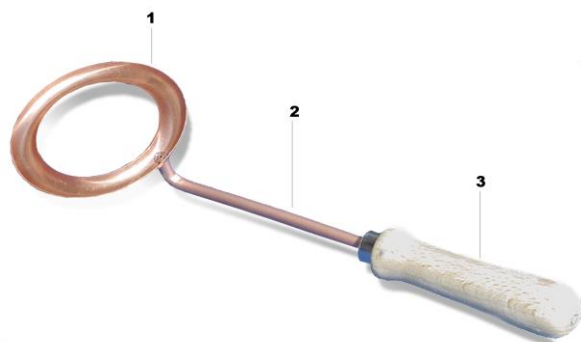


Fusion ring 1000980

Instruction sheet

10/15 SF



- 1 Fusion ring
- 2 Shaft
- 3 Wooden handle

Safety instructions

Caution: Build-up of high temperatures. Danger of serious burns!

- Hold the apparatus only by the insulated handle.
- Set up the induction furnace on a heat-resistant surface.
- Switch off the mains coil immediately after the solder has melted.

2. Description

The fusion ring is used for demonstrating the application of the Joule effect (induction melting).

The fusion ring consists of copper sheet which is formed into a circular groove and attached to a wooden handle. In the experiment, the fusion ring acts as a secondary coil with a single winding in conjunction with mains coil 1000986 @115 V or 1000987 @230 V and transformer core with yoke 1000976 to form an induction furnace. Ordinary tin-lead solder is well suited for use in the experiment.

3. Technical data

Inner diameter:	57 mm
Length:	270 mm
Material:	Copper

4. Operation

Additionally required:

1 Mains coil @115 V	1000986
or	
1 Mains coil @230 V	1000987
1 Transformer core with yoke	1000976

Tin-lead solder

- Set up the experiment as shown in Fig. 1.
- Put the solder into the fusion ring.
- Switch on the mains coil.
- Switch off the mains coil immediately after the solder has melted.
- Carefully remove the molten solder from the fusion ring.
- Disposal of the solder must be in accordance with local regulations.

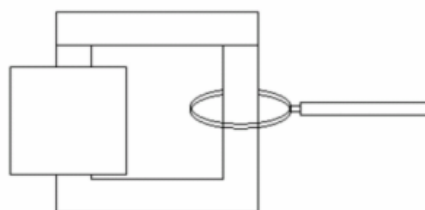


Fig. 1: Schematic diagram of an induction oven