



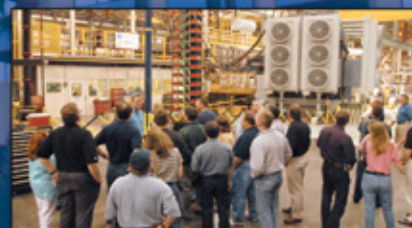
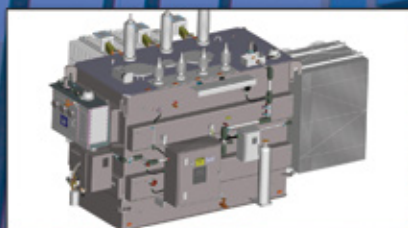
Electric Energy T&D

MAGAZINE www.electricenseonline.com

OFFICIAL SHOW GUIDE

Life of a
Transformer
Seminar

February 18-22, 2008
Orlando, FL



GE
Energy



We'll put our transformers up against anyone in the world. Any takers?



Transformers and Service by ABB.



We take pride in our more than 100 years of experience in the power industry. We are proud of our advanced design, quality construction and transformer technology. But mostly we're proud of our people, and their commitment to provide you with rapid local repair, local field service and local support. When you work with ABB, you're working with a team dedicated to providing consistent grid reliability, year after year. That's something we can all be proud of.

Get in touch with some really good people.

Call ABB – 800.531.1864, or visit www.abb.com/transformers



When you invest in quality equipment, you expect it to run in top form at all times—whether you're rounding a hairpin turn on the Le Mans circuit or driving performance throughout your business.

GE Energy offers the expertise and service capabilities you need to keep your equipment in peak operating condition. From power system design to remote monitoring to remanufacture to repairs, we have the know-how and experience you can rely on to help ensure the smooth and efficient operation of your transformers, substations, motors, switchgear, drives and other power related equipment. Contact your GE Energy sales representative today and find out how we can help you with your winning performance.

Visit us on the web at ge-energy.com/industrial-service.

A winning performance starts with expert service.



imagination at work

Join GE for dinner and a guided tour of our industry leading transformer manufacturing and re-manufacturing facility on February 20th. Visit us at Booth #3 and #4 for details.



Greetings Fellow Transformer Students! Welcome to the 2008 "Life of a Transformer" Seminar

We are all on a mission to better understand and manage every aspect of dealing with large power transformers. Each of you is here to soak up as much information as you can about these critical assets. We have gathered some of the world's top experts in their field for your benefit. They will share their impressive knowledge of important aspects of power transformers with you. The experts that you will hear from this week are also students here to learn – from your experiences and from one another. This event is truly one of a kind!

From our humble beginnings in 2003, when we hosted approximately 200 attendees and 6 exhibitors, to our expected attendance of almost 600 participants from virtually all 50 states and approximately 30 countries plus 50 exhibiting companies – this event has become the "Gold Standard" of the industry. This is a world-class event! I would like to take this opportunity to thank you for your support, and for taking a full week out of your busy lives to be here.

The entire week is jam-packed with great speakers, lots of important information, the opportunity to meet new colleagues and establish valuable contacts. Please take advantage of this unique and powerful opportunity to learn from the finest experts in the industry. Ask questions, make contacts, develop new relationships. This seminar is all about you. It is our goal to put the most powerful information about the industry into your hands, the rest is up to you!

Wishing you all the best for a productive, informative, and fun week,

Richard K. Ladroga, P.E.
Seminar Chairman

Power Transformer Cooling

ForZair
Transformer Coolers

The Hottest Name in Cooling

UNIFIN
INTERNATIONAL

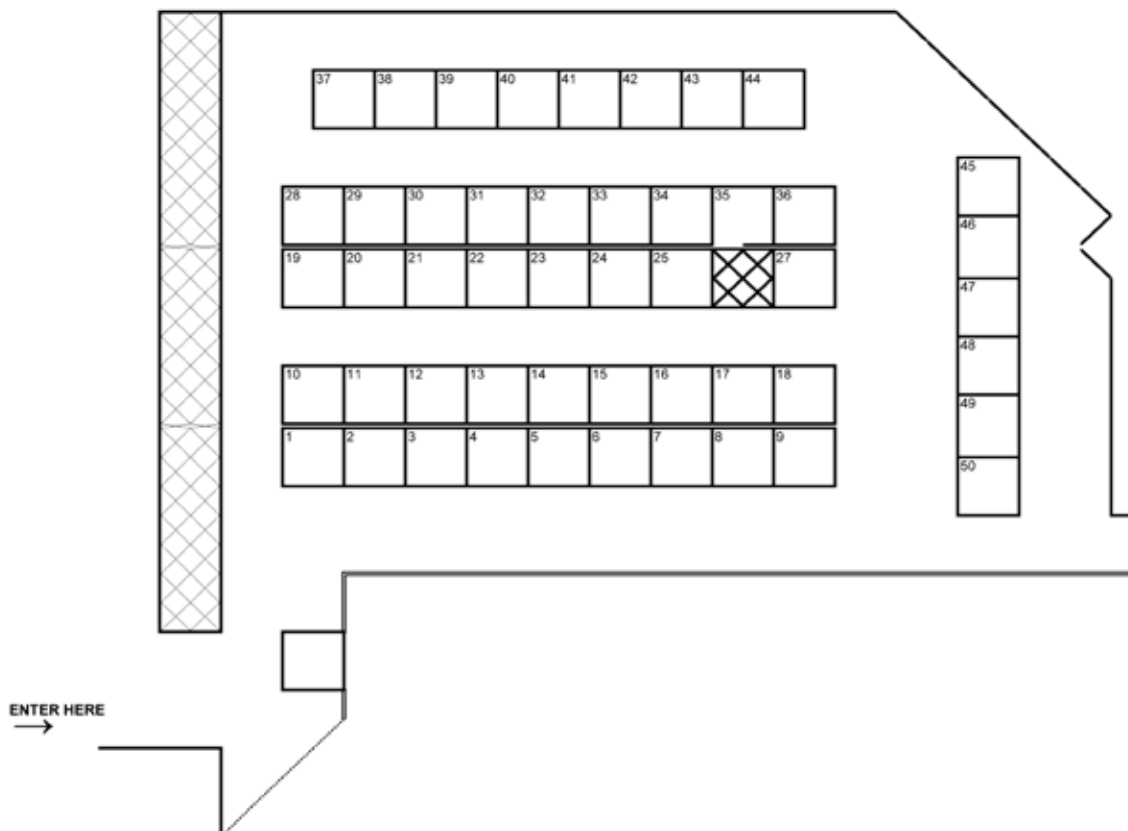
Pre-Engineered
Easy Selection
Fast Delivery

London, Ontario, Canada 1-888-451-0310 www.unifin.com



2008 Life of a Transformer Expo

Buena Vista Palace, Orlando Florida



COMPANY BOOTH

A-Line E.D.S.....	9	High Voltage Supply	7
ABB.....	5, 6	(a division of Waukesha Electric Systems, Inc.)	
AREVA T&D.....	15	HV TECHNOLOGIES, Inc.....	13
Albarrie Canada Limited.....	42	LumaSense Technologies	28
American Electrical Testing Co., Inc.....	23	Nynas USA, Inc.	50
BCS Switchgear, Inc.....	38	PCORE Electric Company, Inc	19
Baron USA, Inc.....	46	Parts Super Center	17
Beckwith Electric.....	32	Physical Acoustics Corporation	24
Colt	49	Power Asset Recovery.....	8
Delta-X Research, Inc	29	Power Substation Services	27
Digital Inspections, a KEMA Company.....	29	PowerPD USA.....	43
Doble Engineering Company.....	1, 2, 39-41	Reinhausen.....	45
Doble Engineered Strategies.....	1	S.D. Myers.....	20
Doble Laboratories.....	2	Schweitzer Engineering Laboratories Inc.....	22
DryKeep USA.....	10	Serveron Corporation	35
Dynamic Ratings, Inc	37	Transformer Protector Corp.....	48
FLIR Systems.....	36	Trench Limited.....	16
G&S Technologies.....	11	Unifin International LP.....	14
GE Energy.....	3, 4	Vacudyne.....	12
GridSense.....	47	Velcon Filters, Inc	44
HICO America.....	18	Virginia Transformer Corp.....	25
		Waukesha Electric Systems, Inc.....	7
		ZTZ Services International.....	21



A-Line E.D.S. Booth 9

808 Dearborn Ave
Waterloo, IA 50703 USA
319-232-3889
Fax: 319-235-7032
Anne Bailey
anne@alineeds.com
www.alineeds.com

A-Line E.D.S. provides the environmentally sound decommissioning of electrical transformers as well as the most comprehensive transformer recycling and removal services available. We have vast experience in the safe dismantling and approved recycling of transformer metals. Our unique on-site transformer decommissioning process encompasses units ranging from 5 KVA up to 1200 MVA. Along with our licensed EPA approved reclamation furnace located at our facility in Waterloo, IA, we provide our clients with experienced and environmentally sensitive teams that work directly with you. A-Line's wide range of global markets helps to insure you will receive the highest returns. We will work directly with your insurer or engineering department to systematically dismantle transformers and other electrical equipment in order to determine the problems that lead to equipment failure.



ABB Booths 5, 6

4350 Semple Avenue
St. Louis, MO 63005
314-679-4722
Fax: 314-679-4595
Mark Hemmann
Mark.hemmann@us.abb.com
www.abb.com

ABB is the largest transformer manufacturer in the world with units ranging in size from small distribution through large power. In addition,

ABB offers a full range of components and services, including technical assessments, factory remanufacturing, and field services. As the OEM of the majority of the installed based in North America, ABB's experience can compliment your existing transformer asset management program.

See Ad Page Inside Front Cover

AREVA T&D Booth 15

One Power Lane
Charlroji, PA 15022
724-483-7891
Mark Hammer
mark.hammer@areva-td.com

AREVA T&D is a major supplier of High Voltage Electrical equipment. The AREVA T&D Power Transformer division is a worldwide supplier featuring eight (8) Power Transformer factories with a total annual capacity of > 85,000 MVA. Capacities range to 800 kV and to > 1000 MVA. Equipment is designed, built and tested to ANSI standards. Auto Transformers, Generator Step Up, Step down and Shunt Reactors.

Albarrie Canada Limited Booth 42

85 Morrow Road
Barrie, ON L4N 3V7 Canada
866-269-8275
705-737-0551
Fax: 705-737-4044
albarrie@albarrie.com
www.albarrie.com
www.sorbwebplus.com

Albarrie Canada Limited is presenting the SorbWeb™ Plus secondary oil spill containment system. SorbWeb™ Plus is a cost effective and reliable passive system that provides continuous protection against oil spills from transformers. The system allows rain water and snow melt to pass through with no pumps or maintenance.

American Electrical Testing Co., Inc. Booth 23

480 Neponset Street, Building 3
Canton, MA 02021
781-821-0121
1-800-99AETCO
Marketing Contact: Paul M. Kelly

Company Contact: Charles K. Blizard, Jr.
www.99aetco.com

American Electrical Testing Co., Inc. provides power system studies and complete engineering and testing services for acceptance, maintenance, retrofit and repair of electrical power distribution systems and equipment.



BCS SWITCHGEAR, INC. 888-599-0486

BCS Switchgear, Inc. Booth 38

888-599-0486
Cody Whisenhunt
Cody@bcswitchgear.com
Susanne Kennedy
Susanne@bcswitchgear.com
www.bcswitchgear.com

BCS can furnish the following equipment: Circuit Breakers – Load Break Switches – Molded Case Breakers – Insulated Case Breakers – Relays – Transformers – Motor Control Centers – Breaker Parts Replacement Contacts – AC/PRO Solid State Trip Device Recondition & Repairs. Industrial Electrical Equipment Circuit Breakers and Switchgear.

See Ad Page #12

Baron USA, Inc. Booth 46

350 Baron Circle
Cookeville, TN 38501
931-528-8476
Fax: 931-526-2219
Derek Baranowski
sales@baronusa.com
www.baronusa.com

Baron USA, Inc. is the premier provider of Transformer Dry Out Systems, Transformer Oil Processors, FR3 systems, Silicon Fluid Purifiers, and other Dielectric Fluid Reclaimers. Control options include "one button" control systems, data logging, moisture monitor, transformer dry out estimator, and other features. The Baron AUTOS line is an unattended automated on line dry out system for use on energized transformers. We also design and manufacture Vapor Phase Systems, Vacuum Impregnation



Chambers, Cold Traps, Fuller's Earth Systems, Circuit Breaker Filtering Trailers and SF6 Reclaimers. Intelligent Solutions for solving today's problems and meeting tomorrow's challenges!

Beckwith Electric

Booth 32

6190 118th Ave N.
Largo, FL 33773
727-544-2326
www.beckwithelectric.com

Beckwith Electric, founded in 1967, is a premier provider of innovative and high quality products, technical services and solutions that meet the needs of customers involved in the production, transmission, and distribution of electric power. Beckwith Electric's products include tapchanger, regulator, and capacitor controls, protective relays, custom services and solutions, and equipment for synchronizing and motor bus transfer.

Colt

Booth 49

P.O. Box 74396
Richmond, VA 23235
866-572-5325
Jim Hackett
www.coltonline.com

The Power Services Division of Colt Atlantic Services provides repairs to oil, nitrogen and SF6 gas leaks without draining or de-pressurizing the equipment. A proven injection process greatly reduces or eliminates outage times. All repairs are documented and guaranteed for two-years with a conditional life time guarantee.

See Ad Page #7

Delta-X Research

Booth 29

PO Box 42083
200 Oak Bay Avenue
Victoria, BC V8R 6T4 Canada
www.deltaxresearch.com

Delta-X Research is the provider of the Transformer Oil Analyst (TOA) product.

Digital Inspections

Booth 29

804A Buchanan Avenue NW

Corvallis, OR 97330
800-877-8783 ext.116
Fax: 541-758-3666
John Lane
jlane@digitalinspections.com
www.digitalinspections.com

Digital Inspections is the provider of the CASCADE Utility Asset Equipment Health Maintenance Management and Inspection System.



Doble Engineering Company

Booths 1, 2, 39-41

85 Walnut Street
Watertown, MA 02472
617-926-4900
Fax: 617-926-0528
www.doble.com

Now in 75 countries all over the world, Doble Engineering has been helping clients in the electric power industry improve operations and optimize system performance for more than 85 years. Doble offers diagnostic instruments, services and the world's premier library of statistically significant apparatus test results for the benefit of energy generation and delivery companies and industrial power users worldwide.

See Ad Page Back Cover



Doble Engineered Strategies

Host of the "Life of a Transformer" Seminar

Booth 1

65 Boston Post Road W
Marlboro, MA 01752
617-393-3133
Fax: 617-926-0528
DES@doble.com
www.doble.com

Doble Engineered Strategies (DES) provides expert consulting services and Condition Assessment—a proprietary method for estimating the remaining service life of your transformers, generators and large motors. DES services include:

- Specification Writing
- Design Review

- Factory Audits
- Field Commissioning
- High-level field testing, including high voltage electrical testing to detect the increasing problem of Corrosive Sulfur
- Condition Assessment
- Forensic Analysis

DES works in conjunction with the other departments at Doble and other Doble offices worldwide to bring together all the resources needed for your job.



Doble Laboratories

Booth 2

85 Walnut Street
Watertown, MA 02472
617-926-4900
Fax: 617-926-0528
www.doble.com

The Doble Laboratory can provide answers and solutions to your problems based upon quality data from a wide scope of testing capabilities and a rich experience in apparatus diagnostics. We can help you develop the most cost-effective testing program for condition assessment or help identify and solve apparatus problems. All test reports include an analysis of the data and recommendations for remedial action if warranted.

DryKeep USA, Division of the Ardry Group

Booth 10

195 Industrial Boulevard
Rincon, GA 31326
912-754-2474
Joe Carbery
joec@ardry.com
Ed Vance
edv@ardry.com

DryKeep is a permanently installed On-Line Moisture Removal System for power transformers that fully complies with paragraph 7.2 of IEEE C57-140 Standards for On-line Molecular Sieve Dry-Out Systems. The re-chargeable saturated cartridges can be quickly changed out while the transformer is in service. In a gentle, passive, and



entirely non-intrusive way that preserves all of the transformers monitoring data, moisture is removed as a permanent function of a transformer's oil circulation system. Dehydration is continuous, as opposed to prolonged buildup followed by periodic dry-outs. Once a wet transformer has been dried, further deterioration of the insulation is stopped. The remaining potential service life is extended, and the dielectric strength of the transformer is improved and stabilized.

Dynamic Ratings Pty Ltd

Booth 37

1275 E. Wisconsin Avenue
Pewaukee, WI 53072
262-746-1230
Fax: 262-746-1232
Tony Pink
tony.pink@dynamicratings.com
www.dynamicratings.com

Dynamic Ratings offers comprehensive transformer management solutions providing monitoring, control and communications for medium and large power transformers. Our continual innovation has significantly reduced the cost and complexity of comprehensive transformer monitoring and control.

FLIR Systems

Booth 36

FLIR Systems
25 Esquire Road
N. Billerica, MA 01862
978-901-8866
Steve Chisholm, Inside Sales Manager
info@flir.com

FLIR Systems is the global leader in infrared cameras. For more than thirty years, utilities worldwide have used FLIR infrared cameras to identify problems before they turn into costly failures, downed equipment, or dangerous electrical fires. FLIR provides utilities with the most advanced thermal imaging solutions to support the predictive/preventive monitoring programs that keep the vital electrical power grid up and running. FLIR ThermaCAM® infrared cameras' smart,

Web-ready design allows utilities to monitor remote substations and critical assets 24x7 via the Internet. Lightweight and rugged, these FLIR cameras are ready to handle any situation in the field.

G&S Technologies

Booth 11

1800 Harrison Avenue
Kearney, NJ 07032
201-998-9244
Fax: 201-998-3349
George Newmark
george@gstechnologies.com
www.gstechnologies.com

TCI OF ALABAMA, LLC
101 Parkway East
Pell City, AL 35125
205-338-9997, EXT. 106
Fax: 205-338-9979
George Jackson
jackson1794@bellsouth.net
www.tci-pcb.com
TCI OF NY, LLC
39 Falls Industrial Park Road
Hudson, NY 12534
518-828-9997
Fax: 518-828-9979
Lisa Beers
tci@tci-pcb.com
www.tci-pcb.com

TRANSFORMER TECHNOLOGIES, LLC.
4705 Turner Road S.E.
Salem, OR 97317
503-364-5476
Fax: 503-364-3339
Les Joel
les.joel@calbag.com
www.transformertechnologies.com

FAMILY OF COMPANIES, INDEPENDENTLY OWNED, WORKING TOGETHER TO PROVIDE CUSTOMERS: A fair return on assets, Environmentally safe disposal of oil filled electrical equipment, Related PCB and Non-PCB services.



GE
Energy

GE Energy

Booths 3, 4

8941 Dutton Drive
Twinsburg, OH 44087
330-963-2080
Fax: 330-963-2080
www.ge-energy.com/industrial_solutions

GE Energy offers the expertise and service capabilities you need to keep your equipment in peak operation condition. From power system design to remote monitoring to remanufacture to repair, we have the know-how and experience you can rely on to help ensure the smooth and efficient operation of your transformers, substations, motors, switchgear, drives and other power related equipment. Contact your GE Energy sales representative today and find out how we can help you with your winning performance.

See Ad Page #1

GridSense

Booth 47

310-645-0755
Sales_NA@GridSense.net
www.GridSense.net

GridSense presenting the TransformerIQ™ Monitoring Platform. GridSense is a leading manufacturer of intelligent line monitoring, power quality and condition monitoring systems which includes the TransformerIQ comprehensive and scalable transformer monitoring platform and the SubstationIQ SCADA server and Windows annunciation client. The TransformerIQ offers a single-model solution for competitively replacing a single phase electronic temperature monitor that can be expanded to keep watch over even the world's largest transformers with advanced functions such as fiber optic sensing, LTC motor current monitoring and our patent-pending OilFlowIQ™ coolant level and temperature sensing. Tested more than any other monitor, using readily available components and offering the most compact retrofitable package, the TransformerIQ finally



offers a transformer monitoring solution that a utility can standardize on for all applications. GridSense offers a family of immediate and cost effective "smart grid" solutions to Electric Power Utilities providing critical information on the condition and operating performance including the LineTracker live-mount load and fault recorder, PowerMonic power quality analyzer, Surveyor high-voltage inspection camera, NetSwitch demand side load control and contamination sensing Pollution Monitor.

HICO America

Booth 18

412.787.1170 ext. 212

Fax: 412.787.2270

Vincent Chiodo, Sales Manager

vchiodo@hicoamerica.com

www.hicoamerica.com

HICO America, with headquarters in Pittsburgh Pennsylvania, is a part of the HICO division of the Hyosung Corporation, a \$5.5B publicly traded corporation based in Seoul, South Korea. HICO has been manufacturing power transformers since 1969, when it began a technical relationship with Westinghouse Corporation which lasted until the 1990's. We are extremely proficient with manufacturing medium and large power transformers, both core and shell form technology, up to 765kV 2050kV BIL, 2,200MVA capacity, as well as large power shunt reactors. HICO also offers SF6 power circuit breakers and Gas Insulated Switchgear up to 800kV, with experience since the 1970's.

Having supplied over 5,000 GIS and breaker installations, and 4,500 power transformers worldwide, HICO is a world leader in technology and quality in the power equipment industry. Domestically, HICO America maintains a strong reputation for customer service and quality. With engineering, services, logistics, project management and sales teams working together in Pittsburgh and Los Angeles, as well as at our factory in Chang Won, South Korea, we continue to delight our customers with our immediate responsiveness & world class quality. Our goal remains to Power the Success of our customers' projects, doing

our part, contributing by bringing projects online on-time, and exceeding expectations of quality and service.

High Voltage Supply, a division of Waukesha Electric Systems

Booth 7

9011 Governors Row

Dallas, TX 75247-USA

214-637-4434

800-338-5526

Fax: 262-637-1157

Fernando Lujan

HVSinfo@waukesha.spx.com

www.highvoltagesupply.com

A leading manufacturer of transformer, LTC and breaker components including a line of Transformer Health Products™. Valued supplier of LTC services including maintenance training, failure analysis reporting and complete overhauls. In addition, HVS has built a strong reputation as an industry leader in reverse-engineering and design enhancement.

HV TECHNOLOGIES, Inc.

Booth 13

PO Box 1630

Manassas, VA 20110

703-365-2330

Fax: 703-365-2331

Leo Makowski, President

hvsales@hvtechnologies.com

www.hvtechnologies.com

HV TECHNOLOGIES, Inc., the USA subsidiary of the LDIC Group, a leading company for High Voltage Test, Diagnostics and Monitoring Equipment. Our computer-based measuring devices not only assess the insulating condition but also indicate trending changes of the insulation behavior of electrical facilities. HVT believes that PD condition monitoring guarantees a higher network reliability.

Lumasense

Booth 28

404-512-6336

408-727-1600

Fax: 408-727-1677

Brett Sargent, Sr. Director Utility Products

b.sargent@lumasenseinc.com

info@lumasenseinc.com

www.lumasenseinc.com

LumaSense Technologies is a premier sensor company with a primary focus on clean technology sensing of temperature and gas parameters. With several options for the Energy Industry, LumaSense (formerly Luxtron) is the world leader of fiber optic temperature sensing of high voltage electrical gear including winding hot spot temperature sensing in transformers. LumaSense has over 25 years experience with winding hot spot temperature measurement and has been installed in over 1,000 transformers globally. LumaSense also offers Mikron portable and fixed thermal imagers for various applications to support predictive maintenance and utility operations.

THE COLT GROUP
EXPERTS IN TRANSFORMER LEAK REPAIR

Flapper Valve Packing	Two Year Guarantee
Flapper Valve Flanges	No Draining Oil
Tap Changers	Sealant
Pumps	Compatibility Analysis
Drain Plugs	Dialectrically Tested Sealant
Cover Plugs	Experienced Technicians
Bushings	Lump-Sum Quotes
Weld Leaks	Reduced Down Time

866-572-5325
OIL LEAK REPAIR SERVICES
www.coltonline.com



Nynas USA, Inc.

Booth 50

1800 West Loop South, Suite 1200
Houston, TX 77027-3291
713-819-2067
Fax: 1-713-586-3845
Jeremy Kriska, Sales Executive
jeremy.kriska@nynas.com
www.nynas.com

Nynas is a global refiner and producer of mineral transformer oils. Nynas stores transformer oil in Houston, TX, Long Beach, CA, and Montreal, QC, for customer throughout North America. Nynas manufactures Type I, Type II, and Arctic Grade Canadian Class A/B oils.



PCORE Electric Company, Inc.

Booth 19

135 Gilbert Street
LeRoy, NY 14482 USA
585-768-1200
Fax: 585-768-1212
info@pcoreelectric.com
www.pcoreelectric.com

PCORE Electric, a subsidiary of Hubbell Power Systems Inc., is North America's only company 100% focused on the manufacturing of capacitance-graded bushings, and related components, for transformers and oil circuit breakers in the ANSI and CSA marketplace. PCORE, an independent manufacturer, will provide tailored solutions to the North American electric industry for bushings and related components. We are committed to delivering the best possible value to our customers, employees, owners, vendors and community. PCORE offers a wide range of products, including 15kV-69kV PRC® Bushings, 25kV-500kV POC® Bushings, and 25kV GSU Bushings. PCORE's time and cost-saving products include the PCORE® Test Terminal, Bushing Repair Service and the patented Quick Link Bushing™. Visit our website for more information and to use our wide array of online bushing-related tools.

See Ad Page #11

Parts Super Center

Booth 17

800-341-1010
www.PartsSuperCenter.com

The Parts Super Center specializes in new replacement parts for electrical power equipment. All parts are made to the original OEM specifications and meet the manufacturers rigorous quality standards. If you are looking for genuine GE replacement parts for your Switchgear, Circuit Breakers, Controls, Drives, or Transformers the PSC is here to help. As your source for GE Rome and Pittsfield Transformers, the Parts Super Center can support all of your parts needs, including... Pumps, Gauges, Bushings, Gaskets, Fans Packages, LRT Replacements, Load Interrupter Switches. The Parts Super Center can also provide complete new replacement units for GE Rome Transformers. Replace your aging Rome Transformer with a brand new unit that is identical in both physical size and performance specifications. Reduce down time and conversion costs with one of PSC's Rome Replacement Transformers: Genuine OEM parts, Experienced Factory Engineers, Parts Identification Experts, 24/7 on-line quotations and order entry, Full factory warranties, Technical publications and catalogs, Same day shipments & 24 hour Emergency Service.

Physical Acoustics Corporation

Booth 24

609-716-4162
Cellular: (267) 968-3289
Fax: (609)716-0706
Arturo Núñez, Substation Reliability
Services & Products Manager
anunez@pacndt.com
www.qsplus.com/power_equipment.htm

Physical Acoustics Corporation is the world leader in Acoustic Emission (AE) testing in power transformer. The use of AE in power transformers allows the Maintenance Engineer not only to detect but also to locate where the problem is originating on the unit. This Inspection is performed with the transformer in-service and with no

disruption of its operation. At the end of the test, a three dimensional location plot is obtained, information about the type of fault present as well as a determination of the intensity of the problem based not only on the AE data but also on the results from other NDT tests performed on-site such as Gas Chromatography and moisture (portable instrument), Infrared Inspection, Vibration, Oil quality tests and Electrical detection methods. The results are compared to an existing database with more than 360 cases from tests done worldwide. Physical Acoustics also manufactures Acoustic On-line monitoring systems that are installed on critical transformers to be monitored for days, weeks, months or permanently. The acquired data is uploaded to a protected webpage that can be accessed by the customer at anytime and further analysis is performed by expert personnel who provide periodic reports on the condition of the unit.

Power Asset Recovery Corporation

Booth 8

3801 Whipple Ave. NW, Suite 1
Canton, OH 44718
330-493-1890
Fax: 330-493-1893
Mark Haas
mark@power-asset.com
Missy McFarland
missy@power-asset.com
www.power-asset.com

Power Asset Recovery Corporation (PARC) is one of the largest dealers in the world for New Surplus/Used Reconditioned distribution and power transformers up to 950,000 KVA, 500 kV. We have an extensive stock of transformers that we own and transformers on consignment from utilities and industrial customers. Go to www.bigpowertransformers.com. We also have transformer parts in stock including new/unused transformer bushings up to 500kV and related substation components such as SF6 breakers. Go to www.bigtransformerparts.com. PARC now represents a new transformer manufacturer



that builds power transformers up to 200,000 KVA and mobile substation transformers up to 50,000 KVA, a company that dismantles and scraps transformers, and a company that provides transformer field service. "Quite simply, we are the best at what we do"

Power Substation Services

Booth 27

4 Industrial Park Drive
Wheeling, WV 26003
304-232-1590
Fax: 304-232-1599
Scott Reed
sreed@powersubsvcs.com
www.powersubsvcs.com

Power Substation Services (PSS) specializes in the installation, assembly, vacuum-filling, repair and testing of Substation, Power and GSU transformers throughout the United States. PSS has state of the art mobile rigs

and experienced technicians for performing hot oil reclamation (dehydration/degas) on energized transformers. In addition, PSS is the only company in the United States with the permitted technology to destroy PCBs in the oil while performing the hot oil reclamation, a process known as PCBXSM.

PowerPD USA

Booth 43

34 Amato
Mission Viejo, CA. 92692
949-457-3558
fax: 949-454-0475
David Eom, President
Peter Paek, COO
Simon Paek, Marketing Director
sales@powerpd.net
www.powerpd.net

With a vision of providing the best on-line continuous monitoring system that detects

partial discharge (PD), two top engineers from a government research group created the future of PowerPD in 1996. We are committed to being the leader in the industry in providing high quality, low cost, test equipment to be used on transformers, GIS, CGIS, Cables, Motors, Generators and Metal Clad Switchgear. This early detection of equipment malfunction and eminent failure will not only prevent the catastrophic event and loss of revenue, but also to serve a vital tool for power plant engineers and managers to maintain system integrity. PowerPD benefits are PowerPD's installed equipment offers continuous on-line monitoring of UHV/HV Substations by monitoring and recording real acoustic, electrical, and electro magnetic waves. PowerPD's multi-functional portable equipment allows flexibility of testing and monitoring during normal inspection process. PowerPD's equipment monitors and measures a PD pattern trend to give valuable tool for

www.vatransformer.com

Virginia Transformer Corp Lead Times

- ☒ Up to 46 kV Class = 16 weeks
- ☒ Up to 115 kV Class = 20 weeks
- ☒ Up to 230 kV Class = 26 weeks
- ☒ COMPETITION - 40-72 WEEKS!



3 Phase Voltage Transformer



Liquid Filled Transformer



When time is not on your side, our team is there!





engineers to make decision to save cost in repairs and loss of revenue. Provides earliest warning for incipient faults. With our headquarter in California, USA, PowerPD aims to service the world customers with our branch office and agent offices throughout the World.

Reinhausen Manufacturing, Inc **Booth 45**

Reinhausen Manufacturing, Inc.
2549 North Ninth Avenue
Humboldt, TN 38343 USA
731-784-7681
Fax: 731-784-7682
Jim McLean
Jim.McLean.Reinhausen@BestLTC.com

Reinhausen welcomes you to visit booth #45 for the latest in transformer control solutions. Your expected quality and reliability of tap changers, automatic voltage controllers and other peripheral components can be found at Reinhausen.

SD Myers **Booth 20**

180 South Avenue
Tallmadge, OH 44278
330-630-7000
Bill Beese
bill.beese@sdmyers.com
www.sdmyers.com

SD Myers is known worldwide for our analytical services (transformer oil analysis) and we provide highly skilled sample technicians if needed. Additionally we provide Lab-OnLine results, field service consulting, condition assessment of your equipment, seminars, training and international PCB and field services.

Schweitzer Engineering Laboratories **Booth 22**

2350 NE Hopkins Court
Pullman, WA 99163
509-332-1890
Fax: 509-334-8795

SEL is a leading manufacturer of monitoring, control, protection, communications, and security solutions, covered by a worldwide, ten-year warranty, and has the strongest customer support in the North American electric power industry. SEL is known for innovative, reliable solutions, such as the SEL-387 transformer management system, which provides thermal overload and through-fault recording for accurate maintenance scheduling, and the SEL-2411 monitoring and control system.

Serveron Corporation **Booth 35**

3305 NW Aloclek Drive
Hillsboro, OR 97124
503-924-3200
Fax: 503-924-3290
Steve Jennings
steve.jennings@serveron.com
www.serveron.com

Serveron develops, delivers and supports on-line transformer monitor products, and diagnostic services transforming utility assets management. Serveron asset condition assessment and management tools are critical to utilities in improving grid reliability, while optimizing the management and economics of their asset base.

Transformer Protector Corp **Booth 48**

808 Russell Palmer Road, Suite 264
Kingwood, TX 77339
281-358-9900
Fax: 281-358-1911
info@transproco.com
www.transproco.com

Manufacturer of the TRANSFORMER PROTECTOR™ device which is used to reduce the incidence of transformer explosions and fires by means of high level mechanical techniques that can be applied to all oil-filled transformers with ratings of 1 MVA and larger. During a transformer short circuit, the TRANSFORMER PROTECTOR™ (TP) is activated within milliseconds by the

first dynamic pressure peak of the shock wave, avoiding transformer explosions before static pressure increases. TP Technology: Avoids oil fire to transformer and surrounding equipment; Allows transformer repair after internal fault; Minimizes the possibility of environmental pollution by containing the oil; Eliminates risk to human life.

Trench Limited **Booth 16**

432 Monarch Avenue
Ajax, Ontario L1S 2G7 Canada
905-426-2665
Dave Wallace, ext. 402

The Trench Bushing Group is the largest capacitance graded bushing manufacturer in the World with factories located in Europe, North America and Asia. The Bushing Group produces bushings using "State-of-the Art" Oil Impregnated Paper technology, Epoxy-resin Impregnated Paper technology, Resin Bonded Paper technology and bushing using SF6 Gas technology with over 90 years of proven experience.

Unifin International LP **Booth 14**

5721 McNeven Court
Dublin, OH 43017
614-336-1590
Fax: 614-336-1872
Dick Amos
Dick.amos@unifin.com
www.unifin.com

Unifin International is the world's leading supplier of transformer FOFA coolers, Cardinal transformer oil circulating pumps and motor/generator air and water coolers. Both extruded tube and platefin technologies are available, with the choice of cooling surface being determined by customer preference and the specifics of the application. Unifin supplies both OEM and users with a flexible line of standardized coolers that allow bolt-in installation of replacement coolers without requiring piping modifications.

See Ad Page #2



Vacudyne

Booth 12

375 East Joe Orr Road
Chicago Heights, IL 60411
708-757-5200
Fax: 728-757-7180
Robert Williams
bwilliams@vacudyne.com
www.vacudyne.com

Vacudyne for 50 years has been manufacturing custom and standard mobile and stationary oil purification systems sized from 70 GPH to 4,000 GPH. These systems remove moisture, gas and particulates. Vacudyne serves the Utility, T&D, Generating and Industrial markets. We offer consultation, installation, start-up, training and parts and services to our world-wide customers.

Velcon Filters, Inc.

Booth 44

1210 Garden of the Gods Road
Colorado Springs, CO 80907
719-53-5855
800-531-0180
Fax: 719-531-5690
Ben Taylor, ext. 7229
vfsales@velcon.com
www.velcon.com

Turn oil handling into art with Velcon! Our fixed, portable, and mobile filtration and storage systems combine such features as versatility, simplicity, and quality to purify insulating oil using advanced **Superdri**® cartridge technology. With this technology Velcon's load tap changer filter systems, oil filter trailers, and on-line transformer drying systems out-perform other manufacturers' systems. See our website at <http://www.velcon.com> for additional information.



VIRGINIA TRANSFORMER CORP

www.vatransformer.com

Virginia Transformer Corp

Booth 25

220 Glade View Drive
Roanoke, VA 24012
540-345-9892 x115
Debbie Custer
Debbie_Custer@vatransformer.com
www.vatransformer.com

Power transformers for Utility, Industrial/ Commercial applications, Virginia Transformer Corp is your single source for all your needs and has been since 1971. We manufacture a complete range of power transformers in three manufacturing plants in North America. From Pindustrial applications to Utilities across the world, each have specified their needs which have been fulfilled by Virginia Transformer's engineering and design team. The VTC team has designed transformers to perform at



An independent domestic manufacturer, we will provide tailored solutions to the North American electric industry for bushings and related components. We are committed to delivering the best possible value to our customers, employees, owners, vendors & community.

135 Gilbert Street
LeRoy, NY 14482

Phone: 585.768.1200
Fax: 585.768.1212
Email: info@pcoreelectric.com

www.pcoreelectric.com

WHY PCORE?

- **PCORE** is North America's only company 100% focused on the manufacturing of capacitance-graded bushings, and related components, for transformers and OCBs, in the ANSI and CSA marketplace.
- **PCORE** proudly holds an ISO 9001:2000 registration through the Quality Management Institute - The 1st North American bushing company to become ISO certified and be part of the less than 3% of all North American companies to be registered to the 9000 Standard.
- **PCORE** offers a wide range of products; 15kV-69kV PRC® Bushings, 25kV-500kV POC® Bushings, and 25kV GSU Bushings as well as time and cost saving products & services; **PCORE®** Test Terminals, Bushing Repair and the patented Quick Link Bushing™
- **PCORE's** website provides many tools to assist our customers; Bushing Catalog, Cross-Reference Guide, Suffix Explanations, Technical Documents, Certified Test Reports, Test Terminal Calculator and more!



THE POWER TO SERVE™



14,000 feet in the mines in mountains of Chile and for the day to day grueling New York Subway System to Generator and substation applications. So imagine what VTC can do for you. Manufacturing power transformers is what we do, all we do, and we excel at it. Our broad base of products include: Liquid Filled to 300 MVA, 230 kV class, Dry Type and UNICLAD® - the premium line of encapsulated transformers to 20 MVA, 34.5 kV class. We are the market leader for lead times and specialty applications. As such the team at Virginia Transformer Corp prides themselves on insuring that all of your requirements are met. Virginia Transformer Corp is a full service power transformer provider. We install and service what we sell. Whatever your power transformer needs Virginia Transformer Corp can provide you with an effective on time solution.

See Ad Page #9



Waukesha Electric Systems, Inc.

Booth 7

400 S. Prairie Avenue
Waukesha, WI 53186-5969 USA

262-547-0121

800-835-2732

Fax: 262-521-0196

David Harris

info@waukesha.spx.com

www.WaukeshaElectric.com

Largest U.S. manufacturer of power transformers (in the range of 10–200 MVA, 345kV) and valued supplier of complete transformer service solutions. Our components division, High Voltage Supply, offers transformer, LTC and breaker components including a line of Transformer Health Products™ as well as training and reverse-engineering capabilities.

See Ad Page Inside Back Cover

ZTZ Services International

Booth 21

786-252-6965

Zalya Berler

berlerg@bellsouth.net

www.ztzservices.com

ZTZ Services International is an engineering and consulting firm that specializes in on-line in service testing and diagnostics for large power transformers, free standing CTs and CCVTs. The company manufactures hardware and instrumentation for on-line PF bushings, CT and CCVT testing and monitoring. ZTZ Services International has recently introduced a unique software for design review of the power transformers which include the following modeling of the transformer design: winding dynamic stability at short circuit stress, high frequency transients inside transformer at the lighting impulse, dielectric margin of insulation, thermal profile of windings and hot spots. An exclusive distributor in North America of DGA analyzer manufactures by MTE, Germany.

If You Have Power Equipment Problems?

BCS Is Your Solution!

BCS Switchgear, Inc. is one of the largest stocking distributors and repair facilities of quality equipment.

New	Molded Case Breakers
	Insulated Case Breakers
Used	Air Circuit Breakers
	Medium Voltage Breakers
Obsolete	Vacuum Breakers
	Vacuum Contactors / Starters
Reconditioned	Switches
	Switchgear



ITE Gould



SIEMENS



SQUARE D

Allis Chalmers



FEDERAL PACIFIC



BCS SWITCHGEAR, INC.
www.bcswitchgear.com

24-Hour Service: 888-599-0486
Fax: 940-458-4122

Waukesha Electric Systems... Your Power Partner

Transformers

ISO 9001
CERTIFIED

Training and Seminars

Manufacturing

Engineering

Service

Components

Your customers need power they can rely on, and they need that power available 24/7. Whether you need new transformers to meet load growth demands or help servicing your current transformers to keep your power systems reliable, the right choice is Waukesha.

For over 35 years, Waukesha Electric Systems has engineered and manufactured quality power transformers for a wide variety of Public Power companies, Investor-Owned Utilities, Independent Power Producers and Industrial customers. Backed by our industry-trusted, highly knowledgeable customer technical support team and experienced and well-equipped service group, Waukesha is the power partner you can trust to help provide the service and quality your customers expect.

Medium and Large Power Transformers (up to 200 MVA, 345kV)

Transformer Installations, Relocations, Retrofills, Oil Processing, Service and Maintenance

LTC, Transformer, Circuit Breaker Components and Transformer Health Products™

Reverse-Engineered and Custom Solution Parts / Accessories

Training and Technical Leadership

W AUKESHA®
TRANSFORMERS • SERVICE
TRAINING • COMPONENTS

CALL 800-835-2732 E-MAIL info@waukesha.spx.com VISIT WaukeshaElectric.com

Doble has the answers.

Turn to Doble for answers you can trust with confidence, for your Transformers, Rotating Machinery and Circuit Breakers.



Doble Engineered Strategies (DES) is Doble's expert consulting engineering division.

Services include:

- Specification Writing
- Design Review
- Factory Audits
- Witnessing of Factory Tests
- Field Commissioning
- High-level Field Testing
- Condition Assessment
- Forensics Analysis



Doble has been the industry's trusted information resource for the past 85 years. You'll benefit from Doble's incomparable KnowledgeBase of industry expertise and test data results, and our team of expert engineers. You can trust Doble's unbiased recommendations to be the correct answers to your problems.

For more information, call **+1-617-393-3133** or email to DES@doble.com

www.doble.com

TOGETHER WE POWER THE WORLD

Australia

China

India

Norway

South Africa

UK

United States