

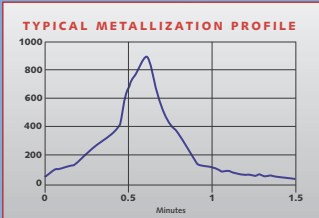


The Global Leader in Thermal Technology

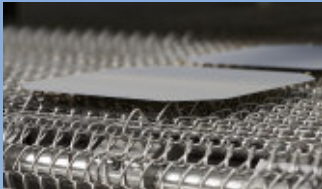
# PV Series

## Solar Cell Firing Furnaces

**Built for Today. Ready for Tomorrow.**



125 mm solar cell, 200 microns thick



Dimpled belt holds solar cells above the belt

### Standard Features

- BTU WINCON™ Control Software
- BTU Intellimax™ Controller
- Redundant Over-temperature Protection
- Element Monitoring
- Process Ready/Not Ready Light Tower
- Panel Safety Interlocks
- Multi-language Software

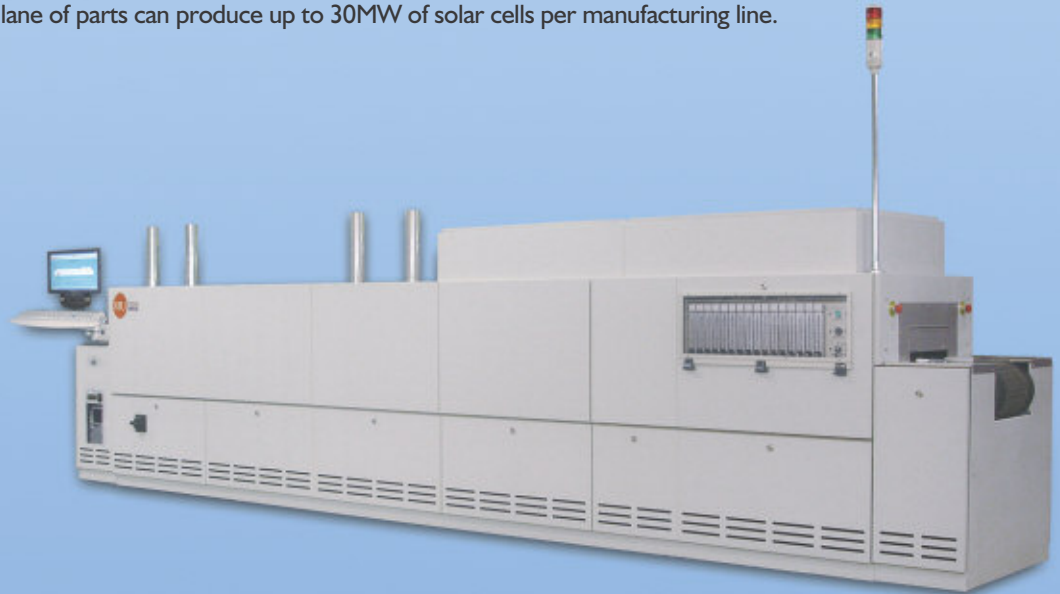
### Options

- 15 in. Ext. Tables
- Ultrasonic Belt Cleaner
- Uninterruptible Power Supply
- CE Compliance
- Spares Kits
- Datapaq Q18 Profiler
- Sun KIC Profiler
- Belt Configurations

The PV Series furnaces are optimized for paste burnout, metallization firing in the 750-950°C range, and BSF layer processing using Rapid Thermal Processing (RTP).

BTU PV Series systems offer technology features which assure fast heating, fast cooling and fast belt speeds. Rapid heating and cooling during metallization firing results in lower contact resistance and higher shunt resistance which improves solar cell efficiency and maximizes power output.

Lower cost solar cells are produced with faster processing speeds and improved equipment efficiency. With shorter processing time and faster belt speeds, one PV-600 Series furnace processing a single lane of parts can produce up to 30MW of solar cells per manufacturing line.



| SPECIFICATIONS                         | PV-309   | PV-609         | PV-614         |
|--|--|----------------|----------------|
| Heater Type                            | IR Lamp  | IR Lamp        | IR Lamp        |
| Belt Width (in, cm)                    | 9, 23  | 9, 23          | 14, 36         |
| Conveyor Speed (ipm, cm/min)           | 12-120, 30.5-305                                     | 22-220, 56-560 | 22-220, 56-560 |
| Load Station (in, cm)                  | 15, 38   | 15, 38         | 15, 38         |
| Unload Station (in, cm)                | 15, 38   | 15, 38         | 15, 38         |
| Number of Heated Zones                 | 4  | 6              | 6              |
| Maximum Temperature Rating             | 1000°C   | 1000°C         | 1000°C         |
| Operating Temperature Range            | 200-900C   | 200-900C       | 200-900C       |
| Forced Air Cooling Length (in, cm)     | 45, 115  | 90, 229        | 90, 229        |
| Atmosphere, CDA, typical (scfh, m3/hr) | 400, 11.2  | 600, 16.8      | 900, 25.2      |
| Process Exhaust, Venturi Assist        | 2  | 2              | 2              |
| Electrical                             | 208-480 VAC 3Ø 50/60 Hz (4-Wire or 5-Wire available) |                |                |
| Power (KW) Peak, Typical               | 36, 14   | 63, 25         | 96, 36         |
| Overall Length (in, cm)                | 148, 376   | 227, 576       | 227, 576       |
| Overall Width (in, cm)                 | 37, 94   | 38, 96.5       | 38, 96.5       |
| Overall Height (in, cm)                | 72.5, 184  | 72.5, 184      | 72.5, 184      |

Specifications subject to change without notice

# Global Strength

BTU provides world-class service and customer support in over 30 countries around the globe.



- ★ BTU Production and Engineering Facilities
- BTU Regional Locations
- BTU Representatives

- 24/7 Worldwide Customer Support
- Manufacturing and Engineering in the US and China
- Process Applications Laboratories in the US and China
- Multiple Global training locations

To contact BTU please go to [www.btu.com/support-contact-sales.htm](http://www.btu.com/support-contact-sales.htm)



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