

TOLO'S LEAD-FREE SOLDERING SYSTEMS



CT-3000
N2 Lead-Free Soldering System



LF-350A
Lead-Free Soldering System



MT-300
Lead-Free Soldering System



LF-350B
Lead-Free Soldering System



MI-300
Desktop Type Lead-Free Dual Wave Soldering System

Features

- All wave soldering products are to make for lead free application
- Ideally suited for lead free process
- Auto synchronous input board connected equipment, ensures a smooth and steady input of board
- Compact machine technology with friendly design
- The patented conveyor reduces the warpage PCB
- Central support for PCB boards, as option
- Fluxes automatic supply system, low liquid warning
- Spray fluxer with exhaust hood
- Spray units ideally suited for water based fluxers. The spraying area is adjusted automatically as the width speeds of PCB change
- Easy to remove spray vapour
- The total length of the preheat area is 1800 mm. The preheat zones are independently controlled in three sections
- The preheat is IR or convection type
- The solder bath is suited for lead free applications and it is possible to put nitrogen inertion in solder pot and in the second preheater
- Solder bath with maximum flexibility, each single nozzle solution can be installed
- The wave can be removed easily
- Screw wave, screw type jet designed solder, SMD component solder parts without crack
- Fine wave, new and advanced technology of horizontal flow, little tin oxygenation quantity, makes solder point perfect
- Soldering dual wave system adopting step less frequency and control wave height independently
- Strong cooling system
- Solder pot automatically rise and drop in and out, easy to use and maintain
- Excellent soldering with nitrogen system
- A nitrogen atmosphere in the machine increases the wetting of the soldering due to reduction of oxidation
- Lowest Nitrogen consumption
- Windows controlling system and different profile for each program with powerful function and in easy way.



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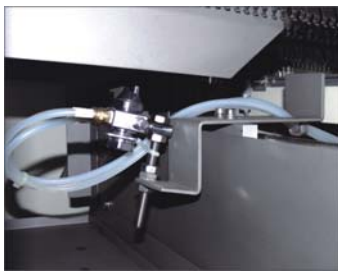
CT-3000 N2 Lead-Free Soldering System



Flexible wave spout
Titanium alloy solder pot
Special design for oxidation preventing; lowest oxidation



PID + simulate control



Flux spraying controlled by stepper motor through software



Fluxer recycle function

	CT-3000	CT-3000N
Control mode	Industrial computer control (Windows OS) + PLC	
Conveyor motor	1P AC220V 60W	
Conveyor speed	20-1800 mm/min	
PCB size	50-350mm	
Preheating length	1800mm 3 sections PID control Room temperature – 250°C 17,8KW 200KG	
Solder temperature	12KW (Cast-iron heating plate) Room temperature – 300°C	
Solder capacity	450kg	
Wave height	0-12mm	
Wave motor	3P AC220V 0,12KW* 2 pieces	
Finger cleaning pump	1P AC220V 10W	
Cooling system	Forced – air cooling	
PCB transport direction	L->R (R->L)	
Nozzle move motor	Step motor	
Flux capacity	25 Lt	
Air pressure of flux	3-5 BAR	
Conveyor angle	4°-6°	
Power supply	3P AC380V 50HZ	
Normal/starting power	9KW/31KW	
Dimensions	4500 (L) x 1400 (W) 1700mm (H)	
Net weight	1920kg	
Cooling system	Forced-air cooling	Water cooling
Nitrogen system	Option	Standard
Concentration of oxygen		500-1000 ppm
Nitrogen consumption		25 ³ /h
Dimensions	(L) 4500 x (W) 1400 x (H) 1700 mm	

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LF- 350B Lead-Free Soldering System



- Totally lead-free design
- Fully computerized (by an industrial control device) WIN2000 controlled ;
- Dynamic monitoring: functions, state, warning records, fault description and operation guide are illustrated by picture, words and curves
- Wholly controlled by Siemens PLC
- Stable working without halt
- Synchronous insert-plate structure; Japan-made transmission power system equipped (Panasonic motor)
- External arc-shaped streamline design with double glass doors; Convenient to be cleaned and maintained
- Rail width electronically adjusted; Additional curtain for preventing pollution when spraying. Spraying system with welding additive; Japan-made high efficient spraying parts; Japan-made spray nozzle; Norgren bar-free cylinder
- Preheated by high efficient far infrared ceramics pipe; Enough heating power and high stability
- Cesium lamp compensation after preheating, which insures the minimal temperature fall before the insertion of the PCB into the solder pot
- Low oxidation; Anti-erosion solder pot; Latest design of spraying nozzle; Adjustable flowing rate and thickness
- High temperature solder pot motor imported from Italy; Stepless variable speed; Independent controlling
- Solder pot swaying motor to promote the efficiency of SMD and welding
- External casting heating board of the solderpot with high efficiency
- Acoustic and optical warning and emergency brake system
- Programmed automatic turning-on by the operator



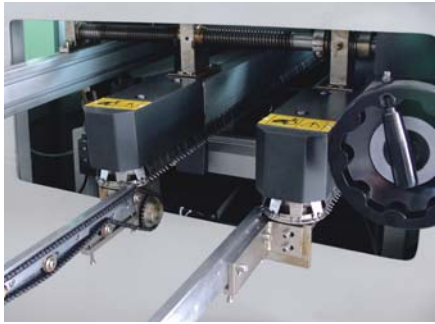
Temperature profile testing function, can save, analysis and uses the data curves after the testing



Computer control and display
Windows control interface
Data manage computerize



TOLO'S LEAD-FREE SOLDERING SYSTEMS



Synchronous insert board
Smooth and stable



Solder pot independent designed, convenient for the cleaning and the change between normal and lead-free alloy



Special design for oxidation preventing; lowest oxidation

	LF-350B
Control mode	Industrial computer control (Windows OS) + PLC
Conveyor motor	1P AC220V 60W
Conveyor speed	20-1800 mm/min
PCB size	50-350mm
Preheating length	1800mm 3 sections PID control Room temperature – 250°C 17,8KW200KG
Solder temperature	12KW (Cast-iron heating plate) Room temperature – 300°C
Solder capacity	450kg
Wave height	0-12mm
Wave motor	3P AC220V 0,18KW* 2 pieces
Finger cleaning pump	1P AC220V 10W
Cooling system	Forced – air cooling
PCB transport direction	L->R (R->L)
Flux capacity	25 LT
Air pressure of flux	3-5 BAR
Conveyor angle	4°-6°
Power supply	3P AC380V 50HZ
Normal/starting power	8KW/30KW
Dimensions	(L) 4100 x (W)1400 x (H)1700 mm
Net weight	1530 kg

LF- 350A Lead-Free Soldering System



- Japan-made PLC control
- Synchronous insert-plate structure; Japan-made conveyor power equipped (Panasonic motor)
- External arc-shaped streamline design with double glass doors; Convenient to be cleaned and maintained
- Rail width manually adjusted; Additional curtain for preventing pollution free spraying
- Spraying system with, Japan-made high efficient spraying parts; Japan-made spray nozzle; and bar-free cylinder
- Preheated by high efficient far infrared ceramics pipe; Enough heating power and high stability
- Cesium lamp compensation after preheating, which insures the minimal temperature fall before the insertion of the PCB into the solder pot
- High temperature tin furnace motor imported from Italy; Step less variable speed; Independent controlling
- External casting heating board of the tin furnace with high efficiency
- Acoustic and optical warning and emergency brake system
- Programmed automatic turning-on by the operator

	LF-350A
Control mode	PLC control and panel operation
Conveyor motor	1P AC220V 60W
Conveyor speed	20-1800 mm/min
PCB size	50-350mm
Preheating length	1800mm 3 sections PID control Room temperature – 250°C 17,8KW200KG
Solder temperature	12KW (Cast-iron heating plate) Room temperature – 300°C
Solder capacity	450kg
Wave height	0-12mm
Wave motor	3P AC220V 10W
Finger cleaning pump	1P AC220V 10W
Cooling system	Forced – air cooling
PCB transport direction	L->R (R->L)
Flux capacity	25 LT
Flux system	Rod-less cylinder
Conveyor angle	4°-6°
Power supply	3P AC380V 50HZ
Normal/starting power	8KW/30KW
Dimensions	(L) 4100 x (W) 1400 x (H)1700 mm
Net weight	1530 kg



TOLO'S LEAD-FREE SOLDERING SYSTEMS

MI-300 Lead-Free Soldering System



- Totally lead-free design
- Japan made Mitsubishi PLC Control
- Tabletop model design, adopt to small quantity production or experiment, shake streamline design, flexible operation
- Low oxidation; Anti-erosion alloyed tin furnace; Latest design of spraying nozzle; Adjustable flowing rate and thickness
- High temperature tin furnace motor imported from Italy; Stepless variable speed; Independent controlling
- Acoustic and optical warning and emergency brake system

	MI-300
Control method	PLC Control and panel operation
Conveyour motor	1P AC220V 60W
Conveyor speed	20-0,9m/min20
PCB size	50-350mm
Preheating length	1 section 800mm IR PID control Room temperature – 250°C 7,5KW
Solder temperature	12KW (Cast-iron heating plate) Room temperature – 300°C
Solder capacity	214kg
Wave height	0-12mm
Wave motor	3P AC220V 0,12KW* 2 pieces
Finger cleaning pump	1P AC220V 6W
Cooling system	Forced – air cooling
PCB tran sport direction	L->R (R->L)
Flux capacity	Froth
Conveyour angle	4°-6°
Power supply	3P AC380V 50HZ
Normal/starting power	5KW/20KW
Dimensions	2570 (L) x 1000 (W) 845mm (H)
Net weight	1000kg

TOLO'S LEAD-FREE SOLDERING SYSTEMS



MT-300 Lead-Free Soldering System



- Totally lead-free design
- Japan made Mitsubishi PLC Control
- Synchronous insert plate structure, Japan made conveyor power equipped, steady transportation
- Shaped streamline design, flexible operation, convenient to be cleaned and maintained
- Preheated by high efficient far-infrared ceramics heating pipe, good heat compensation and high stability
- Low oxidation, anti-erosion alloyed tin furnace, energy saving design of spraying nozzle, fulfil lead-free request absolutely;
- External casting heating board of tin furnace with high efficiency;
- Acoustic and optical warning and emergency brake system.

	MT-300
Voltage	380V
Dimensions	3200 L,1200 W ,1600mm H
Conveyor speed	0-900mm/min
Preheating length	800mm 1 section; Room temperature to 200C
Solder pot capacity	200KG
Solder temperature	12KW, Cast-iron heating plate, Room temperature to 300C
PCB width	30-300mm
Model Number	MT-300

TOLO'S LEAD-FREE SOLDERING SYSTEMS



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