SOS GROUP

BTU International PV 614 Solar Firing Furnace SN ECN-1C

Information contained in this presentation is confidential

BTU International PV 614 Solar Firing Furnace

Vintage 2013 Heater type IR Lamp Belt Width 36 cm Conveyor Speed cm/min 56-560 15, 38 Load station 38 cm Unload station 38 cm Number of heated zones 6 Maximum Temprature rating 1000°C Operation Temprature range 200-900°C Forced Air Cooling Length 229 cm Atmosphere, CDA, Typicle (scfh, m3/hr) 900, 25.2 Process Exhaust, Venturi Assist 2 Electrical 400/230 VAC 112 AMP 81 KVA 50/60 Hz Overall Length 576 cm Overall Width 96,5 cm Overall Height 184 cm





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125 mm solar cell, 200 microns thick



Dimbled belt holds solar cells above the be

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 s	ubject to change without notic



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