

# THERMAL WAVE

## INDUCTION HEATING SYSTEM



Shown: K5668-1  
Thermal Wave Induction Heating System

### AIR-COOLED HIGH OUTPUT CAPABILITY.

The Thermal Wave™ induction heating system helps reduce time-to-temperature across a wide range of preheat and inter-pass temperature management applications. Delivering a market-leading 50kW of continuous output, it reaches temperatures up to 1382°F (750°C), all without the need for liquid cooling. Its compact, easy-to-set-up design and precise temperature control enables operators to apply and adjust heat to optimal levels, helping improve heating efficiency and overall productivity. The result is a highly flexible solution for a wide range of welding and fabrication-related heating applications.

#### Processes »

Preheat, Inter-pass temperature management

#### Applications »

Construction, Shipbuilding, Pipeline, Fabrication, Process Industries, Power Generation, Structural

#### Output »



#### Input »



#### Product Numbers »

K5668-1 Thermal Wave Induction Heating System One-Pak®  
K5669-1 Thermal Wave Power Source  
K5670-1 Thermal Wave Controller  
K5671-1 Thermal Wave Extension Box  
See back for specs and accessories.

INDUSTRY LEADING  
**2-YEAR**  
STANDARD  
WARRANTY

## KEY FEATURES

- **Heat faster and keep jobs moving:** 50kW of continuous power and a 100% duty cycle help reduce heating times and maximize productivity.
- **Help improve jobsite safety:** Eliminate open flames, fuel gas cylinders, and combustion byproducts while reducing noise compared to traditional fuel gas heating methods.
- **Simple Setup and Operation:** Fully air-cooled performance up to 1382°F (750°C) means no liquid cooling system to maintain, transport or monitor.
- **Tackle a wide range of applications:** The Extension Box provides configuration flexibility with support for multiple heating accessories and optimized heat delivery.
- **Move where the work is:** At 99 lbs. (45 kg), the compact design makes transportation and setup easier.
- **Built to last:** Rugged IP33-rated construction is backed by a 2-year warranty.

## KEY CONTROLS - POWER SOURCE

### FRONT

1. Heating ON Indication
2. Temperature Input 1 and 2
3. Air Filter - Out
4. Ground Connection
5. Heating Cable Connections

### Back

6. Heating ON Indication
7. Air Filter - In
8. Power Input Cable
9. Main Power Switch
10. Bus Communication
11. Hardwired 1 (HW1) Control Connection
12. Thermal Wave Controller Connection
13. Hardwired 2 (HW2) control connection (Spare)



## PENDANT CONTROLLER

Use the lightweight, easy-to-use pendant controller to set up and run manual heating output or heating programs based on thermocouple feedback.



## WHAT'S INCLUDED

### Thermal Wave Induction Heating System (K5668-1) Includes:

- Thermal Wave Power Source (K5669-1)
- Thermal Wave Controller (K5670-1)
- Thermal Wave Extension Box (K5671-1)
- Noise Reduction Cable with Magnet - 16 ft (5m)
- Ground Cable - 16 ft (5m)

Note: Additional heating cables or quick wraps required - see accessory list on page 3 for available lengths and sizes.



## RECOMMENDED ACCESSORIES

| Description                                                  | Product Number                                               |
|--------------------------------------------------------------|--------------------------------------------------------------|
| Thermal Wave Heating Cable Preheat                           | K5672-5M<br>K5672-15M<br>K5672-25M                           |
| Thermal Wave Heating Cable High Temp                         | K5673-5M<br>K5673-15M<br>K5673-25M                           |
| Thermal Wave Heating Jumper Cable                            | K5674-1                                                      |
| Thermal Wave Extension Cable                                 | K5676-5M<br>K5676-15M<br>K5676-25M                           |
| Thermal Wave Ground Cable                                    | K5677-20M                                                    |
| Thermal Wave Weld Splatter Sleeve                            | K5678-5M<br>K5678-15M<br>K5678-25M                           |
| Thermal Wave Extension Cable Weld Spatter Sleeve             | K5679-5M<br>K5679-15M<br>K5679-25M                           |
| Thermal Wave Silica Fiber Mat - 3.3 x 98 ft [1 x 30m]        | K5682-1                                                      |
| Thermal Wave Insulation Blanket - 9.8 x 1.3 ft [3.0 x 0.4 m] | K5684-1                                                      |
| Thermal Wave Quick Wrap (includes cables)                    | K5687-DN300<br>K5687-DN450<br>K5687-DN600<br>K5687-DN900     |
| Thermal Wave Thermocouple Probe w/ Mini-K                    | K5695-1                                                      |
| Thermal Wave Noise Cable - 16.4FT [5m]                       | K5690-1                                                      |
| Thermal Wave Quick Wrap Sleeve                               | KP6060-DN300<br>KP6060-DN450<br>KP6060-DN600<br>KP6060-DN900 |
| Thermal Wave Control Cable 15.4 ft [5m]                      | KP6061-5M                                                    |
| Thermal Wave Power Source Fan Filter                         | KP6062-1                                                     |
| Thermal Wave Extension Box Fan Filter                        | KP6063-1                                                     |

## PRODUCT SPECIFICATIONS

| Product Name                          | Product Number | Input Power Voltage/Phase/Hertz | Rated Output | Input Current @ Rated Output | Output Range | H x W x D in (mm)                      | Net Wt lbs (kg) |
|---------------------------------------|----------------|---------------------------------|--------------|------------------------------|--------------|----------------------------------------|-----------------|
| Thermal Wave Power Source             | K5669-1        | 400-480/3/50/60                 | 50kW / 100%  | 90A                          | 0-50kW       | 16.3 X 9.8 X 15.8<br>[413 X 248 X 400] | 99 [55]         |
| Thermal Wave Extension Box (Optional) | K5671-1        | -                               |              | -                            |              | 9.8 X 7.7 X 15.8<br>[249 X 196 X 400]  | 21 [10]         |

(1) Recommended fuse size for input power is 100A to achieve full output. System can operate at reduced output with lower fuse size.

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