

# **SD90 SAMPLE DRYER**

## **OPERATING AND SERVICE MANUAL**



© 2008 Phoenix Mixer India Pvt. Ltd.

User's Manual

Sample dryer

Version Phoenix 1.0 \_ 01-09-2019

© COPYRIGHT 2008, Phoenix Mixer India Pvt. Ltd. all rights reserved.

No part of this manual may be reproduced in any form, or by any means, electronic or mechanical, including photocopying and recording, without prior written permission of Phoenix.

Information in this manual is subject to change without notice and does not represent a commitment on the part of Phoenix.

Unless otherwise indicated, all references to companies, names, data and addresses used in the screens and / or examples are purely coincidental and serve only to clarify the use of the Phoenix Mixer.

Phoenix shall not be liable for technical or editorial errors or omissions made herein; nor for incidental or consequential damages resulting from the performance or use of this material.

If you require additional copies of this manual or further technical information about it, please write to:

**Phoenix Mixer India Pvt. Ltd.**  
**Plot No 7, Collage Road, Vadkun,**  
**Dahanu Road- 401602**  
**Dist: Palghar, Maharashtra**  
**INDIA**  
**Phone: + 91-2528 221120/223324**  
**[www.phoenixmixer.com](http://www.phoenixmixer.com)**

**An ISO 9001:2015 Certified Company**

Printed in India

## INDEX

|                                   |    |
|-----------------------------------|----|
| 1. SAFETY INSTRUCTIONS.....       | 4  |
| 2. INTRODUCTION .....             | 5  |
| 4. TECHNICAL SPECIFICATIONS ..... | 6  |
| 5. WARRANTY .....                 | 7  |
| 6. SAFETY REGULATIONS .....       | 8  |
| 6.1 SAFETY AND ADVISORY NOTE..... | 9  |
| 7. INSTALLATION .....             | 10 |
| 8. OPERATING INSTRUCTIONS.....    | 11 |
| 9. SOP OF DRYER .....             | 11 |
| 9. CARE AND MAINTANCE .....       | 12 |
| 9.1 USE OF PLATFORM.....          |    |
| 11. SCHEMETIC DIAGRAM .....       | 13 |



## 1. SAFETY INSTRUCTIONS

- **Read safety instruction carefully and follow them for your own protection.**  
This Product is use on a nominal 230 Volt circuit, as shown on the Name plate.  
Connect the Product to an outlet having the same configuration as the Plug.  
Wear safety Shoes when installing or relocating the dryer.  
Make sure the dryer stands securely.  
Keep your place clean & tidy. There is risk of accidents at untidy work place.
- **Close the Dryer when it is not being used.**  
Dryer shall be connected to dedicated electrical circuit- No other device shall be connected to this circuit.  
This product is equipped with a cord having a grounding wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.  
Removal of the plug from the outlet is the means for isolating the dryer from the power supply. Ensure that the dryer is installed with the plug easily accessible to the operator.  
This product is designed to operate only when the door is closed. DO NOT ATTEMPT TO ALTER ELECTRICAL INTERLOCK MECHANISM  
**Trained and authorized person shall use this product.**

## 2. INTRODUCTION

Phoenix Sample Dryer are designed to provide high levels of performance & reliability within a compact, energy efficient and is suitable for bench top. This configuration allows greater flexibility in laboratory.

Sample Dryer has been designed to meet the demand of the retail market.

The unique design results in reduced maintenance and in color drying at the lowest cost.

Sample Dryer is rugged and reliable equipment which performance and design exhibits the qualities of a strong sturdy engineering product and low maintenance.

**Future includes:**

- Sample Dryer is industrial drying system designed to outlast conventional hair dryer.
- Quick-low-heat drying delivers accurate color sample result every time will distort sample due to intense heat like conventional hair Dryer.
- More than 2 samples can be dried at a time
- Draw only 3 Amp like conventional hair Dryer
- Auto time PID digital temperature to set 50°C to 100°C



**Phoenix shall not be liable for any damage or injury incurred by non-compliance with these regulations, or by not taking the usual and accepted precautions in handling, operation or repair, even if not expressly stated in this manual.**

### 3. TECHNICAL SPECIFICATION

- Rugged steel cabinets, powder coated for lasting protection with stain steel interior
- Door mounted on heavy duty hinges with easy to use catches that are built to last
- Excellent temperature profile throughout the oven allows full use of shelf space
- Temperature ranges from ambient to 100°C
- Loose fit wire shelves with ample easily adjusted runner position to accommodate a variety of load
- All controls are easy to use clear display at temperature
- Adjustable venting system is available
- Design to be easily use to serve when the need arise
- Twelve month warranty, support & spare parts are always available

|                                 |   |
|---------------------------------|---|
| Model                           | :SD 90  |
| Capacity                        | : 45 Ltr  |
| Interior Chamber Size(HxWxD)    | : 14"x10"x10"   |
| Shelf Level                     | : 2   |
| Power watts                     | : 1000W   |
| Power Supply                    | :230VAC, 10A, single phase  |
| Weight                          | : 45 kgs  |
| Temperature Range               | : Ambient to 100.0°C  |
| Temperature Resolution          | : 0.1°C   |
| Control Accuracy                | : +/-2.0°C or better  |
| Operating and control tolerance | : Typical temperature variation throughout oven chambers +/- 2°C at 100°C |
| External diameter (HxWxD)       | :485 x 380 x 610mm  |
| Net weight                      | : 45Kg  |

#### **4. WARRANTY**

**LIMITED WARRANTY:** Phoenix warrants each unit manufactured to be free of defects in material and workmanship for a period of twelve months. This warranty applies to single-shift operation and is counted from the date of initial start-up. It covers all defects arising from faulty material or workmanship.

Please note that all warranty claims must be accompanied by the original delivery note or initial start – up report.

All essential warranty repair work must only be carried out by trained service engineers or by third parties authorization from Phoenix. Unauthorized repair may render the warranty null and void.

Please return any defective parts or dryer carriage-paid to our factory. Phoenix reserves the rights to decide on whether cost-free parts replacement is applicable. Parts and labor covered by the warranty will be supplied free of charge. The warranty does not cover travel cost, expenses or possible overnight accommodation resulting from warranty repairs carried out off our premises.

Any other responsibility, with particular reference to damage claims, including foregone profit or other material losses on the part of the customer, is expressly excluded.

Warranty and liability claims for personal or material damage are excluded if attributable to one or more of the following causes:

The part unit shall be returned with transportation charges prepaid. If the fault has been caused by misuse

Or abnormal conditions of operation, repairs will be billed at a normal cost. In this case, an estimate will be submitted before works is started, if requested.

Always include serial number in any correspondence concerning the part unit.

## 5. SAFETY REGULATION


Phoenix Systems dryers are operationally safe with state of the art construction. Due to the nature of the curing process, proper use of equipment is necessary.


With improper or unsafe use, there are parts that cannot be protected without impairing operability and functionality.

Improper use can be cause damage to the Dryer itself or to other material and assets.

Phoenix is not liable for any damages resulting from improper or incorrect use.

|

|   |   |
|---|---|
|  | <p style="text-align: center;"><b>THIS EQUIPMENT MUST BE GROUNDED.</b><br/><b>Attention!!!</b></p> <p>Connect this product to a dedicated electrical circuit – no other devices shall be connected to this circuit. Do not use extension cords to connect this product.</p> |
|---|---|

|   |  |
|---|--|
|  | <p style="text-align: center;"><b>Attention!!!</b></p> <p>Only trained person shall be permitted access to the electrical wiring within the cabinet.</p> |
|---|--|

The Dryer shall be connected to a dedicated, grounded circuit, protected by a 10A circuit breaker. All wiring shall be in accordance with local codes.

**Important:**

The power supply cable conductors are color-coded as follows:

|                       |                  |
|-----------------------|------------------|
| GREEN or GREEN/YELLOW | : <b>GROUND</b>  |
| WHITE or BLUE/BLACK   | : <b>NEUTRAL</b> |
| BLACK or BROWN/RED    | : <b>LINE</b>    |



### 5.1 Safety and advisory Note:

- SD- 90 is not explosion proof. Do not use it in a spray booth, mixing room or any volatile area
- Ensure that all necessary protection is worn (gloves, eye protection, airway protection, whole body protection)



- Hands have to be washed thoroughly before eating or drinking
- Do not use this equipment when it is wet or damp. Water coming into the unit may lead to electric shock or damage to the equipment
- This equipment is not for outdoor use
- Do not cover air vents, as overheating could occur
- Do not mount dryer on a wooden or inflammable surface
- Make use of local safety and accident prevention regulation during the operation of the dryer
- The dryer must be grounded
- Keep the operating manual available, near the dryer
- If the power cable is damaged, please ask the manufacturer, service provider or specialist to replace it to avoid injury and damage
- When not in use, ensure that the power is off and unit is unplugged

## 6. INSTALLATION

### **INSTALLATION:**

It is recommended that, during the installation of the Dryer, protective gloves be worn in order to prevent hand injuries.

- Unpack the Dryer
- Ensure the dryer has not been damaged in any way
- Position the Dryer in the desired location
- Ensuring that all four feet are properly supporting the dryer

## 7. OPERATING INSTRUCTION



(1) (2)

### SOP OF Dryer

1. Connect the mains to mains socket & put on the mains switch (1)
2. The Digital Controller (2) will indicate ambient temperature
3. The upper display (PV) shows Actual Temp & lower display (SV) shows set Temperature.
4. Press button {⏻}, upper display indicates SP1, set the required temperature by pressing button {Δ} to increase the temp & press {▽} button to decrease the temperature & press {⏻} to confirm the set temperature.
5. Set the temperature in safety thermostat higher than temperature set in controller
6. The display will go in normal mode & it will show process value & now the heaters will start & temperature will start rising & when the set temperature is reached heaters will be off & temperature will be maintained within the specified limit

## 10. CARE AND MAINTAINANCE

### Use of Platform

Dryer must rest on feasible table platform which can be operated easily by the person working on it.



### Maintenance:

- Always keep the Dryer clean.
- Gently press the button on panel.
- Clean the tray of dryer and keep the dryer clean

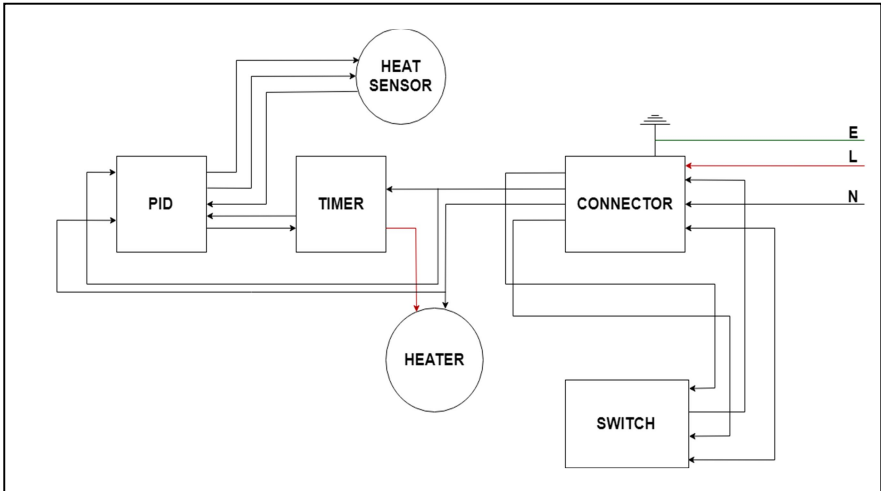
### Troubleshooting:

| PROBLEM                                | TROUBLE SHOOTING  |
|--|---|
| Dryer is not turning on or Not working | 1) Check the Mains supply.<br>2) Check the Power supply<br>3) Check plug or loose wire. |



**Before conducting care and maintenance, be sure that the unit is disconnected from the electricity. Also ensure that the unit has cooled down**

## 11. SCHEMATIC DIAGRAM



THANK YOU

Phoenix Mixer India Pvt. Ltd.  
Plot No 7, Collage Road, Vadkun,  
Dahanu Road - 401602  
Dist: Palghar,  
Maharashtra.  
INDIA  
Phone: + 91-2528 221120 / 223324

[www.phoenixmixer.com](http://www.phoenixmixer.com)

**An ISO 9001:2015 Certified Company**