



# INSTRUCTION MANUAL



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## 1. Junction

The devices have been designed for continuous operation, even at the maximum temperature and during continuous operation, the housing will heat up only to a slight extent.

The 220 Volt unit is ready for connection. Only earthed connectors with protective contact are permissible.

The 400 Volt unit has a 5-pole cable, whereby wire colours are yellow/green basically the protective conductor, and blue basically the wire for the neutral conductor. The neutral conductor is needed for the control voltage of the electronic (230 V). The remaining three cores can be connected arbitrarily to the 400 V network, as in contrast to, e.g. motors, no determined polarity is necessary.

## 2. Switching on

The devices have a single bottom operation. As soon as the bottom has left the zero marking, the yellow control lamp illuminates.

## 3. Heating capacity regulation

An energy regulator switches the heating on and off in controlled periodical intervals. The figures on the scale indicate the power in Watt-p.c. and should help to find established data once more.

## 4. Temperature regulation (except HOP-3030, HOP-6116, SOD series)

The required temperature is adjusted with the °C knob. As well as the Thermostat and warmth sensor, the devices are also equipped with an infinitely adjustable energy regulator, with the following function and advantages: If only a low temperature is required, it would be inefficient to heat with full capacity. A high or excess heating capacity would continue to heat despite a switched-off Thermostat (automatic procedure) and cause a high regular bandwidth.

### Please note:

All new devices exude an unpleasant smell when first heated to over 150°C. This is caused by insulant binding material, oil, dust etc. It is advised to heat for the first time near an extractor fan or open windows or even outdoors

## 5. Sandbaths: Change in temperature (sketch)

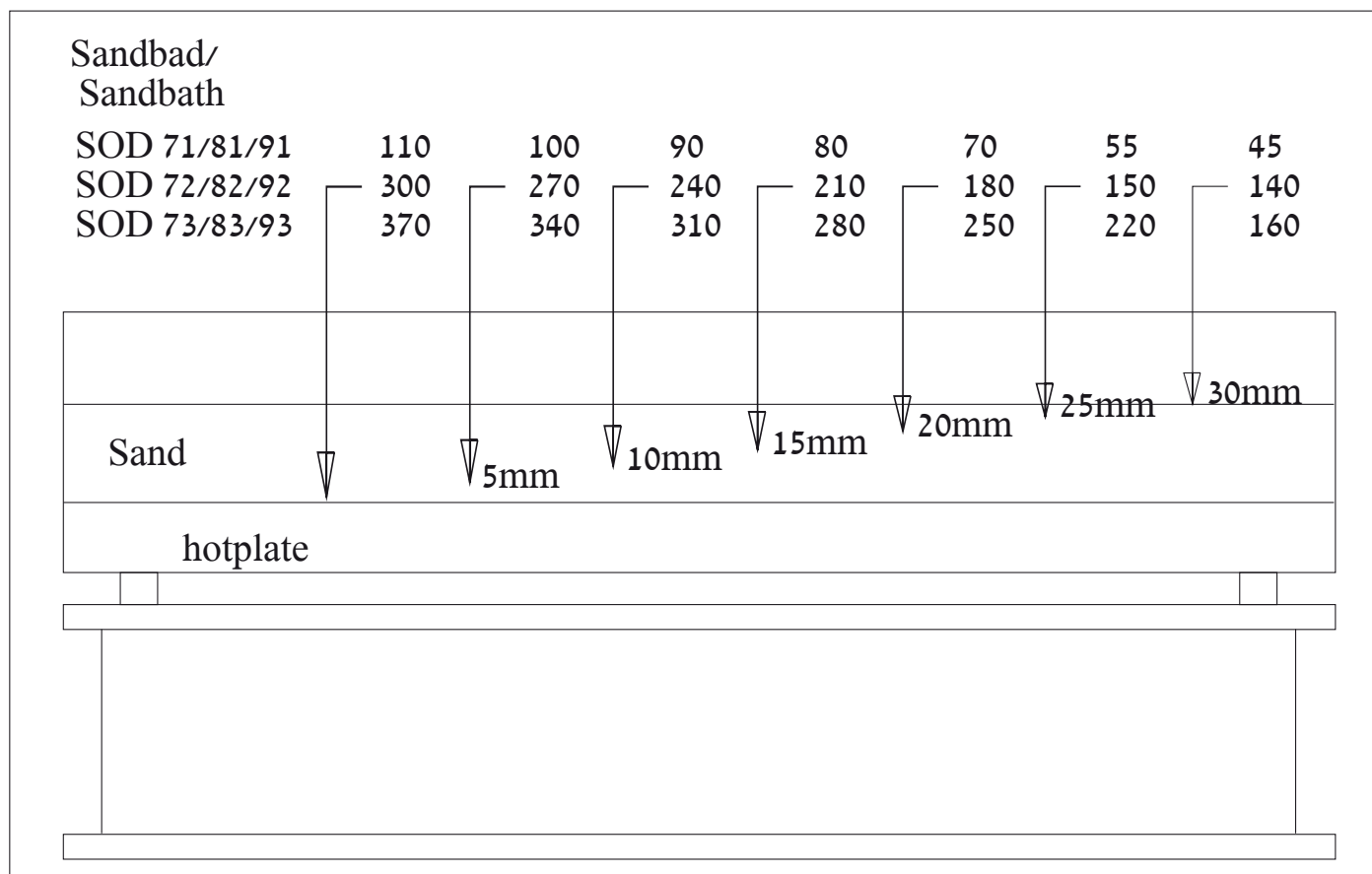
The data shown depend on quality and graining of the sand. Since sand is a poor heat conductor, warming towards the surface of the sand happens very slowly. This measurement was made after 90 minutes of heating up.

### Rule of thumb:

10 p.c. fall in temperature a 5 mm sand.

## 6. Spare parts

The hotplates are constructed of the best durable materials. As long as qualified personal are at hand, the following spare parts are available for customer installation.



Temperaturen in °C

