



Operating Instructions

# **Type 4 Series** Flux Cored Electrode Wire Stabilization Ovens

- Designed for flux cored wire and general purpose storage
- Type 4 provides adjustable shelving to accommodate different spool sizes
- Thermometer option available



Part No.	Description	Temperature Range*	Insulation	Chamber Size	Capacity	Weight	Dimensions
	Type 4 Series Oven						
1205438	120/240V AC at 1000 watts with installed thermometer	100° - 300°F (38° - 149°C) +/-25'F (14°C) adjustable thermostat control with indicator light	2" fiberglass	14.5" x 17" x 18"	up to four 12" or three 16" spools or coils	90 lb (41 kg)	22" x 23.75" x 25" (55.9 x 60.3 x 63.5 cm)

\* Operation on Direct Current (DC) will damage oven and void warranty. Average stabilized termperature at 70°F ambient temperature.





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## **Product Description**

## CAUTION:

- To provide continued protection against risk of electrical shock, power cord must be connected to a properly grounded outlet.
- To avoid damage, never place oven in contact with welding current.
- Store in dry location. Unit not to be exposed to rain or moisture.

## Prior to Use

- 1. Run oven at 300°F (150°C) for two hours with the vent hole fully open and the oven doors slightly open. This will help purge the oven of any contaminants.
- 2. Contact the wire manufacturer regarding the appropriate temperatures for holding the spools of wire, specifically plastic spools.
- If using plastic spools in the dryWIRE<sup>®</sup> oven, test a few spools in the oven at the manufacturer's recommended temperature. If warping or core distortion occurs, turn temperature down 10°F (5°C) and retest. If neccessary, continue testing.

## Amp Draw

Ovens operating on 120 AC voltage draw 8.5 amps. Those operating on 240 AC voltage draw 4.2 amps.

## Wiring

dryWIRE® ovens are designed for AC single phase power only. Note: dryWIRE® ovens are factory wired for 120 volts and can be rewired for 240 volts. Refer to wiring diagram.

## Venting

For normal holding operation set easily adjusted vent on the door about 1/4 of the way open.

## **Temperature Settings**

The dryWIRE® oven temperature range is 100°F (38°C) to 300°F (150°C). The thermostat dial has a range from 32°F (0°C) to 300°F (150°C). Required oven temperature setting is obtained by rotation of dial to line up desired temperature with indicator light.

The indicator light illuminates only when voltage is being applied to the heating elements. Momentary rotation past desired temperature setting may be necessary to activate the indicator light in order to locate it for indexing purposes.

Thermostat is accurate to  $+/-15^{\circ}F$  (8°C) at the sensing bulb, however, temperature may vary slightly at different areas in the oven chamber since this is a convection type oven.

Excess Heat: At maximum setting, the actual temperature in portions of the oven near the heating elements may reach approximately 400°F (204°C). Temperatures over 400°F (204°C) are not recommended. They may cause oven damage and/or unacceptably high exterior surface temperatures.

## **Temperature Indication**

dryWIRE<sup>®</sup> Type 4 ovens are supplied with a battery powered digital thermometer to indicate the actual temperature inside oven in either °F or °C.

The thermometers are supplied in °F mode. Conversion to °C mode is accomplished by pressing the button located in the battery holder. This will cycle between °F and °C. Thermometers are powered by one AA battery.

Replacement of the battery is also covered in the troubleshooting section of this manual.

## Guide to Storage

Once flux cored wire is removed from its initial packaging, the unused portion should be stored in a dryWIRE<sup>®</sup> oven not to exceed 300°F (150°C) for coils or wire baskets, 250°F (121°C) for fiberboard spools or 150°F (65°C) for plastic spools. Never store wire in its original plastic bag. Precise temperatures for wire storage and reconditioning should be obtained from the wire manufacturer's technical department.

Note: Temperatures exceeding this will damage the spool and render the wire un-usable.

Reconditioning flux cored wire exhibiting weld metal porosity or "worm tracks" due to moisture absorption by the flux can be reconditioned by rebaking the wire.

The exact time and temperature for rebake are determined by the wire and the spool material. Wire coils, masonite spools or wire baskets are typically rebaked in a range of 230°F - 300°F (110°C - 149°C) for a minimum of 6 to 12 hours. Wire on plastic spools cannot be rebaked because of the inability of the plastic to withstand high temperature. Precise temperatures for wire storage and reconditioning should be obtained from the wire manufacturer's technical department.

Another important factor in the storing and rebaking of flux cored wire is the lubricant on the outside of the wire. Some lubricants can be damaged by high temperature. Contact the wire manufacturer for possible damage.





## Troubleshooting

# CAUTION

When replacing heating elements, always replace both elements. Pairing
of one new element with an old element will cause rapid failure of old
element.

#### Oven Fails To Operate: No Heat, Overheats

- 1. If the indicator light does not illuminate, check power supply.
- 2. Check indicator light for continuity. If defective, replace indicator light.
- **3.** Check thermostat on front. If indicator light illuminates, power is being supplied through thermostat to dual heating elements. Turn knob from low to high setting and return. Definite "snap" should be heard at low temperature end and indicator light should turn off and on with each "snap" cycle. If "snap" is not heard and indicator light fails to operate, replace entire thermostat. (See Replacement Parts section in this manual.)
- 4. If thermostat operates satisfactorily, check continuity of heating elements at bottom of oven. (Access through removable lower panels.) Failure of one element will prevent oven operation on 240 volts. If operating on 120 volts failure of one element will cause very slow heating. If defective, remove oven from power source and replace both elements.

#### Thermometer Indicates in Wrong Units: °F or °C (if equipped)

- 1. Disconnect power from the unit.
- 2. Remove the cover near the base on the left hand side of the oven to expose thermometer battery housing.

- **3.** Changing to either °F or °C is accomplished by pressing the button located in the battery holder.
- **4.** Re-install the battery and bottom cover prior to putting the oven back in service.

#### Thermometer Inoperable: Replace Battery

Indicated by a weak or absent display.

- **1.** Disconnect power from the unit.
- 2. Remove the bottom cover from the base.
- **3.** Remove the battery from the holder and replace with a fresh AA 1.5V battery. (Alkaline batteries are recommended.)
- 4. Reinstall the battery and bottom cover prior to putting the oven back in service.

### **Checking Thermostat Calibration**

Each thermostat is adjusted at the factory and calibrated on precision instruments to control temperatures accurately. Adjustment or re-calibration is not needed unless the thermostat has been mishandled in transit or changed or abused while in service.

To check calibration:

- 1. Use a good grade mercury thermometer to check temperature. For griddle control, use a disc type thermocouple. Put a couple drops of oil on griddle surface plate and place thermocouple disc flat into the oil.
- 2. Turn the dial of the termostat to 300° mark.
- **3.** Allow enough time for temperature to stabilize or until several temperature readings are identical.

## **Recommended Spare Parts**

For users of large dryWIRE<sup>®</sup> oven quantities or users not in North America: For normal daily operation, the following spare parts and quantities are

recommended to have inventoried.

Item No.	Spare Part Description	Part No.	Recommended Quantity per 10 Ovens
1	Heating Element Kit	1257095	1
2	North American Power Cord	1257540	1
3	Door Latch and Strike	1252200	1
4	Thermostat Kit	1257085	1











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## **Replacement Parts**

## **Ordering Information**

To order spare or replacement parts, visit our website: www.dryrod.com. When ordering, please confirm that you are ordering parts for the correct oven.

ltem No.	Description	Qty	Part No.
1	Thermometer Kit		1257420
	Digital Thermometer	1	
	Screw	2	
	Clamp	1	
2	Indicator Light	1	1257540
3	Door Latch and Strike	1	1252200
4	Vent Cover Kit	1	1257152
5	North American Locking Power Connection Kit		1257395
	Rivet	2	
	Locking Power Inlet	1	
	120V North American Locking Cord	1	1257540
6	Heating Element Kit		1257095
	Element	2	
	Thermostat Kit		1257085
	Thermostat	1	
	Thermostat Knob	1	
	Shelving Kit		1255150
	Shelving Assembly	1	
	Gasket Kit		1257163
	Gasket (per foot)	8	
	Power Inlet Kit		1257390
	Rivet	1	
	Locking Power Inlet	1	
	Hinge Kit (2 hinges)	1	1250206
	North American Power Cord	1	1257540







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## dry WIRE

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#### **Operating Instructions**

## Wiring





## **Guide to Electrode & Flux Stabilization**

#### Eliminate expensive rework and protect welding profits!

This guide explains proper storage and oven holding temperatures:

- Recondition/rebake procedures for electrode coatings exposed to moisture are included.
- Remove electrodes from cardboard containers before placing in ovens.
- Electrode coatings should not be exposed to the re-baking temperature without first being reconditioned at a lower temperature. Failure to do so may result in breakdown of electrode coatings. After re-baking, lower temperature to holding level until reissued.

Download your guide at www.dryrod.com/guide.

## Warranty

Phoenix Ovens International LLC warrants its products against defects in material and workmanship. The company will, at its discretion, repair or replace any properly installed Phoenix International manufactured product which fails under normal operating conditions within one year from date of receipt. Contact the factory for return authorization before returning the product to Phoenix International freight prepaid. If our inspection confirms that the product is defective under terms of this warranty, it will be repaired/replaced and returned freight prepaid.

This warranty applies only to products sold by Phoenix International, Inc. and specifically excludes installation or de-installation labor, transportation or equipment of another manufacturer used in conjunction with Phoenix International products. No other warranty, expressed or implied, exists beyond this warranty declaration.

Phoenix constantly strives to improve its products and therefore reserves the right to change design, materials and specifications without notice.

