

Destructive Electrical Discharge

A practical training course built on theory to understand the cause and effect and how to manage the risks associated with electrical assets and the safety of personnel

A course to understand DED for a safe and reliable plant

Partial discharge and partial arcing lead to more catastrophic electrical equipment failure than any other single cause. Destruction in the form of an arc flash incident, explosion and fire are the cause of numerous serious injuries and fatalities every year. Risk is significant and poorly understood.

Today there is a better understanding of the cause, effect and the means to predict a failure. The first line of defence is knowledge. Provided by this course is an in-depth understanding of the principals and good practise for identification of risks associated with destructive electrical discharge.

This two-day course will cover the following:

- Types of electrical discharge (PD, PA, EMD)
- Associated risks to plant and personnel
- Theoretical explanation for the root causes
- Common causes of discharge in equipment
- Destructive effects, short term and long term
- Recognising destructive electrical discharge
- Risk determination, when to act
- Detection and measurement methods
- Remedial action
- Prevention measures
- A practical approach to various types of equipment – case studies
- Safe work practice



Who should attend?

- Maintenance artisans, technicians and reliability / electrical engineers
- Operating personnel who have the delegated authority to maintain, service or operate power electrical equipment
- Personnel who are involved in electrical plant condition monitoring, maintenance managers and safety officers

Course prerequisites

- Post matriculation electro-technical or safety qualification
- Experience with and/or exposure to power electrical plant and equipment

The facilitator

Tom H Dalton

Mr Dalton is a transformer reliability specialist at Martec a member of the Pragma Group.

He holds a National Higher Diploma in Electrical

Engineering and gained

experience at Eskom specialising in

oil analysis and management for over 10 years. Tom has

worked on several working groups and committees

concerned with transformers and insulating oils and written a

number of specifications and has co-authored

two books on the subject.

As a software developer, he has developed an insulating oil management application to assess transformer condition.



Format

- Two day: 09:00 – 17:00
- Breaks for tea and lunch
- Delivered at the Pragma Midrand training centre or client site (subject to minimum number of delegates)

For more information

+27 11 848 6940 training@martec.co.za

Destructive Electrical Discharge

Registration form

Complete in full and fax +27 (0)86 502 0634 or email: training@martec.co.za

DMS.TCM2.01

Learner details

Name and surname	Cell number	Email
Designation	Work phone number	Work fax number

Invoicing details

Name and surname			
Physical address			
VAT registration number		Purchase order number	
Postal address	Menu option: Standard or Halal		

Person responsible for payment

Name	Phone number	Email

Course information

Dates:	Minimum number of learners per group:	Cost per person (excl. VAT)	X
5 – 6 March, 2019	6 - 10 per group	R 7,000	
13 – 14 August, 2019	6 - 10 per group	R 7,000	
Rates are for South Africa only			

Venue | Pragma Building – Waterfall Park, Treur Close, Midrand

A confirmation letter and tax invoice will be sent to the delegate on receipt of this application. Confirmation of the delegate's registration including a map to the venue and a list of accommodation options in the area will be sent on receipt of confirmation of payment.

Terms and conditions of registration

- **All applicants must complete this registration form in full and indicate your menu option. Halal menus are charged in addition to the above rate.**
- **All applicants must complete this registration form in full**
Incomplete application forms cannot be processed.
- **Full payment must be received prior to attending the course**
On arrival, each delegate must present the confirmation of registration that will have been emailed to them.
The course presenters reserve the right to refuse admission where this confirmation and evidence of payment cannot be shown.
- **Cancellation and Non-attendance Policy**
All notices of cancellation must be in writing. Cancellations received more than 10 working days prior to commencement of the course will be accepted subject to a 10% cancellation fee. Alternatively, a substitute delegate will be accepted. No additional fee would be payable, even if course fees are increased. Late cancellations (10 or less working days prior to commencement of the course) and non-attendance are liable for the full invoice amount.
- **Obligation to Pay**
Even though the Company is liable for paying the course fee, the delegate retains ultimate responsibility for ensuring that the fee is paid.
- **Confirmation of Registration**
- **Martec** reserves the right to cancel any advertised course due to insufficient enrolments or conditions beyond our control

I hereby confirm that I am authorised to sign for and on behalf of the Applicant Company and accept the above Terms and Conditions.

Name	Signature	Date