



2009 “REVOLUTIONARY MACHINES” SEMINAR

Hotel Information

The host hotel for the 2009 “Revolutionary Machines” seminar is the

Hyatt Regency
San Francisco, California, USA



Register to Attend

The cost for this 4-day seminar is **\$1,350 per person.**

This price includes breakfast and lunch daily as well as all seminar materials.

To register go to: www.doble.com and click on “**Events.**” Select the **2009 Revolutionary Machines** seminar from the listing of upcoming Doble events.

Payment by credit card is required to place your registration. Registration will not be confirmed until payment is received.

If you have any questions, please contact us at events@doble.com.

November 9-12, 2009 • Hyatt Regency, San Francisco, California, USA

SEMINAR AGENDA*

Sunday, November 8, 2009

10:00 – 17:00 Doble Registration Open

Monday, November 9, 2009

06:30 – 07:45 Breakfast

07:45 – 08:00 Welcome & Course Introduction

08:00 – 08:45 History of Rotating Machines

08:45 – 09:45 Theory & Principles of Electromechanical Energy Conversion

09:45 – 10:00 Break

10:00 – 11:00 Prime Movers – Hydro, Fossil, Nuclear

11:00 – 12:00 Generator Design & Construction I: Prime Mover (Hydro)

12:00 – 13:00 Lunch

13:00 – 14:00 Generator Design & Construction II: Prime Mover (Fossil, Nuclear)

14:00 – 15:00 Generator Auxiliary Systems

15:00 – 15:15 Break

15:15 – 16:00 Excitation Systems

16:00 – 17:00 Generator Operations & Controls I

17:00 – 17:30 Q & A Session “Ask the Experts”

Tuesday, November 10, 2009

06:30 – 08:00 Breakfast

08:00 – 08:45 Generator Operations & Controls II

08:45 – 09:45 Generator Operations & Controls III

09:45 – 10:00 Break

10:00 – 11:00 Generator & Transmission Interconnection

11:00 – 12:30 Generator Protection

12:30 – 13:30 Lunch

13:30 – 14:15 Generator Monitoring Systems

14:15 – 15:00 Generator Accessory Maintenance

15:00 – 15:15 Break

15:15 – 17:00 Inspections – Stator, Rotor, Auxiliaries

17:00 – 17:30 Q & A Session “Ask the Experts”

17:30 – 20:00 **INDUSTRY EXPO – OPENING RECEPTION**



*Preliminary Agenda, subject to change.



SEMINAR AGENDA *continued*

Wednesday, November 11, 2009

- 06:30 – 08:00 Breakfast
- 08:00 – 09:00 HV Bushing & Bushing Box Maintenance
- 09:00 – 10:15 Diagnostic Testing I
- 10:15 – 10:30 Break
- 10:30 – 11:30 Diagnostic Testing II
- 11:30 – 13:30 **LUNCH IN INDUSTRY EXPO**
- 13:30 – 14:30 Generator Failure Analysis
- 14:30 – 14:45 Break
- 14:45 – 16:00 Stator Rewind & Specifications
- 16:00 – 17:00 Rotor Repair
- 17:00 – 17:30 Q & A Session “Ask the Experts”

Thursday, November 12, 2009

- 06:30 – 08:00 Breakfast
- 08:00 – 09:00 Motor Principles & Theory
- 09:00 – 10:00 Motor Design & Construction I
- 10:00 – 10:15 Break
- 10:15 – 11:00 Motor Design & Construction II
- 11:00 – 12:00 Motor Applications & Selection
- 12:00 – 13:00 Lunch
- 13:00 – 14:00 Motor Starting & Speed Control
- 14:00 – 15:00 Maintenance Testing & Diagnostics
- 15:00 – 15:15 Break
- 15:15 – 16:45 Motor Rewind & Repair
- 16:45 – 17:00 Closing Remarks

Doble reserves the right to revise this agenda.

Who should attend:

This program is ideal for everyone involved in owning, operating, maintaining, or testing generators and large motors including: operators, maintenance craftsmen, technicians, engineers, asset managers, site managers, senior executives and investors that need a comprehensive understanding of these large capital assets.

Electric power generating facilities, petrochemical plants, pulp and paper mills, metals industry, insurance companies and any business with an interest in large electric motors and generators should send delegates to this seminar to increase the value of their employees at their jobs.



About the Revolutionary Machines Seminar Host:

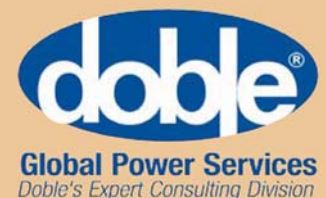
Turn to Doble Global Power Services (formerly known as Doble Engineered Strategies or DES) for answers you can trust with confidence for your transformers, rotating machinery and circuit breakers.

Doble Global Power Services is Doble's expert consulting engineering division.

Its services include:

- Specification Writing
- Design Review
- Factory Audits
- Witnessing of Factory Tests
- Field Commissioning
- Electrical Apparatus Condition Assessment
- Forensic Analysis
- High-Level Electrical and Oil Diagnostics, including sophisticated oil and high voltage electrical testing to detect the increasing problem of Corrosive Sulfur; Electromagnetic Interference; Sweep Frequency Response Analysis and much more!

For more information about Doble Global Power Services, contact Richard Ladroga, General Manager, at **+1-617-393-3133** or email to **DobleGPS@doble.com**.





Global Power Services
Doble's Expert Consulting Division

Look inside for more information including a detailed agenda and how to register.

- Are you taking advantage of the best and most thorough diagnostic techniques to maintain your plant equipment?
- Do you need a basic understanding of modern generator and power plant protection schemes?
- Does your job require knowledge of motor principles, theory, and applications, including motor starting & speed control?
- Do you need a complete understanding of machine design, principles, and construction?
- Do you know how to write a generator rewind specification to ensure a quality rebuild?

If you answered 'yes' to one or more of the above questions, then Doble's 2009 "Revolutionary Machines" Seminar is for you!

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November 9-12, 2009

Hyatt Regency, San Francisco, California, USA

The knowledge you gain in just four days will dramatically impact your ability to manage your company's generators and rotating machines. This is the best investment your company can make with your valuable 2009 training dollars. Learn from over 25 world-class industry experts and take back practical knowledge you can immediately put to use at your facility.

Topics Include:

- Basic theory of generators and motors
- Generator design & construction
- Motor design & construction
- Prime movers
- Auxiliary systems
- Operations & controls
- Motor application & selection
- Motor starting & speed control
- Generator & transmission interconnection
- Insurance industry update
- Maintenance planning – time-based and condition-based
- Diagnostic testing
- Protection
- Generator accessories
- Failure analysis
- Stator rewinding & specifications
- Rotor repair... & much more!!

See detailed agenda inside...

