ESTD. 1958

Manufacturer & Exporter

NSW INDIA

Coltan®

60 Years of Success

NARANG SCIENTIFIC WORKS PRIVATE LIMITED

MAINTENANCE MANUAL

HIGH PRECISION TEMPERATURE CONTROL EQUIPMENT FOR MEDICAL, INDUSTRIES & RESEARCH LABORATORIES

ISO 9001:2015 CERTIFIED — ISO 9001

ISO 13485:2012 CERTIFIED — ISO 13485

CE Certified

WHO GMP compliant company

NSW-102
INDUSTRIAL FURNACE
(GROOVED TYPE)

www.nsw-india.com

OPERATING INSTRUCTIONS & WARRANTY CARD

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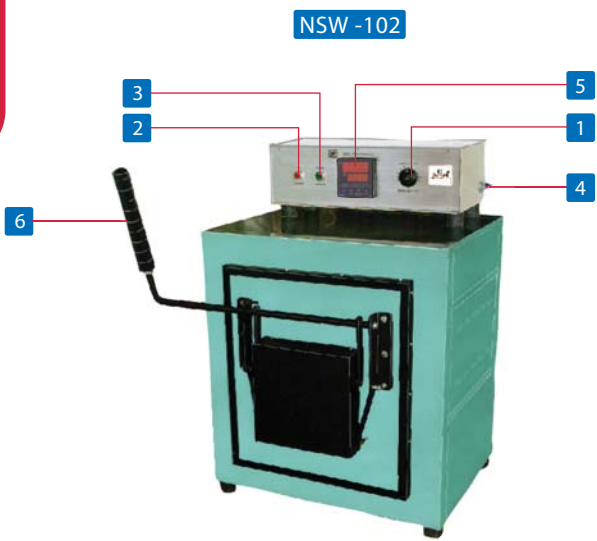
NSW-102

INDUSTRIAL FURNACE

(GROOVED TYPE)



INTRODUCTION

This furnace is designed for heat treatment and annealing ash test etc. It is used even in laboratory also for continuous operation at 950°C and temp. should not go beyond 1000°C

PARTS IDENTIFICATION

1. On-Off switch
2. Main Indicator
3. Control Indicator
4. Main Connecting Wire
5. Digital Temp. Indicator cum Controller
6. Counter Balance Weight (Handle)
7. Air Break Contactor/SSR
8. Thermocouple (CR/AL) (Sensor) of Temperature Controller (Inside)
9. Heating Element (Inside)
10. Muffle Tile (Groove)'
11. Copper Thermal Fuse (Inside)

TECHNICAL DATA

Model	NSW - 102
Working Temperature (Max)	1000°C
Working Temperature Continuos	950°C
Electric Supply	220 A.C. 50Hz
Connected Load	4 KW TO 10.0 KW

CONNECTED LOAD KW

Model No.	Size	KW	
MF 1.	125 x 125 x 300mm	4.0	Single Phase 220/240 Volts A.C.
MF 2.	150 x 150 x 300mm	4.5	
MF 3.	200 x 200 x 300mm	6.0	3 Phase 4 Wire 400/400 Volts A.C.
MF 4.	300 x 300 x 300mm	10.0	

GENERAL

Open the case, if supplied in wooden box packing safely remove unit from wooden platform.

NOTE:

Its door is counter balanced through heavy weight at the top of handle which is unscrewed, when it is dispatched to destination in wooden box.

OPERATING INSTRUCTION

NSW-102 INDUSTRIAL FURNACE (GROOVED TYPE)

Step- I

Insert plug / cable in the main power source which must be fitted with proper rating switch / MCB / MCCB, main switch.

Step- II

Set temperature in the electronic digital temperature controller as you require but it should not be beyond 1000°C. Never open door untill furnace attains set temperature.

To set temperature in the digital controller / Kindly refer to attached page below how to operate digital temperature controller & for PID Temperature Controller with profiles kindly go through user manual for operation of PID controller

SETTING OF DIGITAL TEMPERATURE CONTROLLER CUM INDICATOR

Furnaces are suitable to work on high temp. to attain more accuracy not less that 500°C. This is supplied with temp. Controller cum indicator which shows (S.V.) set value of your temp. (In Green) and (P.V.) present value which is (In Red) your current running temp.

To set the desired temp suppose 600°C you need to use arrow keys on extreme right up & down keys. Other keys are used to change the settings of the controller which is already done by our company for easy use. You can also lock the temp. if your desired temp is always fixed. For other settings of the controller. Kindly contact the company or ask for user manual for same.

Once your mains are on (Red indicator is On) you can set the temp by up arrow key. The door of the Furnace should not be opened and also do not disturb the keys of Digital Controller until the desired temperature is attained.

It should attain the temperature 600°C. With 40-45 minutes, it may take more time if the voltage of the main supply is low. The progress in the heating up of the Furnace can be observed on the Digital Controller.

IMPORTANT INSTRUCTION.

1. Temperature should not rise beyond limit 1200' C.
2. Metal oxides, hardening and reducing agent, salt ect. Should not get in touch with the Muffle Tiles.
3. The material to be treated should not occupy more than 50% to 70% of heating space for more better results & safty of the furnace.
4. Furnce should be properly earthed.
5. All the repair work on the Furnace must be done only with the power main being switched off.
6. Furnace should be kept at even stable place.
7. This furnace will work at your set temperature till the power is "ON"
8. Never qet repaired your furnace from outside source.

TROUBLE SHOOTING

1. Main indicator does not glow when - power is connected check main source of power.

2. Main indicator glows when power is switched on but no control indicator glows-check (i) Copper Thermal fuse after opening the back cover.

3. Main indicator glows- controller displays 1 check- thermo couple (sensor) is defective.

4. All the control and every indications are glowing but heating is slow check- voltage.

Incase you feel any kind of difficulty please do not hesitate to contact us. We shall be too pleased to assist you without any obligation.

Wiring Diagram

TERMS OF WARRANTY

ESTD. 1958

NSW INDIA

NARANG SCIENTIFIC WORKS PVT. LTD. guarantee the high quality and workmanship of each unit for a period of one year subsequent to the date of delivery by the company. During this period, faulty material will be replaced free of charge. This guarantee does not extend to components that are subject to wear and tear in the course of normal operation or due to improper treatment /maintenance as per instructions not followed.

1. The manufacturer is only responsible for effects on the safety, reliability and the performance of the instrument.

2. Installation, additions, adjustments, modifications or repairs are carried out by personnel authorized by the manufacturer.

3. The electrical installations within the room concerned satisfy the requirements laid down by ISO/CE.

4. The appliance is used in full accordance with the instruction manual which is solely a guide and no substitute for professional training.The safe and effective use of this product largely depends on the skill of the operator.We are not liable for nay damages due to mishandling or improper and unauthorized use.

5. The company reserves the right to change technical specifications, designs without prior notice.

Note: In case you feel any kind of difficulty please do not hesitate to contact us. We shall be too pleased to assist you without any obligation. Our Instruments are guaranteed for 12 months from the date of purchase.

WARRANTY CARD

Bill No. _____

Serial No. _____

Date of Purchase _____

Dealer Name _____

Stamp: