

Operating Instruction for “Lakmini” Furnace

1. Connect the LP Gas supply, Oxygen supply and water (In and out) lines to correct connecting points of the furnace. Don't get mixed up.
2. Ensure that there are no gas leaks at the joints of the gas lines. In case of detecting a gas leak, close the gas supply valves and tighten the joints properly. If necessary, change the hose clips.
3. When lighting the burners, never direct them straight away towards the furnace. Turn away the burners from the furnace by loosening the nut at the lower end of the supporting rack on which burner is mounted. Then, firstly slightly open the LP gas supply valve and light at the burner mouths immediately.
4. Then, while keeping the pressure at 0.5 Kg/cm² in the gauge of the Oxygen supply cylinder, open the Oxygen valve until you obtain bright flames from both burners. Then adjust the LP gas valve also to get the required bright flame.
5. Now, turn the two burners and direct the flame straight towards the chamber of the furnace through the holes on both sides of the furnace while keeping 5mm gap between the burner mouth and the furnace. Fix the burners well by tightening the nuts.
6. Ensure that water cooling system is now functioning through the burners and the furnace.
7. While gradually increasing the LP gas and oxygen inputs to the burners, bring the burners closer to the furnace. Note that oxygen should only be increased until you obtain bright flame.
8. In the case of burner gets cut off, close the LP gas and Oxygen valves immediately. Never supply gas directly into the hot furnace from the burners before lighting.
9. To light the burner, which got cut off, repeat the process from above step 3 by turning the burner away from the furnace.
10. To put off the burners after operation, close the LP gas Oxygen valves simultaneously.
11. Change the 9V battery of the temperature recorder, after every 50 working hours of the furnace.
12. Keep the temperature recorder switch off position whenever the furnace is not in operation. Please note that incorrect temperatures will be indicated when exhausted batteries are used.

Different genda varieties, conditions for heat treatment and colour after treatment.

Geuda Variety	Temperature C ^o	Condition applied	Colour after treatment
Ottu	1600 – 1650	Reducing	Blue
Dun Geuda	1600 – 1650	do	do
Diesel Geuda	1750 – 1800	do	do
Milky Geuda	1800 – 1825	do	do
Silky Geuda	1800 – 1900	do	do
Deguna	1050 – 1200	Oxidizing	Red
Red Geuda	1450 – 1500	do	do
Kowangu Pushparaga	1800 – 1900	do	Yellow

Flow chart of Heat Treatment of Geuda

