



# FGW LATCA Training Program



# Introduction to Generating Sets And Basic Operation

## Course Level

Basic

## Duration

Four days

## Course Overview

An introduction to Diesel Controlled generating sets. Understanding basic electrical circuitry and alternator principles. Ideal for complete beginners wishing to grow their knowledge enabling them to advance onto the Intermediate courses.

## Objective

To focus on familiarization of the FG Wilson product range. Delegates will learn to identify and understand the function of the key components of the main generating set. This will be structured into specific areas - the Engine, Alternator, Control System and Cooling Package. The course will also be a good refresher to personnel who have not attended a course for some time.

## Suitability

Generating set operators, semi skilled technicians or personnel with limited electrical knowledge, who will be required to operate, maintain and make minor adjustments to a generating set. Persons wishing to attend this course need to have an understanding of diesel engines and a basic understanding of electrics.

## Pre-Requisite

Basic mechanical/electrical knowledge

## Number Of Attendees

Maximum 8

## Topics

### Engine

Identification and explanation of the function of general components. Description of the engine fuel systems and governing.

### Alternator

Explanation of alternator principle and different A/C wiring configurations.

### Control System

Explanation of control panel features from Analogue to Digital.

Introduction to A/C and D/C wiring using basic electrical schematics.

### Cooling Package

Explanation of cooling system types.

Radiator construction, fan types and airflow allowance effects.

### Parts & Warranty Support Training

Maintenance schedules, recommended parts lists and warranty procedures.

## Additional Course

### Details

Training equipment used will include engines, alternators, generating sets and control panels. Learning methods will include a combination of both classroom theory and practical sessions.

## Venue

This course can be conducted at the FGW LATCA Regional Training Center (RTC) in Miramar, Florida, or off site at the customer's premises or any other suitable facility, provided the customer can supply all the relevant equipment / hardware to conduct the course.

## Price

\$500.00 per person at our RTC (with a 2 person minimum)  
\$1000.00 for one person at our RTC  
\$1000.00 per day at customer location – flat rate

# Product Technical Training Intermediate 01

**Course Level**  
Intermediate

**Duration**  
Four days

**Course Overview**  
An Introduction to current and existing FG Wilson generating sets. Ideal for personnel wishing to grow their knowledge and ultimately advance onto the Expert range of courses on successful completion.

**Objective**  
This specially designed course will focus on FG Wilson generating set installation, commissioning and fault diagnosis. To focus on identification and understanding the function of the different key components of the generating set. The program includes both classroom lecture and practical hands-on exercises and is an excellent foundation for INT 02 and the Expert range of courses.

**Suitability**  
Skilled Service Engineers with a minimum of two years experience.

**Pre-Requisite**  
Persons should have successfully completed the Intro. to Gen. course, or have similar generating set experience. Persons wishing to attend need to have a basic understanding of diesel engines, a good knowledge of electrics and electronic engine control, who wish to attain or grow their knowledge of the FG Wilson product range.

**Number Of Attendees**  
Maximum 8

## Topics

### Engine

Identification and explanation of the function of general components. Description of the engine fuel systems and governing. Discussion of basic maintenance procedures and proper bleeding of the fuel system.

### Control System

Explanation of EIM functions and Magnetic pickup. Explanation of electrical schematics. Control system applications. Commissioning and adjustment of systems including EIM and magnetic pickup.

### Alternator

Excitation types, methods of operation and fault diagnostics. AVR types, functions and adjustments. Output configuration and set-up.

### ATI / CTI Transfer Panel

Digital controls operation and function. Transfer systems installation and set-up. Options available.

## Additional Course Details

Training equipment used will include engines, alternators, generating sets and control panels. Learning methods will include a combination of both classroom theory and practical sessions.

## Venue

This course can be conducted at the FGW LATCA Regional Training Center (RTC) in Miramar, Florida, or off site at the customer's premises or any other suitable facility, provided the customer can supply all the relevant equipment / hardware to conduct the course.

## Price

\$500.00 per person at our RTC (with a 2 person minimum)  
\$1000.00 for one person at our RTC  
\$1000.00 per day at customer location – flat rate

# Product Technical Training Intermediate 02

**Course Level**  
Intermediate

**Duration**  
Four days

**Course Overview**  
An Introduction to Electronically Controlled Engines. Building confidence in this new method of controlling diesel engines. Ideal for personnel wishing to grow their knowledge and to be able to advance onto the Expert range of courses.

**Objective**  
The specially designed course will focus on FG Wilson generating set installation, commissioning and fault diagnosis. Delegates will learn to identify and understand the function of different key components of the generating set. The program includes both classroom lecture and practical hands-on exercises as an excellent foundation for Expert courses.

**Suitability**  
Skilled Service Engineers with two years experience.

**Pre-Requisite**  
Persons should have successfully completed the Product Technical Training Intermediate 01 course, or have similar generating set experience. Persons wishing to attend this course need to have a good understanding of diesel engines, of electrics and electronic engine control, who wish to attain or grow their knowledge of the FG Wilson product range.

**Number Of Attendees**  
Maximum 8

## Topics

**1300 Series Electronic Engines**  
HEUI fuel and oil system function and operation.  
ECM management system.  
Explanation of electrical wiring diagrams.

Control system interface and methods of operation.

**2x06 Series Electronic Engines**  
MEUI fuel system function and operation.

Electronic control module management system.  
Explanation of electrical wiring diagrams (Not control panel).

Control system interface, methods of operation.

**1100 Series Electronic Engines**  
Fuel system function and operation.

Electronic Control Module management system.  
Control system interface, methods of operation and adjustments.

## Additional Course Details

Training equipment used will include engines, alternators, generating sets and control panels. Learning methods will include a combination of both classroom theory and practical sessions.

## Venue

This course can be conducted at the FGW LATCA Regional Training Center in Miramar, Florida, or off site at the customer's premises or any other suitable facility, provided the customer can supply all the relevant equipment / hardware to conduct the course.

## Price

\$500.00 per person at our RTC (with a 2 person minimum)  
\$1000.00 for one person at our RTC  
\$1000.00 per day at customer location – flat rate

# Customized Generating Set Training

**Course Level**  
Customizable

**Duration**  
As required (full days only)  
maximum 5 working days

**Course Overview**  
This course is designed to be fully flexible to suit your own requirements and the needs of your trainee. Adaptable to cover the full range of intermediate topics applicable to your Dealership. A course with its agenda set by you to match the equipment that is used or serviced by you.

**Objective**  
This specially designed course will focus on FG Wilson generating set installation, commissioning and fault diagnosis. Delegates will learn to identify and understand the function of different key components of the generating set. The program includes both classroom lecture and practical hands-on exercises.

**Suitability**  
The course is aimed at engineers, sales and store personnel as it can be tailored to suit everyone's requirements.

**Pre-Requisite**  
Persons should have successfully completed the basic course, or have similar generating set experience. Persons wishing to attend this course need to have a good understanding of diesel engines, a good understanding of electrics and electronic engine control, wishing to attain or grow their knowledge of the FG Wilson product range.

**Number Of Attendees**  
Maximum 8

**Topics**  
**Parts & Warranty Support Training**  
(One day - basic). This training will consist of a generator set system overview and sub-component identification. We will discuss the integration of components in a system and how they work together to form a single common function. Maintenance schedules, recommended parts lists and warranty repair will be discussed.

**Engine** (One day – basic to intermediate)  
Identification and explanation of the function of general components.  
Description of the engine fuel systems and governing.  
Discussion of basic maintenance procedures and proper bleeding of the fuel system.

**Control Systems**  
(One day - basic level)  
(Two days - intermediate Level)  
(Three days – expert level)  
Explanation of EIM functions and magnetic pickup.  
Explanation of electrical schematics.  
Control system applications.  
Commissioning and adjustment of systems including EIM functions and magnetic pickup.  
Various practical fault finding exercises.

**Alternators** (One day – basic to expert )  
Identification.  
Excitation types, operation and fault diagnostics.  
AVR types, functions and adjustments.  
Output configuration and setup.  
Various practical exercises.

**LCS & L-series Engine Governing**  
(one day – intermediate to expert )  
Fuel pump operation, settings and adjustment.  
Electronic governor fitting, tuning and set-up.  
Various practical fault finding exercises.

**1300 Series Electronic Engines**  
(one day – intermediate level)  
(two days – expert level)  
HEUI fuel and oil system function and operation.  
ECM management system.  
Explanation of electrical wiring diagrams.  
Control system interface and methods of operation.

**2x06 Series Electronic Engines**  
(one day – intermediate level)  
(Two days – expert level)  
MEUI fuel system function and operation.  
Electronic control module management system.  
Explanation of electrical wiring diagrams (Not control panel).  
Control system interface, methods of operation.

**Price**  
\$150.00 per person at per day our RTC (with a 2 person minimum)  
\$250.00/day for one person at our RTC  
\$1000.00 per day at customer location – flat rate

## Booking Form

Name:

Company name:

Company address:

City:

Country:

Zip/Postcode:

Telephone:

Fax:

Email:

Payment Type:

- Credit Card
- Wire Transfer
- Existing Account

Purchase Order Number:

Location of Training Required:

- RTC, Miramar Florida
- On-Site Location

Dates Requested:

Number of Attendees:

## course information

- Introduction to Generating Sets and Basic Operation
- Product Technical Training Intermediate 01
- Product Technical Training Intermediate 02

Customized (please specify)

- Parts & Warranty Support
- Engine
- Control Systems – basic, intermediate, expert
- Alternators – basic, intermediate, expert
- LCS & L-series Engine Governing – intermediate, expert
- 1300 Series Electronic Engines – intermediate, expert
- 2x06 Series Electronic Engines – intermediate, expert

CREDIT CARD AUTHORIZATION SHEET

To: Training Department

Attn: Mr. Alex Cabrices

From:

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Credit Card Number:

Name on the Credit Card:

Expiration Date:

\*Security Code:

Credit Card Billing Address:

Purchase Order No.:

\$ Amount:

Ordered by:

Title:

Date:

Signature:

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Please make sure to fill in all of the information requested and fax to: (954) 433-4431. Please send with a copy of a valid license or identification. Name on the credit card, **must** be the same person who signs the "Credit Card Authorization Sheet". \*The credit card security code may be called in.

Thank you for your interest in training with FG Wilson.