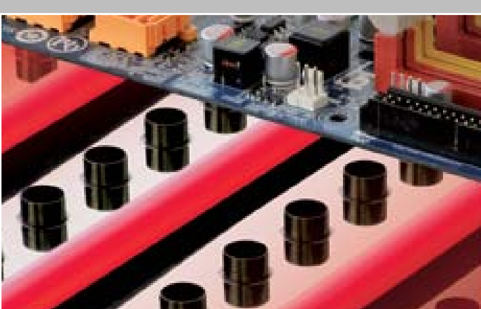
Reliable Rework

All MARTIN rework systems utilize advanced convection and infrared heating technologies, delivering extremely repeatable and efficient heating. HD vision provides high contrast-crystal clear and crisp images. Component alignment and placement is effortless and accurate, performed automatically via AVP package recognition. New APP Shuttle supports flux dipping, solder paste printing solutions along with the presentation of the smallest µSMD.

For Extensive Tasks: EXPERT 10.6

The EXPERT 10.6 rework platform delivers reliable and precise rework of surface mount devices, sockets and connectors. Innovative technologies such as Advanced Vision Placement (AVP) provide repeatable component alignment and soldering automatically, minimizing operator reliance. Ultra-flexible product support features simplify top-justified PCB positioning. All 10.6 systems are configured for residual solder removal and dispensing of flux or solder paste.

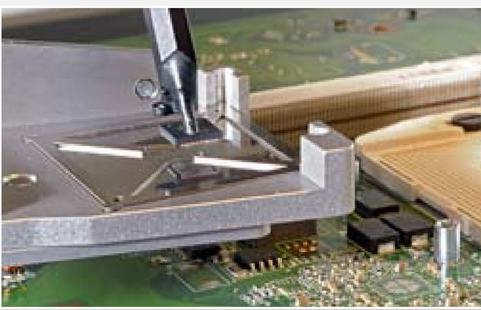


Hybrid from Below

Utilizing the advantages of both convection and infrared technologies, energy is transferred efficiently with uniform heat distribution across the PCB. Controlled heating and cooling of small and large mass assemblies, minimize temperature induced stresses and preheat products for optimized soldering.

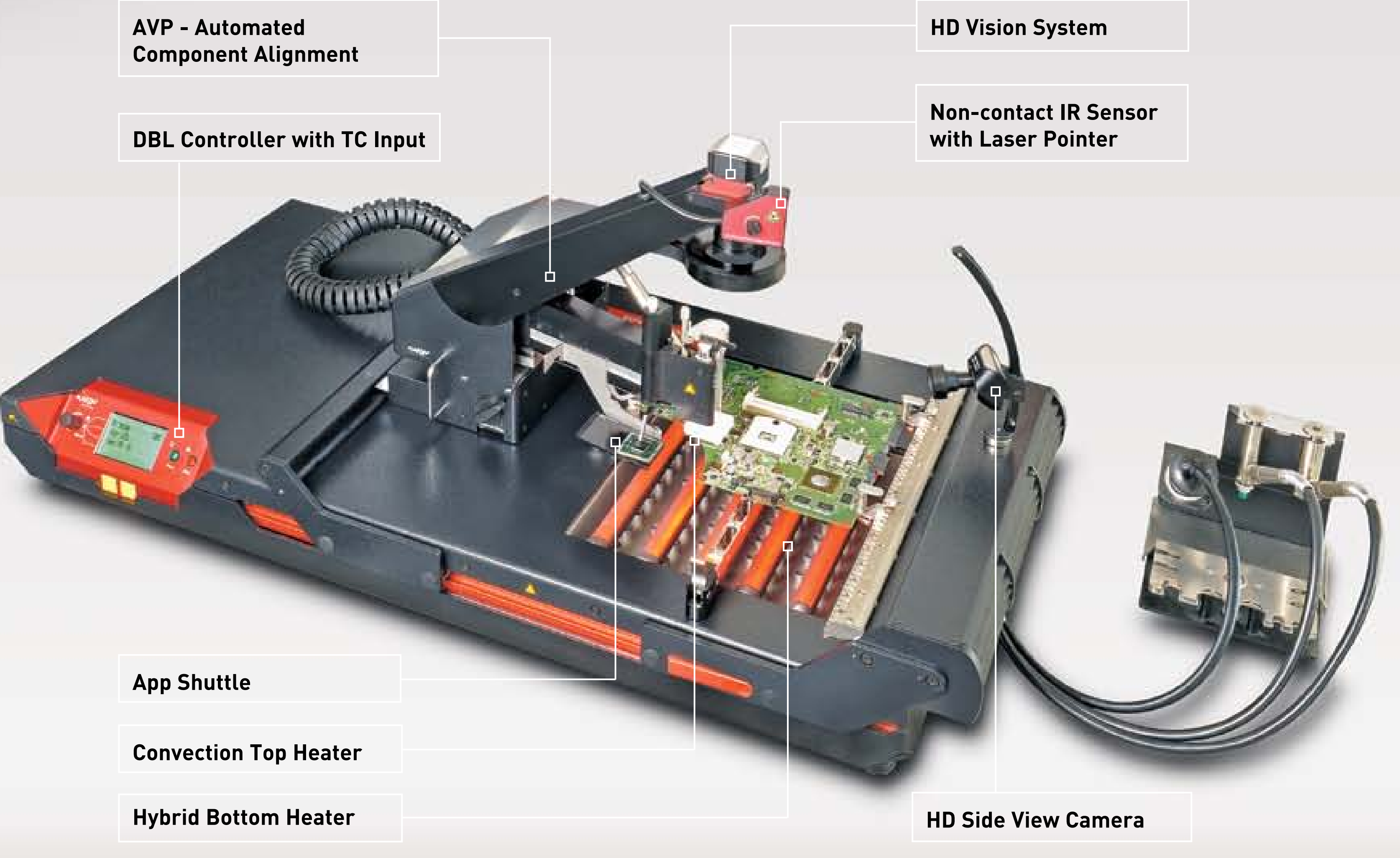
Clear Vision

The EXPERT 10.6 vision system displays HD quality images that are crisp and clear. Various lenses are available for specific applications. The Auto-Lens-Detect function eliminates all vision calibration.



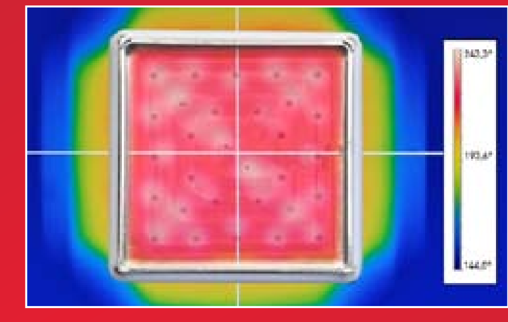
New APP Tools

DIPPING, PRINTING, HANDLING are supported by the new APP TOOL feature. Whether flux dipping BGA solder spheres, printing QFNs or presenting µSMDs for placement - all can be accomplished quickly, precisely and without programming.



Soldering Tools

Advanced technologies such as thermal imaging provide optimal nozzle designs to ensure maximum thermal uniformity and heat transfer for all MARTIN rework systems. Specific nozzle designs provide maximum thermal isolation of adjacent components.



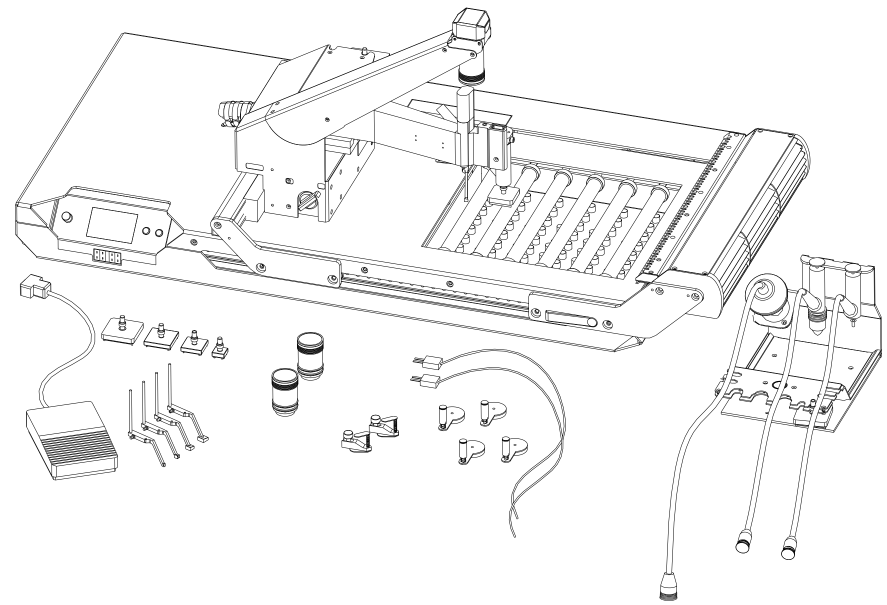
Optimal Temperature distribution of a BGA soldering tool

AVP - Positioning Arm with BGA

AVP - Automated Component Alignment

With just a few mouse clicks an operator verifies the rework site and component position, then using package recognition AVP performs final component alignment and precisely places the component automatically for subsequent soldering. All critical alignment guess work is removed.

EXPERT 10.6 HV



Rework Station with 3000W hybrid under heater. The heating area of 275x245mm² is adjustable to PCB size. Automated SMD placement process by Auto Vision Placer (AVP) incl. Easy Solder software package and DBL 06 control unit with six high resolution sensors inputs for thermocouples (Type K).

This system is particularly suitable for mid size and big PCBs with Fine Pitch components with varying package dimensions.

Standard Equipment (Art.No. DB00.1065)

- Tool set for dispensing, placing, residual solder removal and soldering with magazine
- Set of placement nozzles (BGA/CSP) 3mm, 5mm, 8mm, 10mm
- Set of solder nozzles (BGA) 15mm, 27mm, 35mm, 40mm
- Two camera lenses (BGA und CSP)
- Two thermo couple sensors (type K)
- Four PCB magnet holder 40,5mm (standard)
- Two PCB clips to install at hand rest
- Foot switch
- Rework ABC and manual

Technical Data

System power consumption:	3500 VA	
Power solder pen :	300 W, 35 l/min	
Power underheater:	600-3000 W, 6 x IR-lamps	
Effective heating area:	275 x 245 mm²	
Recommended max. PCB size:	305 x 305 mm²	
Resolution motion system:	0,001 mm	
Placement accuracy :	± 0,015 mm	(Flip Chip)*
	± 0,030 mm	(CSP)
	± 0,040 mm	(BGA)
	± 0,070 mm	(Maxi BGA)*
High resolution CMOS-camera:	5 Mio. Pixel, USB2	
Camera field of view (FOV):	14 x 18 mm²	(Flip Chip)*
	28 x 37 mm²	(CSP)
	37 x 50 mm²	(BGA)
	65 x 85 mm²	(Maxi BGA)*
Mains:	1 Phase, 230VAC, 25A/Phase, Fuse 16A, Connector Type CEE 32A (3 phase)	
Pressurized air:	5 - 8 bar, 100 l/min clean dry air	
Foot print:	865 x 460 mm²	

* Optional Extras

EXPERT 10.6 HV

Optional Extras

SF66.0004	Micro SMD nozzles and lens for AVP 4 licence MS, 3 n, 3 solder n, lens FC
DVSX.0007	Report with pcb Identification for ES 05, licence RP
SF71.0003	IR temperatur sensor for AVP04.1
SF64.0501	Tool slider for AVP 4.1
SF64.0525	Dipp tool 32x0,08mm with squeegee for tool slider
SF64.0526	Dipp tool 32x0,15mm with squeegee for tool slider
SF64.0527	Dipp tool 32x0,22mm with squeegee for tool slider
AT10.0100	Chip Frame Set Dipp Tool 7 pcs (11x14,12x18,12,15,17,23,27)
SF64.0520	Print tool with squeegee for tool slider
SF64.0540	µSMD tool for tool slider
SF66.0110	Lens Maxi BGA for AVP4/4XL, f=16mm, 65*85mm
LW40.1096	Soldering nozzle set CSP/QFN for all CSP types, 4 pieces (9, 11, 13, 16)
LW40.1104	Soldering nozzle set CSP with vacuum for all CSP types, 4 pieces (9, 11, 13, 16)
LW40.1099	Solder Nozzle Set BGA 7 for all (98%) types of BGA, 7 pieces
LW01.0100	Soldering Tool Set QFP for all PLCC ...QFP, 7 pieces
SF36.1001	PCB flex support 40,5 for HIF 08 and IRF, “10 pin“
SF71.0004	Side Camera (lens 35mm) for ES 05, camera, stand, cable, DVD
SF71.0007	Lens Side Camera f=16mm
DB00.0025	Nitrogen input for DBL 04/05/06 (2.p.r) reduces consumption of N2 for vacuum

Report

27mm 23mm 17mm 15mm 12mm 12x18mm 11x14mm

Maxi-BGA
AVP4

Further units and consumables under www.martin-smt.de