

# THROUGH HEATING INDUCTION

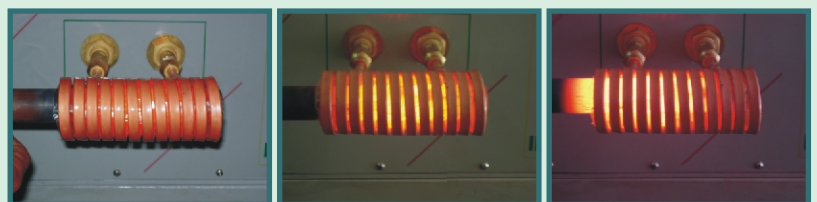
# Sohal

## Advantages of Induction Heating

- Controlled heating
- Selective heating
- Non polluting
- Energy efficient
- No 'start-up' time
- User friendly
- High speed of production

## Salient features

- Digital display
- Touch control switches
- On screen counter
- Auto/manul mode
- Fully solid state
- Robustly built
- 100% duty cycle operation
- Application specific machines
- Large variation of load characteristics
- Controlled heating variable frequency
- Load sensing self tuning



In our industry, lot of energy is wasted in several ways. The heating process based on fuel is a major segment in wastage of energy & no idea is found to solve the problem in fuel based furnaces because the medium (air) itself consume more than 50% of energy. Now energy can be saved by replacing conventional technique with Induction heating. Induction is a phenomenon to transfer electrical energy from a coil to another coil. In induction heating we use same concept, the workpiece act as another coil and consume transferred energy itself that heats it up to the desired temperature. Our machines are constructed on medium frequency topology. So, the components can be through heated. It's common applications are Aneling, Hardening, Forging of Ferrous and non-ferrous metals.

This solid-state and durable machine is developed by years of hard work. All components and techniques used are up-to-date and tested. The transformer core is low loss soft ferrite and coils are copper wound with H-class covering & an extra insulating wall is provided to isolate output winding. The water cooled design of transformer make it more efficient. The inverter section incorporates high quality capacitors which has a Q-factor > 1000. The switching device used are the fastest devices than their counterparts. To prevent any type of damage two hall sensors, a water sensor, a supply sensor & a saturation sensor is attached to its micro controller powered main board. An interface filter prevents line disturbance. A new type of exclusive circuit removes the MCB's repetitive tripping.

MODEL	ID-13 K10	ID-20 K 20	ID-20 K 40	ID-20 K 50
Supply	415V, 3Ph, 50Hz	415V, 3Ph, 50Hz	415V, 3Ph, 50Hz	415V, 3Ph, 50Hz
Power	10 KVA	20 KVA	40 KVA	50 KVA
Duty	100 %	100 %	100 %	100 %
Efficiency	90 %	90 %	90 %	90 %
Insulation	H Class	H Class	H Class	H Class
Programs	9	9	9	9
Heating cycle	2	2	2	2
Counter	6 Digit	6 Digit	6 Digit	6 Digit
Warning	Sound & Light	Sound & Light	Sound & Light	Sound & Light
Placement	Tabletop	Ground	Ground	Ground
Coolant	DM Water	DM Water	DM Water	DM Water
Coolant Pressure	1-2 Kg Cm <sup>2</sup>	2-4 Kg Cm <sup>2</sup>	2-4 Kg Cm <sup>2</sup>	2-4 Kg Cm <sup>2</sup>
Size (H x W x D) in.	14 x 25 x 30	50 x 21 x 35	50 x 25 x 38	50 x 28 x 38
Weight	70 Kg	95 Kg	130 Kg	150 Kg

\* Note: In view of modifications, All specification are subjected to change without prior notice

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