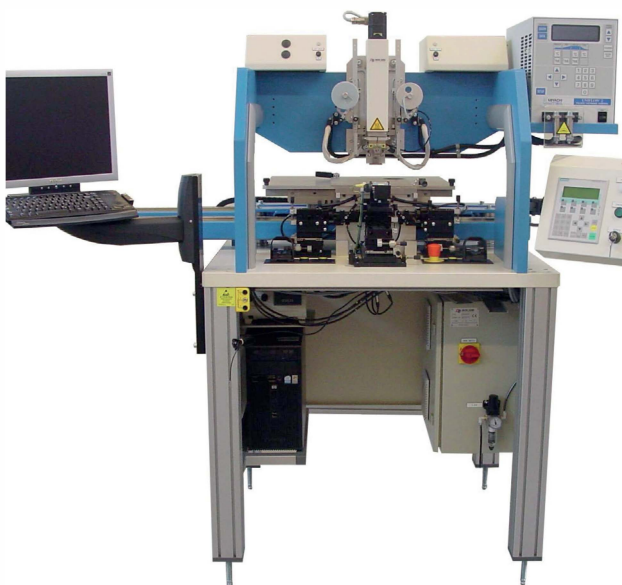


KEY FEATURES

- Supporting all TAB/Flex sizes and almost all LCD/PDP panels
- Fine pitch alignment
- ACF tacking, Heat seal bonding and Hot Bar soldering all-in-one system
- Dual look-up cameras for alignment and track & marker recognition
- Reliable process control, based on proven technology of the Uniflow power supply
- High precision pneumatic bonding head ensures consistent process results
- Optional 1" to 6" panel support

Emerald Series Pulsed Heat Flat Panel Bonding & Repair

Amada Miyachi Europe offers a full product line of LCD/PDP Bonding and Repair Systems. The Emerald Series is designed for a wide variety of TAB and Flex sizes and can handle panel sizes ranging from 1" up to 65". The Emerald system is highly flexible and can be used for ACF tacking, ACF final bonding and Hot Bar soldering. Emerald systems have a flipper X-Y-Z-Phi module for accurate positioning. Multiple thermode dimensions are available and a quick connect block enables fast and easy thermode change. The system can be extended with an upgrade package for the high precision motorized bonding head. We also have several modules, such as screen splitter function with PC, manual or automatic interposer system which can be added to the standard system.



LCD Panel application

TECHNICAL SPECIFICATIONS

TAB sizes minimum L x W mm	8 x 5
TAB sizes maximum L x W mm	150 x 66
Chip (COG) sizes minimum L x W mm	5 x 1
Chip (COG) sizes maximum L x W mm	50 x 10
Flex sizes minimum L x W mm	8 x 5
Flex sizes maximum L x W mm	150 x 50
Customised shapes	customised shapes and sizes out of min/max on request
Thermode (Hot Bar) type	Thermo-plane Thermode
Thermocouple type	K-type
Temperature controller	Uniflow © power supply
Air supply	6 – 8 bar, dry & filtered air
Power requirements	16A, 230 VAC, 50/60 Hz, 16A, 110 VAC, 50/60 Hz (Hot Bar ≤ 60 mm)
Operating temperature	15 – 40 °C
Panel sizes	25.4 – 635 mm diagonal
Product handling standard / optional	PHS-25 / PHS 45 or PHS-65
Dimensions Emerald 45-PH: HxWxD (mm)	2050 x 2250 x 1405
Weight	650 kg
Panel sizes	25.4 – 1143 mm diagonal
Product handling standard / optional	PHS-45 / PHS-65
Dimensions Emerald 65-PH: HxWxD (mm)	2050 x 3050 x 1705
Weight	650 kg
Panel sizes	25.4 – 1651 mm diagonal
Product handling standard	PHS-65

BONDING HEAD SPECIFICATIONS

Force range	SH500	PH500	SH1250	PH1250	PH2500
Head actuation method	Pneumatic	Motorised	Pneumatic	Motorised	Pneumatic
Bonding force	Adjustable	Programmable	Adjustable	Programmable	Adjustable
Force range (N)	40-500	250-1250	20-2500		
Hot Bar stroke mm	50				
Hot Bar sizes L min – L max mm W min – W max mm	4-150 1-5				

Temperature range			
Idle	25 to 100 °C	Heat	60 to 600 °C
Baseheat	25 to 300 °C	Heat Extended Range	60 to 999 °C
Preheat	60 to 300 °C	Postheat	25 to 600 °C
Time period (in 0.1 sec increments)			
Base Heat	0 to 99.9 seconds	Rise to Heat Time	0 to 9.9 seconds
Rise to Preheat Time	0 to 9.9 seconds	Heat	0.1 to 99.9 seconds
Preheat	0 to 99.9 seconds or continuous	Postheat	0 to 99.9 seconds
Communication ports	RS-232, RS-485		

WEIGHT & DIMENSIONS

Dimensions Emerald 25-PH: HxWxD (mm)	2050 x 1200 x 900
Weight	600 kg