing separate compartments of Fuse Gear, Switchgear or both, represent multiple ways to distribute and protect power systems. Sectionalizing cabinets allow for a wide range of system configurations, and increase system flexibility by providing open points, circuit reconfiguration, and circuit distribution.

PRODUCTS

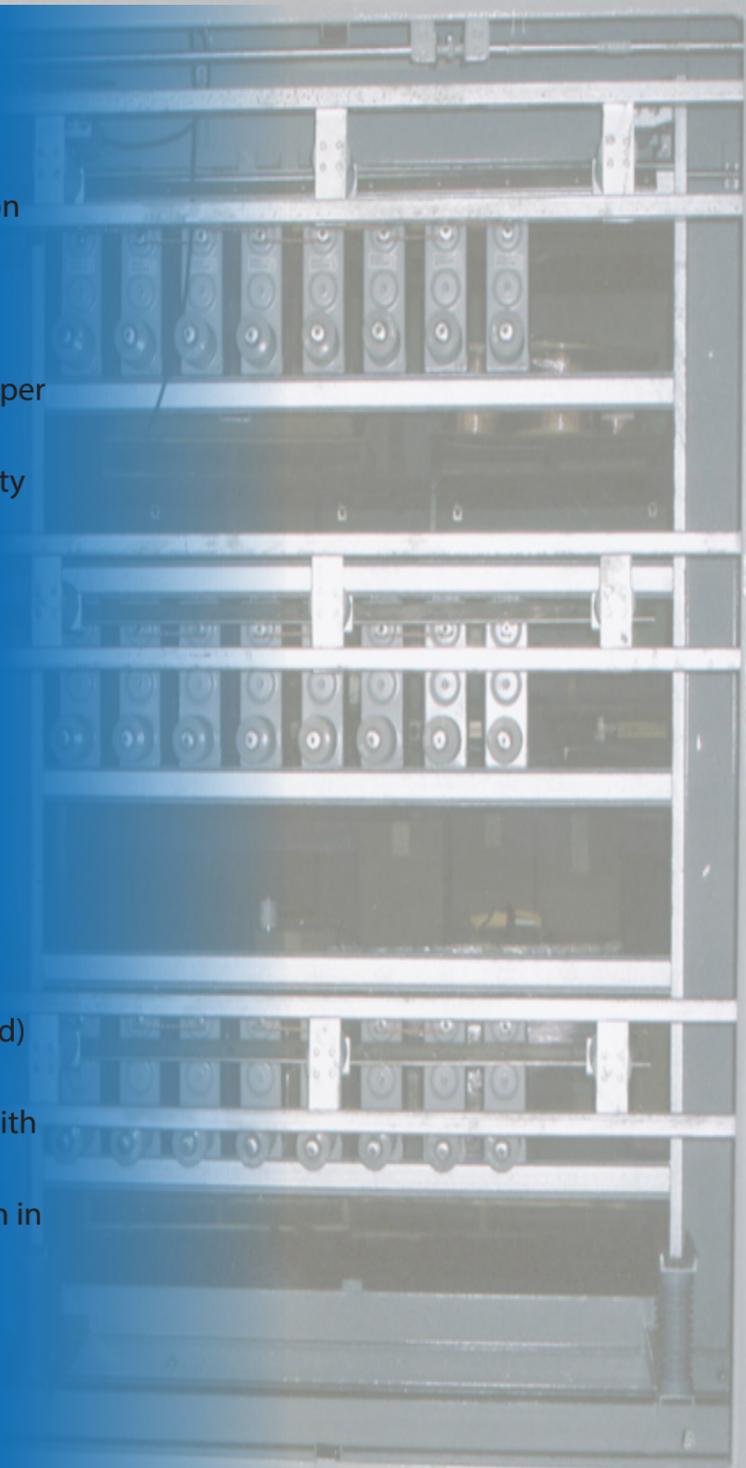
- o Capacitors Banks
 - Pad mounted Capacitor Banks
 - Pole-Mounted Capacitor Racks
 - Substation Capacitor Banks
- o Switchgear and Fuse Cabinets
 - Live-Front - SPM
 - Dead-Front - SPD
- o Termination/Sectionalizing Cabinets
 - Cable Termination Cabinets
- o Metering Gear
 - Primary Metering
 - Secondary Metering
- o Hardware
 - Pole Line Hardware
 - Mounting Brackets
- o Custom Gear and solutions to meet customer needs



STANDARD FEATURES

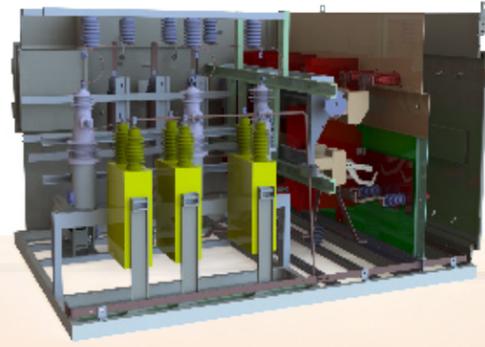
Scott offers the following standard features on our enclosures:

- Steel construction throughout
- Meets ANSI and Western Underground tamper resistance standards
- All doors are double baffled for extra security
- MIG Welded throughout
- Structural channel base that is hot-dip galvanized after fabrication
- Roof is cross-kinked for both strength and drainage
- Ventilation Capabilities
- Heavy Duty Stainless Steel Door Hinges
- Bold, clear Cautionary Labels
- Positive Door Stop Locks for open position
- Cabinet media blasted prior to coating
- Paint System exceeds C57.12.28
- NEMA Grade GPO-3 Barriers (where required)
- Removable Access Barriers
- Doors provided with padlockable handle with three-point latching
- Cabinet doors have lift off capabilities when in open position
- Grounding Nuts or Ground Lugs provided



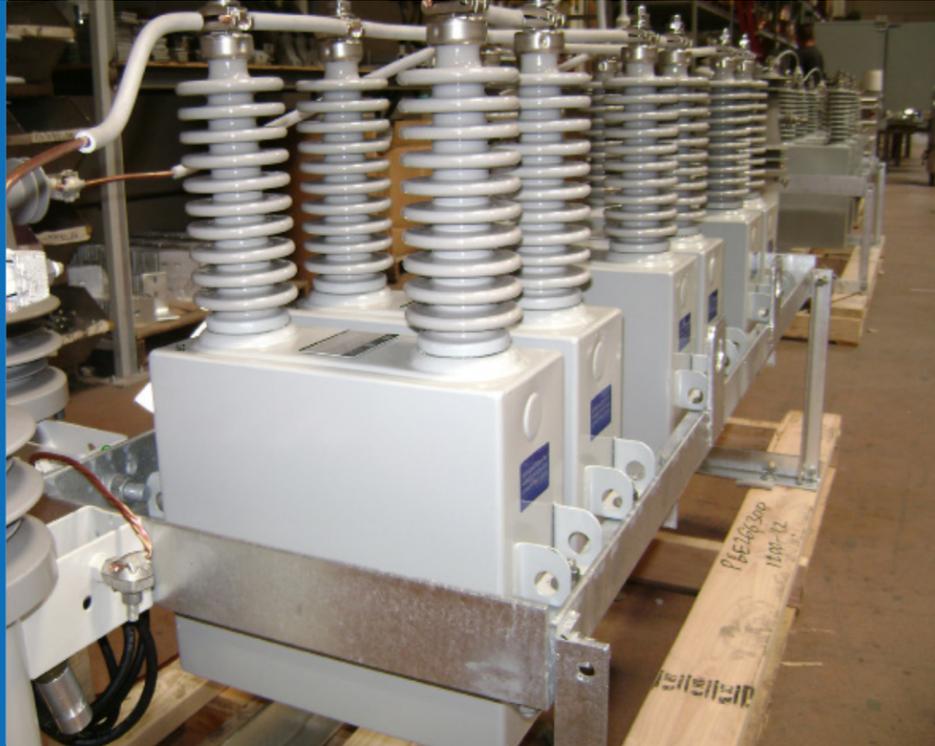
Scott Engineering takes pride in the quality of all products that leave our California plant. We have partnerships with all major component manufacturers/suppliers, offering a complete list of brands and options.

All Scott Engineering enclosures are built to meet industry standards and are ensured by our quality management system. Our heavy duty designs ensure rigidity and enclosure integrity, while meeting dimensional requirements, specified by the customer.



CAPACITOR PRODUCTS

- o Capacitors Banks
 - Pad mounted Capacitor Banks
 - Pole-Mounted Capacitor Racks
 - Substation Capacitor Banks



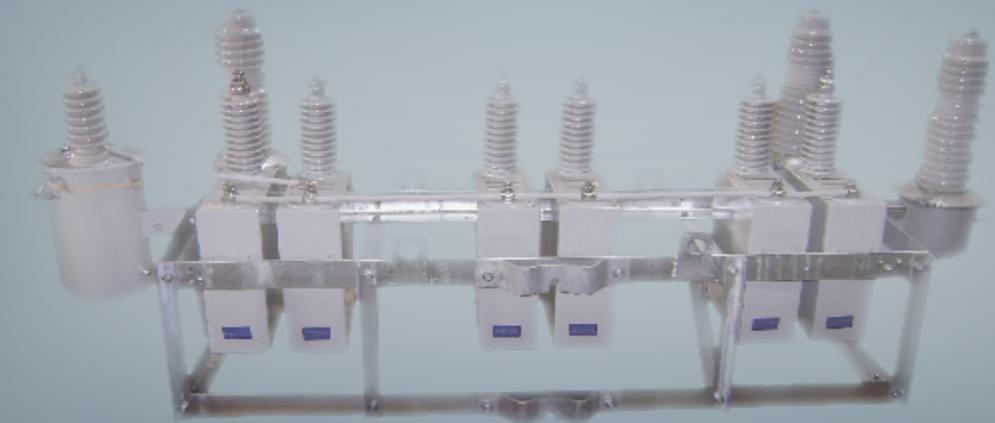
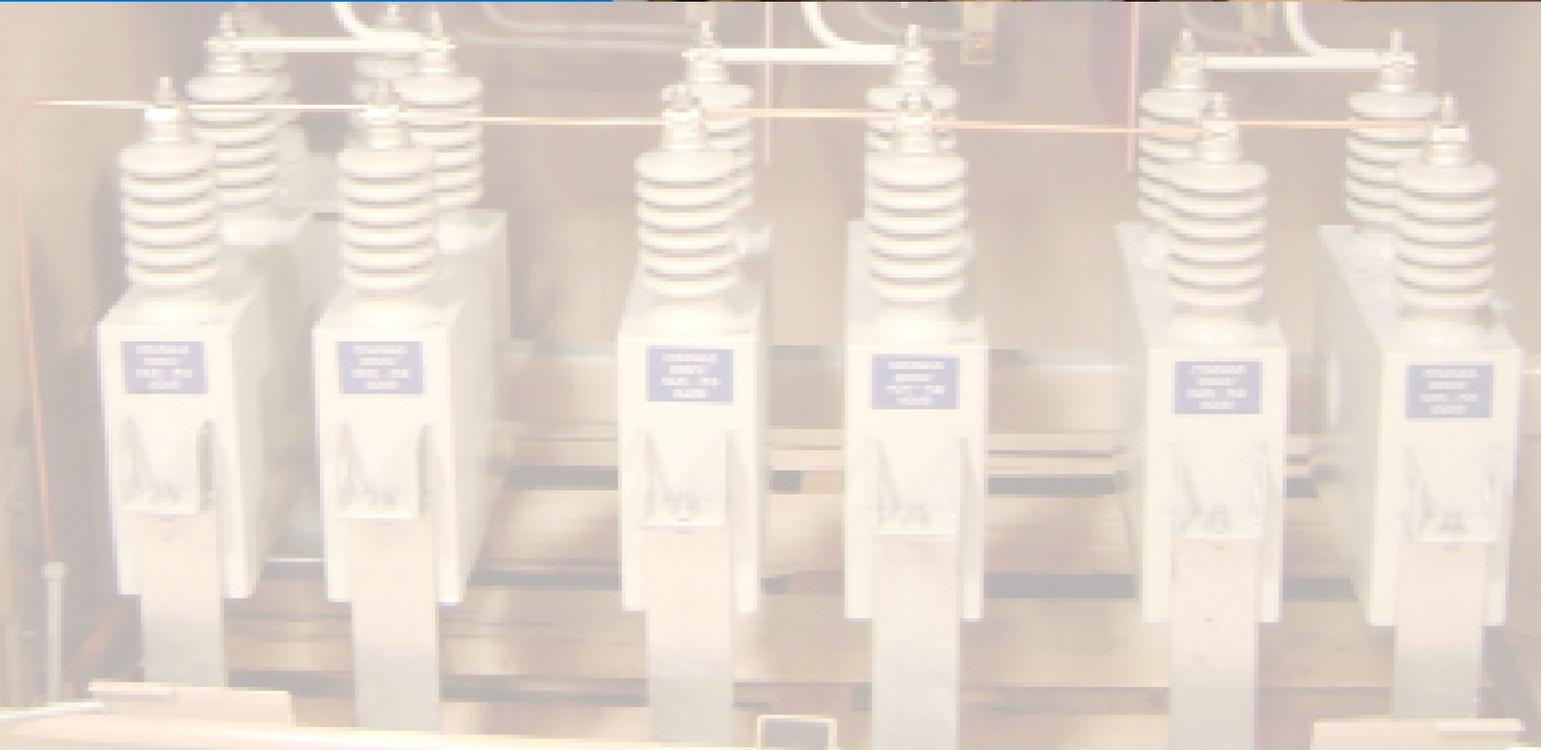
Overhead, Pole-mounted capacitor bank



POLE-MOUNTED CAPACITOR BANKS

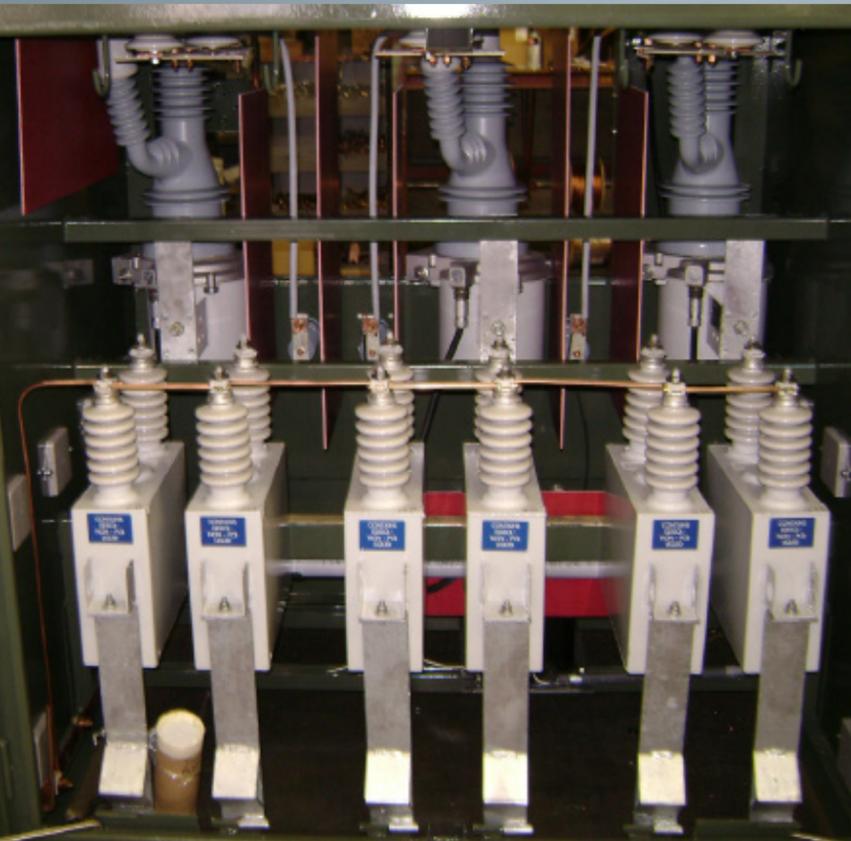
For overhead applications, Scott Engineering offers a variety of Capacitor Racks that can be fabricated and assembled to customer specifications. Standard features that come with our pole-mounted capacitor banks are:

- Galvanized Steel or Aluminum Construction
- Vacuum or Oil Switches
- 2.4kV to 38kV
- 95kV BIL to 150kV BIL
- Oil or Dry Potential Transformer
- Junction Box
- Wiring
- FULLY ASSEMBLED (READY FOR INSTALLATION)



PAD MOUNTED CAPACITOR BANK

Scott Engineering offers a complete line of free-standing, self supporting metal enclosed distribution capacitor banks. These low profile cabinets are shipped completely assembled, including capacitors, switches, fuses, power transformers "PT's" and other accessories (as specified).



Some optional features are:

- Dead-front or Live-front design
- Individual or Group Capacitor Fusing
- One or Two Bushing Capacitors
- Galvanneal or Stainless Steel Construction
- Removable Lifting Eyes
- Finish Color
- Non Drip Compound coating interior of the roof of enclosure
- Vacuum or Oil Switches
- Oil or dry Control Power Transformers (fused or non-fused)
- 2.4kV to 35kV
- Lighting Arresters
- Reactors
- Interlocking System
- Neutral Unbalance Relay
- Capacitor Controls

Some optional features are:

- Dead-front or Live-front design
- Individual or Group Fusing
- One or Two Bushing Capacitors
- Galvanneal or Stainless Steel Construction
- Removable Lifting Eyes
- Finish Color
- Vacuum, Oil or Circuit Breaker Switches
- Oil or dry Control Power Transformers (fused or non-fused)
- 2.4kV to 38kV, 95kV BIL to 150kV BIL
- Lighting Arresters
- Reactors
- Ground Switch
- Disconnect Switch
- Mechanical or Key Interlocks
- Neutral Unbalance Relay
- View Windows
- Capacitor Controls
- Multi-Stage Banks
- Heaters and Exhaust Fans



SUBSTATION CAPACITOR BANK

Scott Engineering offers a complete line of free standing, self supporting, metal enclosed substation capacitor banks. Enclosures are shipped completely assembled, including: capacitors, switches, fuses, PT's and other accessories as specified. These units can be designed within a voltage ranges of 2.4kV to 38kV with power kVAR as required.

SWITCHGEAR & FUSE CABINET

Scott Engineering offers Switchgear and Fuse Cabinets that are available in a variety of standard configurations, allowing for protection and switching in circuit configurations that fit every requirement. Each configuration consists of either load-break switchgear, fuse cabinets or any combination of both, all conforming to industry standards. The Scott Engineering SPM (Live-Front) and SPD (Dead-Front) low profile cabinets offer protection and switching in circuit configurations that meet requirements, such as ANSI/IEEE C37.73 and C37.74.



SPM PRODUCT LINE (LIVE-FRONT)

Scott Engineering's SPM product line is for Live-Front applications, typically offering a more economical alternative to Dead-Front applications as well as smaller footprints. Custom configurations are available!

Our SPM Switchgear has the following options available:

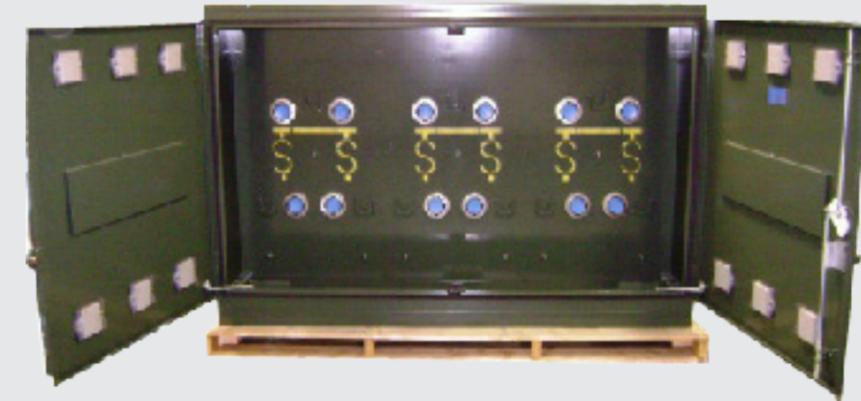
- Lightning Arresters and Brackets
- Base Spacers or Ground Sleeves
- Fuse Refill/Assembly Storage
- Fuse Handling Tools
- Interlock Systems
- Fault Indicator Mounting & Window
- Cable Guide Brackets
- Double Circuit Feeder Adapter for Switch Connection Pads

SPD PRODUCT LINE (DEAD-FRONT)

For Dead-Front applications, Scott Engineering offers our reliable SPD product line, allowing for safer operation and ease of installation and maintenance. Custom configurations are also available!

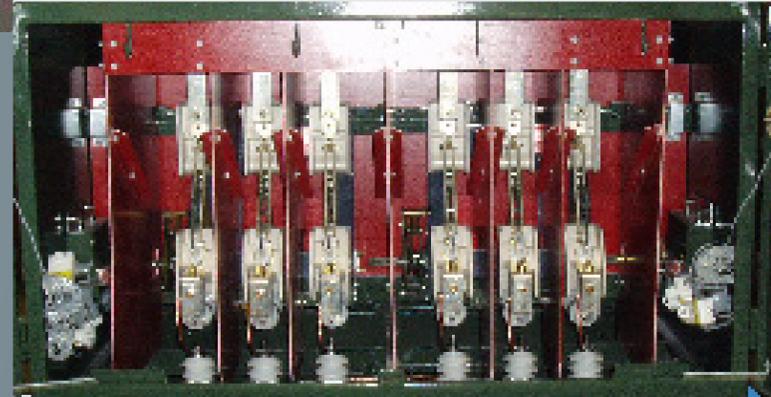
Our SPD Switchgear has the following options available:

- 200A or 600A Bushing Configurations
- Fault Indicator Mounting & Window
- Base Spacers or Ground Sleeves
- Fuse Refill/Assembly Storage
- Various Fusing
- Lightning Arresters and Brackets
- Fuse Handling Tools
- Key Interlock System



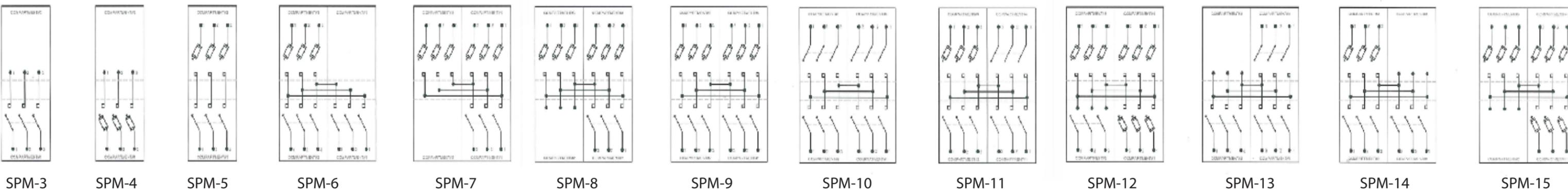
SWITCHES

We offer reliable, gang-operated switched ways that allow for easy isolation of distribution feeders for switching, repair and maintenance. Scott Engineering offers the use of trusted air-break switches (up to 35kV) in our padmount switch cabinets.



FUSES

Our fused sectionalizers are available in low-profile single and three phase cabinets. They can be used where underground cable must be sectionalized and protected. Designs can be offered for 15kV or 25kV voltage classes.



CABLE TERMINATION CABINETS

Scott Engineering produces a broad range of free-standing, self-supporting cabinets. Each low-profile cabinet is designed to accept from 15kV up to 35kV, 200 Amp and 600 Amp Junctions. This type of cabinet can be used wherever underground cable must be sectionalized or connected. We also offer live front bolt on connection cable termination cabinets and secondary bus enclosures.



FEATURES THAT SCOTT ENGINEERING OFFERS FOR OUR CABLE TERMINATING CABINETS ARE AS FOLLOWS:

- Recessed Lock Pocket with padlock hasp and pentahead bolt
- Positive Door Stop Locks for open position
- Hold Down Clamps
- Junction Mounting Plates with Ground Nuts
- Welded Or Adjustable Parking Stands
- Pedestal can be provided to increase cable working area
- Ground Sleeves or riser bases
- Stainless Steel, Aluminum or Galvanneal Enclosure
- 15kV, 25kV or 35kV Multi-point 200 Amp or 600 Amp Molded Rubber Junctions

METERING CABINETS

Scott Engineering offers a complete range of metering enclosures up to 38kV. Our capabilities to build metering enclosures include products such as Primary Metering Cabinets, Metering Boxes and Secondary Bus Enclosures. We can construct live or dead front applications with separate instrument compartments as additional features for customers. Each free-standing, self-supporting padmounted cabinet may also have adjustable mountings for PTs and CTs, along with provisions for surge arresters or other equipment. We also offer switched and fused primary metering designs. We offer pole-mounted or wall-mounted metering boxes and panels as well.



Primary Metering

All primary metering cabinets manufactured by Scott Engineering meet industry standards. Configurations differ dependent on the specifications listed by the customer. Customers also have the choice to include specific types of PT's and CT's with specific winding ratios. You may have unique requests and we are prepared to work with you to take care of your needs.

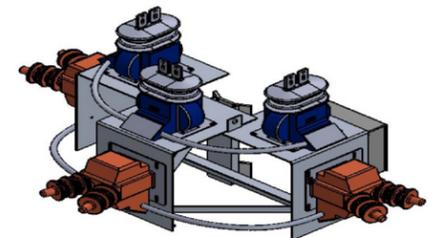
Secondary Bus Cabinets

Secondary bus cabinet enclosures come in various voltage and amperage ratings. Shape and size are additional options customers may specify to best fit their needs. Padmount enclosures also come with standard cabinet features such as cross-kinked roofs, stainless steel door hinges that allow for lift-off capability and padlockable door handles. Typical optional features for these enclosures available.



Scott Engineering offers all Metering Cabinets with our standard features. Other optional features include:

- Dead-front or Live-front designs
- CTs and PTs installed
- Each CT and PT section isolated by NEMA Grade GPO-3 Barriers
- Pole-mounted cabinet can be supplied with brackets
- Instrument Compartment
- Meter Sockets
- Test Switches & Shorting Blocks
- Fusing
- FULLY WIRED & ASSEMBLED (READY FOR INSTALLATIONS)



HARDWARE

Scott Engineering proudly offers company manufactured hardware items for overhead and padmount applications. A few of our commonly purchased hardware items are as listed:

- Penta Socket Wrench
- Add-on Penta Bolt Security
- Anti-Theft Door Lock Protection
- Padmount Capacitor Lifting Tool for Lifting Capacitor Cans
- Cable Rack Hooks, 2-1/2" and 5"
- Antenna Mounting Bracket
- Sample Oil Tube Assembly
- Pothead Arrestor Brackets
- Lightning Arrestor Brackets
- Transformer Brackets (3-Phase, Delta or 1-Position)
- Lifting Jigs for Transformer Brackets
- Tri-Plex Spacers
- Tri-Plex Spreader Tool



We also offer spare parts and other product-related components, such as insulators, reactors and fusing equipment. If you have a special need, please contact us.



CUSTOM PRODUCTS

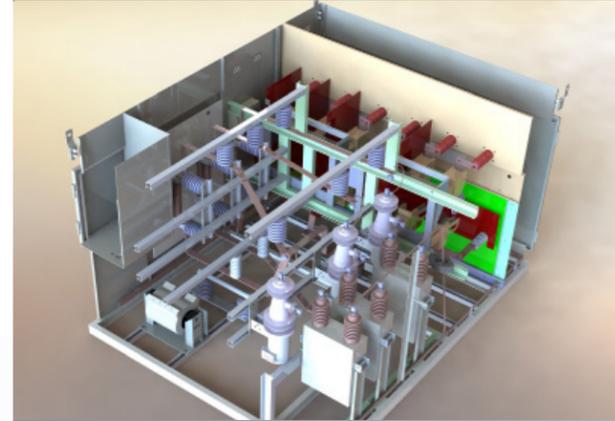
Scott Engineering provides a wide range of products, specific to each of our customers. When unique products are needed, we believe we are the best resource to contact to get the job done in a timely manner with a consistent level of quality and professionalism. We welcome new and challenging projects, priding ourselves whenever we are able to meet or exceed customer expectations.

We offer complete customer support with customizable solutions in all product lines. Custom Pole-mounted applications, such as brackets, racks and pole-line hardware, are also solutions we can provide.

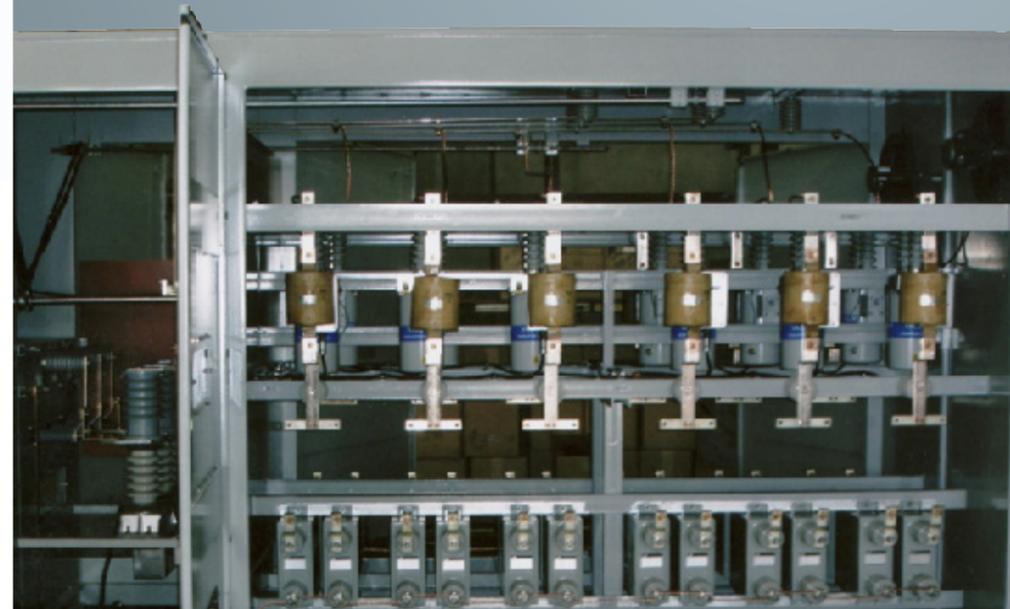
Due to various size, shape and design requirements, custom padmounted enclosures have become our specialty. We take the pressure off your shoulders by making sure safety has been fully considered, all applicable standards have been met and the most economical solutions have been chosen.

We pride ourselves on meeting challenges and providing high levels of quality support. From responsive technical consulting in design stages to shipping finished products to our customers, we make sure the customer comes first. Any inquiries about our capabilities at Scott Engineering can be answered by either our Engineering or Sales departments.

For more information on any of our products, including new and unique products, please contact your local Scott Engineering representative or email us at info@scott-eng.com.



Custom Cabinets & Solutions



SERVICES

Scott Engineering is here to serve your needs. We also offer services that may not always relate to the electric utility industry. Some of the capabilities being utilized outside of the electric industry are as follows:

1 Media Blasting & Painting various products within our new Media Blast & Paint booths (Both pictured below).

2 Material fabrication- Aluminum, Stainless Steel, Mild Steel, Bus Bars, Insulating Barriers (GPO-3 or Acrylic), etc.

3 Rework designs & Retrofit kits for products installed on site.

If there is a need that we are capable of providing a solution to, we do our best to consider all aspects of the necessity to provide the best solutions possible.



Please contact us to discuss your requirements



SUPPORT

We look forward to working with you! We understand that custom, quality designs typically require a generous amount of communication between Scott Engineering and customer design teams. We are committed to working with our customers to manufacture products that meet design requirements, while keeping cost low and levels of satisfaction high.

Problems will arise in the field and immediate actions must be taken to restore the system back to working order. We understand the sense of urgency and the value of a quality customer service team. It is nothing less than our intent to provide best-in-class customer service and support.

When support is needed, our responsive Sales and Engineering teams will work with you to design the best solution. Customers can consult with local representatives of Scott Engineering, Inc., email inquiries directly to our support system or set up an appointment to discuss by phone or in person with our sales or engineering departments.



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SCOTT ENGINEERING, INC.

5051 Edison Ave.
Chino, California 91710

Phone +909 594 9637
Fax +909 595 0379

Email info@scott-eng.com

For more information on any of our products, including new and unique products, please contact your local Scott Engineering representative or email us at info@scott-eng.com. You may also visit us at www.scott-eng.com

