

# BENCH FURNACE

To certify on the bench furnace you will need to know:

1. The four uses of the bench furnace.
2. The safety rules.
3. Know the parts of the bench furnace.
4. Know and demonstrate how to operate the bench furnace.

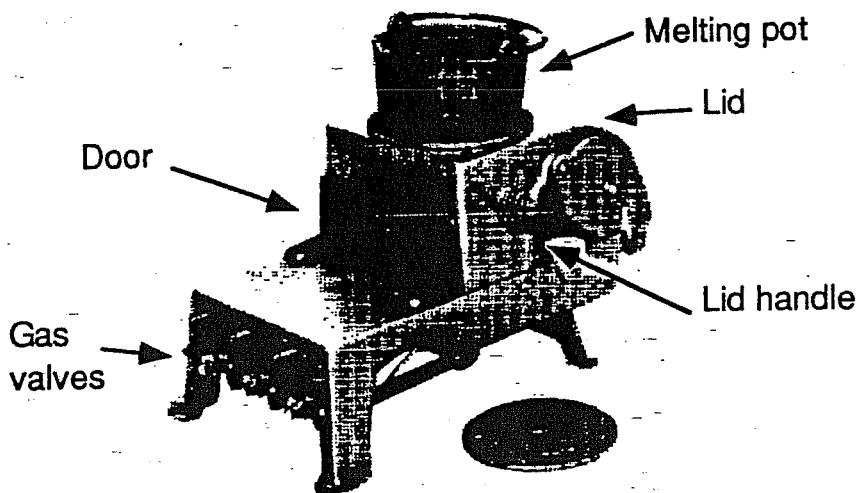
## Uses of the bench furnace.

1. Heating soldering irons.
2. Melting soft metals.
3. Heating light metals for forging.
4. Heating small tools for annealing, hardening and tempering.

## Bench furnace safety rules

1. Wear eye protection
2. Do not blow out the pilot light.
3. Be sure that the three gas valves are turned off when not in use.
4. Wear gloves when working with hot metals.
5. When moving towards the anvil make sure that know one will be walking into your path of travel.
6. Check with instructor each time before lighting the bench furnace.
7. Always assume that the bench furnace is hot and handle accordingly.

## Parts of the bench furnace.



## Bench furnace operating procedures

1. Check all gas valves to see that they are shut off.
2. Turn on the main gas valve and open the lid of the bench furnace.
3. Place the striker to the side of one of the gas nozzles. Open the gas valve to that nozzle  $\frac{3}{4}$  of the way. Strike the lighter and the sparks will ignite a flame.
4. Turn the flame down to the pilot light using the gas valve.
5. Close the lid and replace the door.
6. Turn the flame on full using the gas valve. To start the other burners slowly turn on their gas valves till they ignite.
7. When not using the furnace, turn gas valves down to the pilot light.
8. When finished using the bench furnace, turn all gas valves down to the pilot light and turn off the main gas valve.