

The Juki Advantage

- JUKI has a long tradition of providing quality equipment and service
- With an extensive and knowledgeable service network in North and South America, service and support are not far away
- Best in the industry warranty – 5 years for the heaters, blowers and solder pot - 2 on all other parts
- Lifetime free software upgrades
- Lifetime free training at any JUKI location
- More standard features than any other oven available in the market

WS Series Specifications	WS-450 / WS-450-N2	WS-610 / WS-610-N2
Dimensions: L x W x H	4430 x 1620 x 1710mm	4630 x 1750 x 1710mm
Weight	Approx. 2200kg / Approx. 2250kg	Approx. 2400kg / Approx. 2450kg
Power Consumption (start/operation)	26kW/12kW / 28kW/12kW	50kW/14kW / 52kW/16kW
Power Supply	3Phase 5 Wire, 380V*1	3Phase 5 Wire, 380V*1
Flux Unit		
Spray fluxer Driving System	Stepper-Motor	Stepper-Motor
Flux Flow Meter	S	S
J-Sonic-Ultrasonic Flux Spraying System	O*2	O*2
Preheating Zone		
No. of Preheat Zones / length	3 zones, 1800mm	4 zones, 1800mm
Preheat Temp.	Room Temp. - 250°C	Room Temp. - 250°C
Bottom Preheat (Forced Convection)	S	S
Topside Preheat (Forced Convection)	O	O
Top / Bottom IR Preheat	O / O	O / O
Conveyor System		
PCB Width Range	60 - 450mm*3	60 - 610mm
Transmission Speed Range	300 - 2000mm/min.	300 - 2000mm/min.
Transmission Speed Control Methods	Close Loop	Close Loop
PCB Loading Direction	Left → Right*4	Left → Right*4
V Shape Conventional Titanium Fingers	S	S
V Shape Heavy duty Titanium Fingers	O	O
L Titanium Duck Jaw Fingers	O	O
Conveyor Width Adjustment Method	Motorized Auto	Motorized Auto
Conveyor Height	750mm±20mm	750mm±20mm
Conveyor Angle	4°-7°	4°-7°
Full Wire center Support	O	O
Component Clearance (Top/Bottom)	120mm / 15mm	120mm / 15mm
Solder Bath		
Solder Pot Material	Titanium Alloy*5	Titanium Alloy*5
Max. Height Of Wave-Jet	15mm	15mm
Max Temp. Of Solder Pot	300°C	300°C
Solder Pot Capacity	Pb-Free: Approx. 520Kg	Pb-Free: Approx. 760Kg
Controller		
Operating System	Windows 7	Windows 7
UPS	S	S
PCB Counter	S	S
Operation Mode: Operate / Demo / Edit	S	S
Online Edit	S	S
Cooling System		
Forced Air Cooling System	S / N/A	S / N/A
Air Chiller	O / S	O / N/A
Nitrogen System		
Nitrogen Flow Meter	N/A / S	N/A / S
Hemertic configuration	N/A / S	N/A / S
Flux Collection System	N/A / S	N/A / S
Oxygen Analyzer	N/A / O	N/A / O
Air Chiller	O / S	S / O
Nitrogen Consumption	The N2 consumption: 36m3/hour at less than 1000ppm Oxygen concentration; Nitrogen source at 10ppm with 0.4 - 106 mpa.	

*1 Will require transformer to step up from 220 or down from 480.

All specifications are subject to change.

*2 "Reliable & uniform flux spraying; It save flux approx. 30% against traditional spray nozzle"

*3 NOTE: 457mm (18") can be achieved if standard V-Shape titanium fingers are used. If heavy duty or Duck Jaw fingers are used 450mm is the Max (17.7").

*4 Option: Right → Left (FREE)

*5 5 year warranty on Solder Pot

JUKI®

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JUKI Specifications and appearance may be changed without notice.

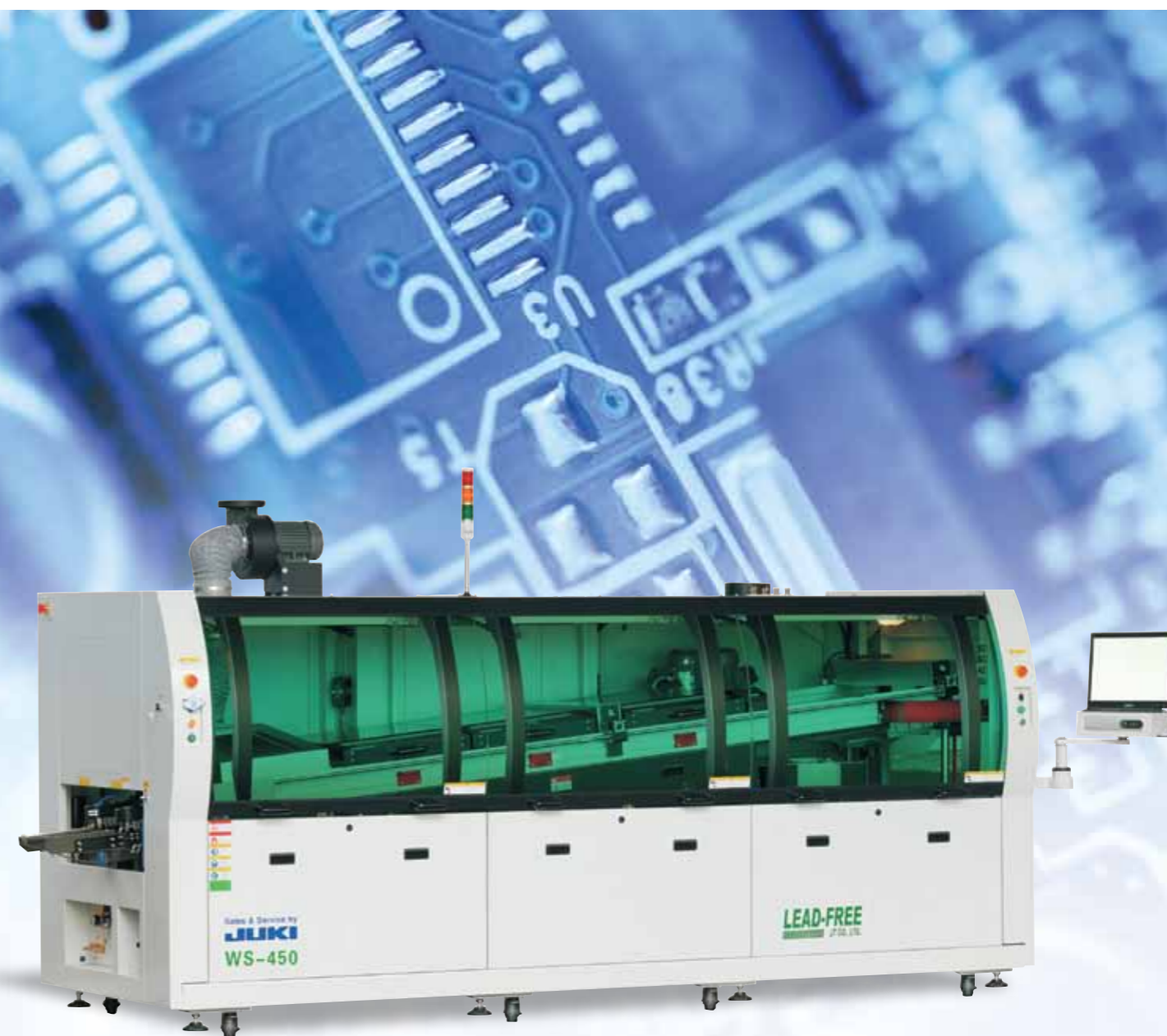
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JUKI®

LOWEST COST OF OWNERSHIP

WS450 / WS450N WS610 / WS610N

WS Series Lead-Free Wave Soldering System



WS Series Lead-Free Wave Soldering System

Introducing the new WS450 and WS610 Lead-Free Air and Lead-Free N2 Wave Soldering Systems from Juki. The WS450 supports board sizes up to 450mm while the WS610 allows for large board size up to 610mm. Both systems are backed Juki exclusive 5 year warranty for the heaters, blowers and solder pot and 2 years on all other parts are supported by the leading service team in the Americas.

Highlights

- The WS series features a modern, streamlined design built with transparent windows for easy viewing and maintenance by the operator
- The computer and PLC control system both support Windows XP operating system
- Comes standard with a motorized auto width rail system
- Spray fluxer system is driven by a stepper motor to automatically adjust to the width of the PCB
- The optional external air chiller attains maximum cool down to meet any lead-free requirement
- Advanced programming can be achieved to meet the weekly operation schedule



Highly Efficient Pre-Heat System

- Generates quick, high heat and located for easy maintenance to insure long meantime between failure

Motorized Solder Pot System

- In/Out and Up/Down motorized drive system features security mechanisms to eliminate incorrect operation

Windows XP OS

- GUI for easy operation

Lead-Free Production

- Comes with a full titanium solder pot
- 0.5 HP high power mechanical pump supports maximum wave height of 15mm

Efficient Cooling System

- Attains optimal cool down slope as need for Lead-Free requirements

Quick Plug and Towline Protection

- Ensures safety and reliability

Adjustable Circulation Design

- Independent temperature control in each of the three pre-heating zones insures optimal heat efficiency

Closed-Loop Inverter Control System

- Closed-loop control system for maintaining accuracy and stability of the transport speed

Spray Fluxing Nozzle

- Spray fluxing nozzle is driven by a step motor that controls the speed and frequency of fluxing according to the PCB width
- The spray fluxing nozzle is positioned at the optimal angle to ensure flux is dispersed onto the PCB correctly

