

**Cileungsi Training Center**

Jl. Raya Narogong KM 19 Cileungsi - Bogor 16820  
West Java - INDONESIA  
Phone: +62-21-8233361 (Hunting)  
Fax: +62-21-8233360

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Ref No.: 044/TC-QUO/IV/17

Jakarta, April 10, 2017

**PT SAPTAINDRA SEJATI**  
Jl. TB Simatupang Kav. 18  
Cilandak Barat, Jakarta Selatan, 12430  
Tlp. 021-7693378

Attn.: Mrs. Dian Sari

Subject: *Training Quotation*

Dear Mrs. Dian,

Thank you for your inquiry concerning our training program.  
Refer to your email on March 24, 2017 we would like to submit our proposal for your kind consideration.

Course Name: ***3516 GENSET Product Training***  
Location: ***PT. Saptandra Sejati - Jobsite ADMO***  
Duration: ***5 days***  
Date: ***May 15 - 19, 2017***  
Course Fee: ***Rp.5.500.000,- / person***  
***(Including training material, stationary)***  
Transportation: ***Rp.5.000.000,-***  
***(Transportation & Accommodation of Instructor during training)***  
Participant: ***6 participants (minimum), 12 participants (maximum)***

*Note: All prices above are excluding 10% VAT*

**LEARNING OUTCOME**

(Attached)

**SAFETY**

Participants are requested to bring their own overall and safety shoes and put on when attending the training. Please note that wearing of shorts is not permitted while attending the training. Safety glasses, safety helmet and ear protection required when working in the workshop/lab on machinery will be provided by PT. Saptandra Sejati

**MEALS, ACCOMMODATION & TRANSPORTATION**

PT. Saptandra Sejati shall provide meals, accommodation & transportation for instructor during training.

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**TRAINING FACILITY**

PT. Saptaindra Sejati shall provide Training Room equipped with PC Projector, unit (machine or engine) and hand tools or other tools required for practical session.

**ACCEPTANCE OF BOOKING**

Once you have completed the booking details and submitted this form to PT Trakindo Utama Training Center as a firm booking, you shall receive confirmation from it that your booking has been received. A contract however is only formed at the point at which PT Trakindo Utama Training Center informs you of the acceptance of your booking.

**CANCELLATION/TRANSFER/SUBSTITUTIONS POLICY**

No cancellation charge shall apply if PT Trakindo Utama Training Center notices of the cancellation of your booking more than two weeks before the first day of the course. Once the class is confirmed, no cancellation allowed. In the event of no-show, full course fee will be charged. PT Trakindo Utama Training Center reserves the right to cancel or postpone any class. Any transfer is subject on case-by-case basis.

*This quotation valid until April 28<sup>th</sup>, 2017*

**CUSTOMER INFORMATION**

The invoice should be submitted to below address:

Customer Name: \_\_\_\_\_

NPWP: \_\_\_\_\_

Customer PIC: \_\_\_\_\_ (Finance Staff)

Phone No: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Specific condition to submit invoice (if any):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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**PAYMENT TERMS**

Once the booking has been confirmed by PT Trakindo Utama Training Center, invoice will be raised. The course fees must be received by PT Trakindo Utama Training Center within 30 days of the date of invoice (for Credit Customer) or before the commencement date of the course (for Cash Customer). PT Trakindo Utama Training Center reserves the right to refuse admission to or provision of the course if payment has not been received in full.

Payment should be transferred to:

**PT TRAKINDO UTAMA  
CITIBANK N.A – CITIBANKTOWER  
Jln. Jend. Soedirman Kav. 54-55 Jakarta – INDONESIA  
Account No.: 0 – 105472 – 048 (IDR)**

OR

**PT TRAKINDO UTAMA  
BANK MANDIRI  
JI Cilandak KKO, Jakarta Selatan - INDONESIA  
Account No.: 127-00010216-31 (IDR)**

Please advise your acceptance of the above details by signing below and returning it to us by fax or email, not later than **April 28<sup>th</sup>, 2017**.

We thank you again for your support & look forward to welcoming the participants to PT Trakindo Utama Training Center. Please do not hesitate contact us for require any further assistance.

We look forward and appreciate for your kind attention.

Signed & Accepted by:

PT TRAKINDO UTAMA



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**Iwan Pramono**  
Customer Training

## COURSE DESCRIPTION

### COURSE TITLE

3516 GenSet – Product Training

### COURSE NUMBER

### TARGET AUDIENCE

People who operated & maintain Caterpillar Generator Set

### PREREQUISITES

None

### COURSE DURATION

5 Days

### COURSE OUTLINE

This course provides an in-depth study and hands-on activity in maintaining and repairing (basic) current production 3516 Caterpillar Diesel Engine. To become qualified, the participants will successfully perform key tasks selected from topics presented in the course.

### OBJECTIVE

### LEARNING OUTCOMES

Upon completion of this course, participants should be able to have a better under-standing of Caterpillar Generator Set Operation & Maintenance and will be able to perform the following tasks:

#### Basic Diesel Engine

- Identify major engine components
- Explain diesel engine four stroke concept
- Explain engine terminology

#### 3516 Diesel Engine

- Describe air induction & exhaust system
- Describe lubrication system operation
- Describe cooling system operation
- Describe fuel system operation
- Describe maintenance section procedure by using OMM
- Identify major 3516 engine components

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**Basic Power Generation**

- Describe Caterpillar Genset
- Explain generator set system operation
- Explain generator set component
- Identify generator set component

**Generator**

- Explain generator set configuration structure, application and rating
- Interpreting AC electrical schematic
- Perform tracing AC electrical schematic
- Explain load character
- Perform power calculation

**Voltage Regulator**

- Explain voltage regulator operation
- Explain volt per hertz regulation

**Monitoring**

- Explain generator monitoring
- Explain latest generator monitoring (EMCP)
- Perform accessing genset monitoring
- Explain safety device verification
- Perform safety device verification

**Genset Operation and Maintenance**

- Explain delivery service
- Explain Single Operation Procedure
- Perform Generator Load test
- Explain Generator Cleaning Procedure
- Explain Generator Insulation test

## PROGRAM AGENDA

### DAY 1

- Introduction & Registration
- Pre test
- Literature and resource identification
- Principle of 4-Stroke Diesel Engine
- 3516 Diesel Engine Component

### DAY 2

- Engine System (cont)
- Lab:
  - ✓ Identify major 3516 engine components
- Basic Generator

### DAY 3

- Basic Generator (cont)
  - ✓ Identify 3516 generator set component
- Lab:
  - ✓ Perform power calculation
- Voltage regulator
- Lab:
  - ✓ Perform AVR testing adjusting, wiring, and simple troubleshooting

### DAY 4

- Genset Monitoring
- Lab:
  - ✓ Accessing Control Panel (EMCP)
  - ✓ Safety Device Verification
  - ✓ Simple troubleshooting

### DAY 5

- Genset Operation and Maintenance
- Lab:
  - ✓ Perform Genset single operation
  - ✓ Loading
- Training Review
- Post-test
- Closing

## NOTES

This Course Description is subject to change due to product design changes and individual attendee needs and experience