

# PROFLEX MOBILE INDUCTION HEATER

## Quick Specs

### Applications

**Preheat** for Coating, Bending, Fitting, Unfitting, Welding.  
**PWHT:** Tank, boiler  
**Heating:** Mold Heating, Shipbuilding, Zinc bath, large & irregular metal parts  
**Pipeline Heating:** Oil, Gas pipeline heating

### Process

Induction Heating

### Input Power

400 VAC, 3-Phase, 60/50 Hz

### Temperature Rating

Storage: -40°C – +60°C  
 Operation: -0°C – +50°C

### Rated Output

40 kW ~ 400 kW at 100% Duty Cycle, 5–20 KHz

### Heating Temp Range

0°C ~ 1100 °C

### Dimensions

H: 300 - 1129 mm  
 W: 300 - 664 mm  
 D: 586 - 975 mm

### Cooling Method

Air Cool or Water Cool

### Multi Heating Mode Selection

- Multi-Program Heating Mode
- Constant Power Heating Mode
- Constant Temperature Heating Mode
- Constant Current Heating Mode

### Parameter is Flexible to Set up and Save during the operation

### Digital Display and Adjust for parameters,

like output power can be adjust with the range of 0% ~ 100%

**Easy to install** primary power through panel that does not require removal of sheet metal.

**High energy-efficiency** more than 90 percent efficient

**PID adjustment technology** realize to perfectly balance the control of the power and the stability of output power

**Error and Failure Status Record** users can check, save, debug, remove the error and failure during the operation

**Versatile mobility** through a lifting eye or optional running gear designed for construction and maintenance.



**Multi Output Channel** can be designed and equipped according to user real needs, like dual output, 10 output channels, which can heat several metal workpiece with one power source

**Uniform heating** is maintained along and through the heat zone by using induction to heat within the material. The surface of the part is not marred by localized conducted heat at higher than specified temperatures.

**Protective Action** for over-current, over-voltage, lower-voltage, over-temperature, phase failure, short-circuit, non-loading. Especially for over-current and over-voltage, the protective actions are taken both for hardware and software

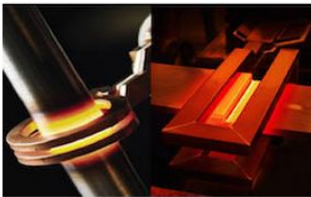
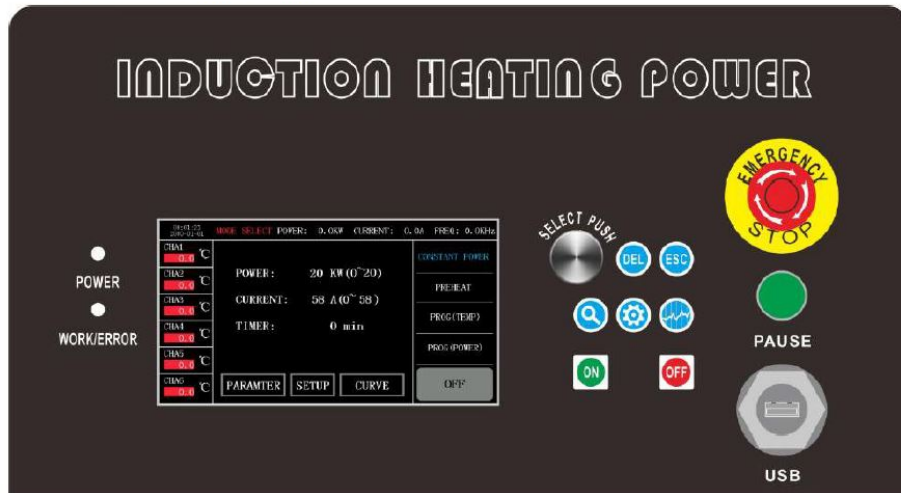
**High Clear Digital Display Screen,** users easier read from the screen no matter day or night

**Module design** increase the system performance, reliability, stability, and easy-going for maintenance

**Cooling System:** Air cooled method or water cooled method according to real practice

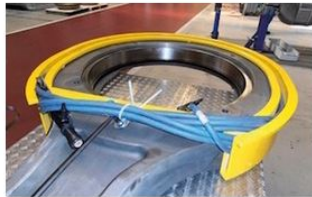
**Easy set-up** is achieved using preheat blankets or flexible heating cables combined with user-friendly insulation blankets.

# CONTROL PANEL



## INDUCTION BRAZING

Induction brazing for Copper or Aluminum Material.



## INDUCTION SHRINK FITTING

Like the bearing crankshaft or electric motor shaft assembly, especially for silicium steel material of the motor parts.



## FIELD JOINT COAT

FJC or Epoxy coating for the oil/gas pipe weld joint, requires fast heating and even heating for the induction preheat process



## INDUCTION ANNEALING

Steel Pipe Induction Annealing, Diameter 2500mm, wall thickness 50mm. Induction Annealing 680 °C



## PIPELINE INDUCTION HEAT

For oil/gas pipe weld joints requires preheat and post weld heat treatment.



## BILLET WELD PWHT

For the steel plate billets the weld seams requires preheat or PWHT.



## VESSEL INDUCTION PWHT

Post weld heat treat for vessels to release stress by welding process



## PIPE INDUCTION BENDING

Heating the pipeline in order to bend with angle





### Built-In Temperature Controller

ProFLEX Induction Power Source is equipped with a built-in temperature controller. The controller provides for Manual Programming or Temperature Based Programming. Manual programming provides for setting a power level and a time duration. This is beneficial in preheat applications where a part is heated to temperature and the heating device removed.

### On-Board Diagnostics

ProFLEX Series Induction Power Source is designed with on-board diagnostics with operator tutoring. Operating parameters are available at the touch of a button. Induction parameters are highly dependent on how the heating system (blanket or cable) is placed on the part to be heated. The ProHeat provides for Limit Conditions where a parameter maximum has occurred. The ProHeat will continue to deliver power, notify the operator and then provide helpful information to increase the Conditions and provide troubleshooting information. The purpose of these capabilities is to provide continuing education of the operator on the use of induction heating equipment and protect the system.

## SPECIFICATION (20kW ~ 160kW)

Model	Rate Voltage & Frequency	Rated Output Power	Rated Input Current	Rated Output Current	Output Wire (mm <sup>2</sup> )	Output Frequency Range	Loading Inductance Range
PROFLEX 20/400V	400V, 3 phases 50HZ/60H`	20KW	30A	55A	12	5KHZ ~ 25KHZ	90uH ~ 240uH
PROFLEX 30/400V		30KW	45A	75A	22		
PROFLEX 40/400V		40KW	60A	95A	35		
PROFLEX 50/400V		50KW	75A	110A	40		
PROFLEX 60/400V		60KW	90A	120A	45		
PROFLEX 80/400V		80KW	120A	180A	60		
PROFLEX 100/400V		100KW	140A	200A	80		
PROFLEX 120/400V		120KW	160A	230A	80		
PROFLEX 160/400V		160KW	195A	270A	110		