



Geothermal Train the Trainer

Location: ClimateMaster, Oklahoma City, OK
Organizations eligible for training: ClimateMaster and OEM

Attendees should plan to arrive in Oklahoma City one day prior to the training and departure from Oklahoma City should be planned for after 5:00 pm of the last day.

Cost: \$2,000 per attendees
Optional: \$600 fusion kit

With standard class registration, you will receive:

- Hotel accommodations for three nights
- Transportation to and from the hotel
- Meals
- Technical Training Instructor Kit
- Instructor MS Power Points
- Pressure Gauge, 2 P/T Adapters, Hydrometers,
- Student Training Kit
- Control Box Trainer & ASPK Repair Kit
- Various Handout/Component Examples

Day One

Objective: Familiarization of Software Tools: GeoDesigner, Pressure Drop Calculation and Sales Proposal.

7:00 – 7:45 AM	Continental Breakfast – Hotel
7:45 – 8:00 AM	Meet at Hotel Lobby for Transport to CM Factory
8:00 – 8:10 AM	Welcome and Introduction of CM Staff –
8:10 – 9:00 AM	Plant Tour
9:00 – 9:10 AM	Review of Today's Objective & Agenda
9:10 – 12:00 PM	Load and Activate GeoDesigner from web site - Describe GeoDesigner activation Process

Run GeoDesigner Job Sizing Analysis

- Job Information
- Load Input Information
- Utility Information Rates/Data Base
- System Comparisons
 - Fossil Fuel w AC
 - Total Geothermal
 - Dual Fuel Geothermal
- Reports
 - Comparison Report
 - Geothermal Report
 - Fossil Fuel Report
 - Dual Fuel Geothermal Report



- Bin Graph
- Saving Job Analysis

12:00 – 12:30 PM	Lunch
12:30 - 2:00 PM	GeoDesigner Analysis – continued
2:00 – 2:10 PM	Break – 10 minutes max.
2:10 – 3:00 PM	GeoDesigner Analysis – continued/finalize
3:00 - 4: 00 PM	Pressure Drop Calculation software <ul style="list-style-type: none">• How to Load from the Internet• Familiarize & Overview• Run Analysis• Save Job File
4:15 – 4:50 PM	Sales Proposal software <ul style="list-style-type: none">• How to Load from CD• Familiarize & Overview• Save Job Files
4:50 – 5:00 PM	Review and Re-cap today's training
5: 00 – 5:15 PM	Return to Rooms & Meet in the Hotel Lobby
5: 30 – 5:50 PM	Travel to dinner
6:00 – 8:00 PM	Dinner
8:00 – 8:30 PM	Travel back to Hotel

Day Two

Objective: Familiarize Students with Instructors Tools: Instructors Manual Material, Student Training Binders, Service & Installation Microsoft® PowerPoint, Student Certificate Printing

7:00 – 7:45 AM	Continental Breakfast – Hotel
7:45 – 8:00 AM	Meet at Hotel Lobby for Transport to CM Factory
8:00 – 8:10 AM	Prior day Q&A –
8:10 – 8:20 AM	Review of Today's Objective & Agenda
8:20 – 10:30 AM	Discuss Student Class Room Setup and Requirements
	Instructor Manual Overview –
	Review Student Training Binder <ul style="list-style-type: none">• <i>Table of Contents</i>• Review Tabs – verify proper books• Review Product Specification Catalog• Review IOM manuals Package/Split



PowerPoint Review - Service & Installation Training

- Geothermal Basic Overview
- Unit Pre-installation Overview
- Basic Refrigeration Cycle Overview

10:30 – 10:40 AM

Break – 10 minutes max.

10:40 – 12:00 PM

PowerPoint Review – Service & Installation (continued)

- Unit Performance Verification
- Hot Water Generator
- CXM & ECM2 Controls and Troubleshooting
- Auxiliary Heaters

12:00 - 12:30 PM

Lunch

12:30 – 2:00 PM

PowerPoint Review – Service & Installation (continued)

- Well Water Systems and Closed Loops

2:00 – 2:10 PM

Break – 10 minutes max.

2:10 – 3:00 PM

PowerPoint Review – Service & Installation (continued)

Product Overviews

- Packaged Products
- Split Unit Products/Line Sets/Coils
- Accessories & Warranties

3:00 – 3:30 PM

Review S & I Student Exam

3:30 – 4:15 PM

Review & Re-cap today's training

4:15 – 5:30 PM

Return to Rooms & Meet in the Hotel Lobby

5:30 – 5:50 PM

Leave Hotel Lobby to travel dinner

6:00 – 8:00 PM

Dinner

8:15 – 9:50 PM

Travel back to Hotel

Day Three

Objective: Familiarize Students with Instructors Tools: Instructors Manual Material, Student Training Binders, Loop Design PowerPoint, GeoDesigner software, Pressure Drop Calculation software, Fusion Tools and Testing Process, Student Certificate & Fusion Card Printing

7:00 – 8:00 AM

Continental Breakfast – Hotel

8:00 – 8:10 AM

Meet at Hotel Lobby for Transport to CM Factory Training Lab Room – 2nd Floor

8:10 – 8:20 AM

Review of Today's Objective & Agenda



8:20 – 8:30 AM	Discuss Student Class Room Setup and Requirements Instructor Manual Overview
8:30 - 9:30 AM	Review of Loop Training Book GeoDesigner Workbook – Site Plan
9:30 – 10:30 AM	PowerPoint Review – Loop Design Training <ul style="list-style-type: none">• Closed Loop Design Benefits & Theory• Review of Loop Types• Review of Loop Piping & Layouts
10:30 – 11:30 AM	Break – 10 minutes max PowerPoint Review – Loop Design Training <ul style="list-style-type: none">• Review of Freeze protection• Review Flushing & Loop Commissioning
11:30 AM - Noon	GeoDesigner software review <ul style="list-style-type: none">• Job Analysis
Noon – 12:30 PM	Lunch
12:30 – 2:00 PM	Pressure Drop Calculation software <ul style="list-style-type: none">• Review program & use• Review pipe sizing• Review pump sizing• Review Fluid Volumes and Antifreeze Calculation• Review Flushing Requirements
2:00 – 2:10 PM	Break – 10 minutes max.
2:10 – 2:30 PM	Review Fusion Procedures
2:30 – 3:00 PM	Review Fusion Tools & Use
3:00 – 4:30 PM	Conduct Fusion Training & Testing
4:30 - 4:45 PM	Fusion Written Test – Grading
4:45 – 4:50 PM	Review Student Certificate& Fusion Card Printing Process
4:50 – 5:00 PM	Review & Re-cap Today's Training
5:00 PM	Photo's & Press Release - End of Training