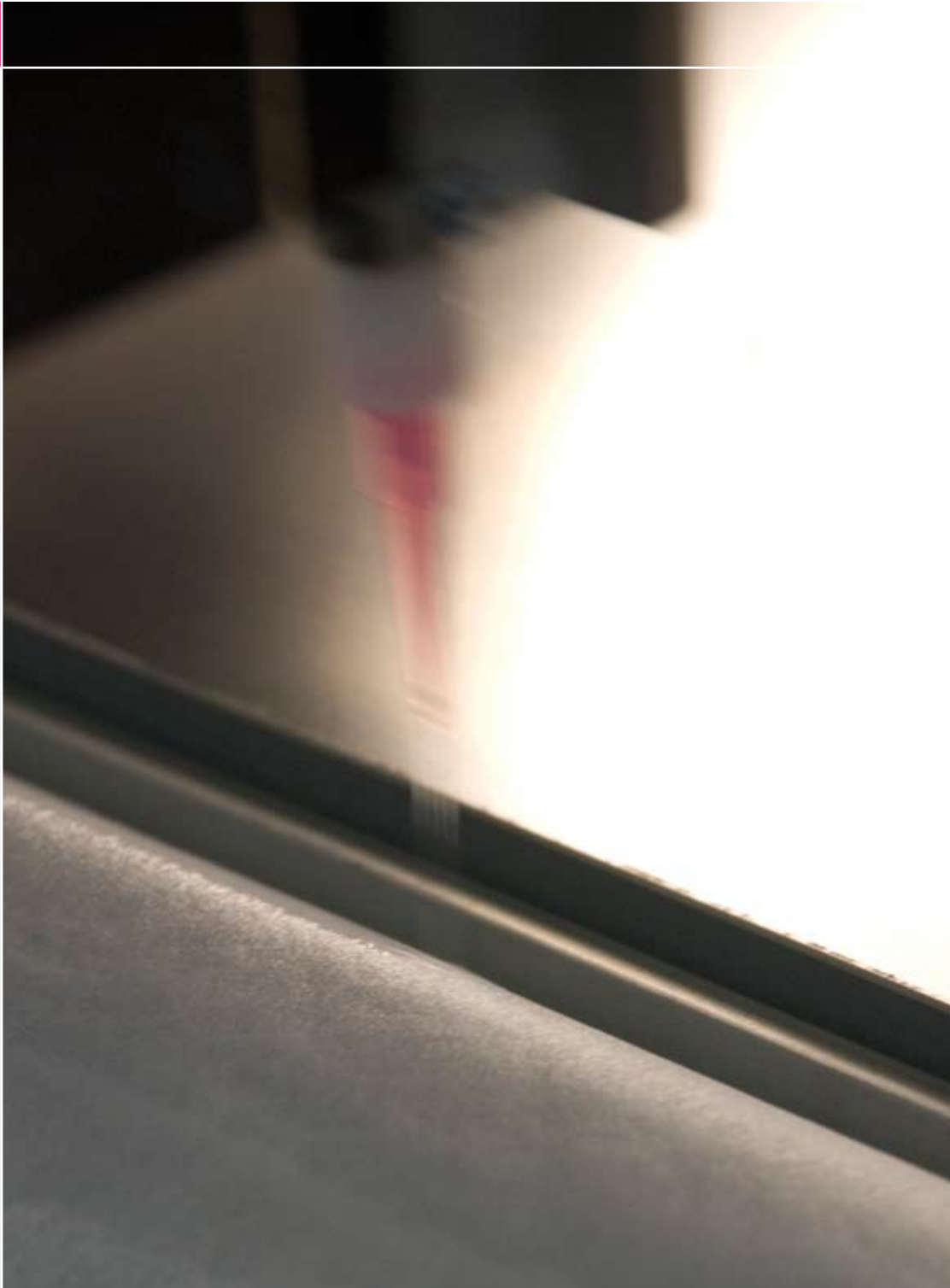


X6 – Automatic Screen and Stencil Printer



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Large Boards & High Speed Inspection

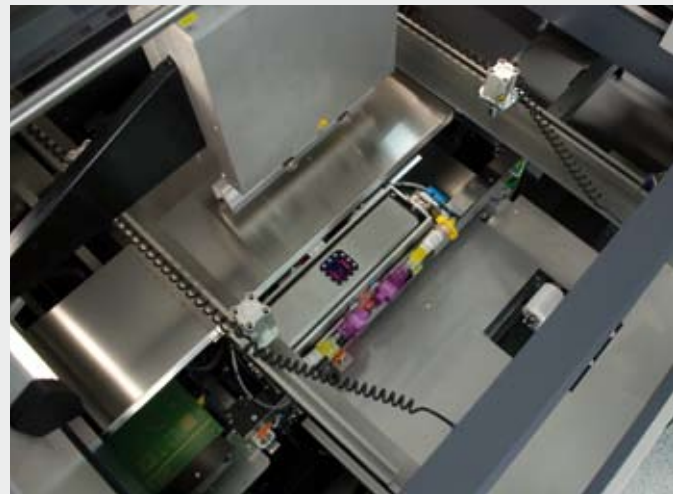
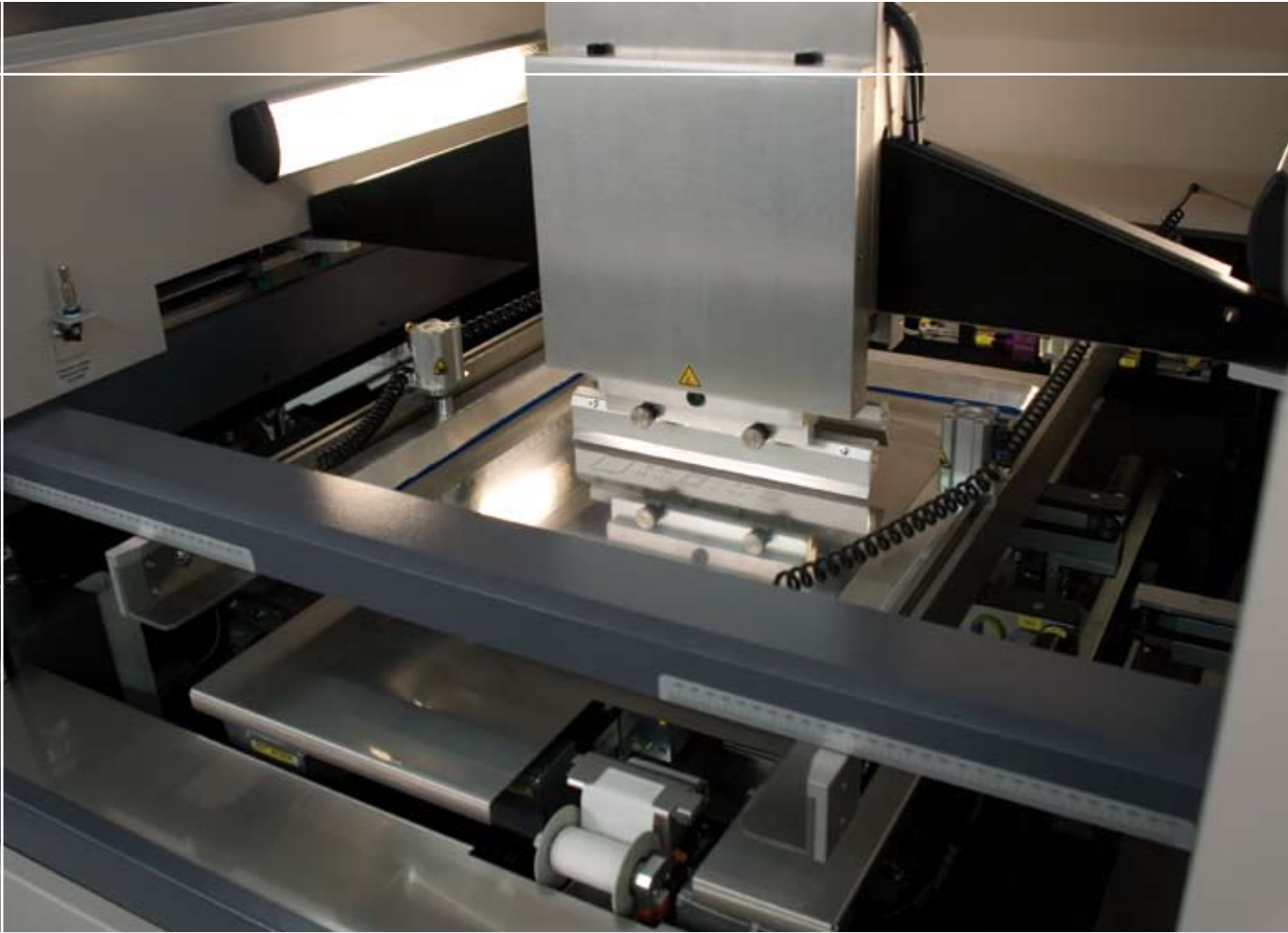
The X6 automatic screen and stencil printer is designed with a focus on enlarged printing formats and applications, which require a high speed post print inspection. Best-in-class alignment repeatability and process capability are guaranteed in order to maintain highest manufacturing quality standards. The X6 also features the EKRA typical exceptional ease of use and flexibility, which both are unmatched. The X6 can be used for the application of solder paste and/or glue onto PCBs, ceramics or glass substrates up to a size of max. 610 x 550 mm (24,9 x 21,6 inches). The well known standard EKRA screen and stencil holder has a flexible design which allows it to be used with all common stencils/screens up to 920 mm (36 inches) without use of an additional adapter. Quick clamp adapter systems of various manufacturers can easily be integrated. The patented optical positioning system EVA™ (EKRA Vision Alignment System) features 2 high-resolution cameras with "Look-up + Look-down" technology for reliable recognition of low contrast fiducials and surfaces. Due to the closed-loop regulation of the dual squeegee print head, the print pressure stays constant throughout the complete printing process and is independent of the PCB characteristics and the print parameters. The optionally available market leading automatic 2½D post print inspection verifies the position and quality of the glue or solder depots, and – compared to simple 2D systems – a qualified feedback is given on the printed volume of the pad and potential height deviations. Furthermore, the EKRA 2½D option is also used on short cuts (bridging) and on stencil bottom side (clogging) control. For fastest inspection cycles with a performance of up to 1.280 mm² per second, the X6 can optionally be equipped with a High Speed

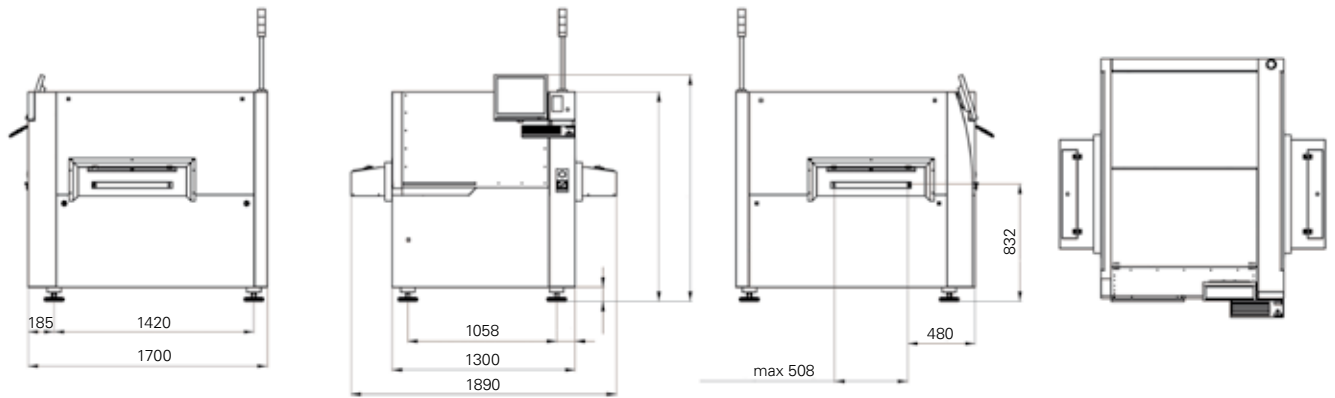
Inspection system HSI, utilizing linear drive technology for high dynamic movements. A further common option is the programmable, automatic stencil cleaning system, which will ensure quick and efficient cleaning results of the bottom side of the stencil whenever a cleaning cycle is necessary.

X6-Prof – Machine Characteristics

- + „Made in Germany“; with high quality welded steel frame for maximum stability and stiffness.
- + Alignment repeatability: $\pm 12,5\mu\text{m}@6\text{Sigma}$.
- + Cycle time: 12 s + print (7 s + print with optional HSP transport).
- + Printing area up to 508 x 508 mm (20 x 20 inches) or optionally 610 x 550 mm (24,9 x 21,6 inches)
- + Patented optical positioning system EVA™ – EKRA Vision Alignment System.
- + 2 independent pneumatic driven print heads with precision proportional valves with closed-loop control
- + Flexible screen and stencil holder for all common screen/stencil sizes up to 920 mm (36 inches) without additional adapter.
- + Simple inspection programming using an automatic teach-in process for the pad positions. Gerber or CAD data are not required.
- + Simple operation of the machine with easy to use MS Windows based software.
- + Quickest product changeover in < 5 min.
- + Large variety of additional options can be integrated and are available upon request.







Technical data – X6

	X6	X6 HSP
Machine dimensions		
Length x width x height	1300 x 1700 x 1610 mm	1890 x 1700 x 1610 mm
Weight	approx.: 900 kg	
Colour	RAL 7015/ SF 700	
Installation requirements		
Power requirements	400 V AC, (480 V AC); 50/60 Hz 3L+N+Ground	
Power consumption	2 kW	
Fuse protection	16 A	
Operating voltage	24 VDC	
Air supply	5 - 6 bar	
Air consumption	10 - 15 l/min	
Squeegee		
Squeegee speed	9 - 200 mm/s	
Squeegee pressure	10 - 250 N	
Squeegee mode	Print / Print Print / Flood Flood / Print Alternating print	
Print material (X/Y)		
Stencil size min.	350 x 350 mm	
Stencil size max.	920 x 920 mm	
Print area min.	80 x 50 mm	
Print area max.	508 x 508 mm optional: 610 x 550 mm	250 x 508 mm optional 508 x 508 mm
Print material thickness	0.5 - 6 mm	
Positioning	Fiducial recognition	
Process		
Alignment repeatability	± 12,5 µm @ 6 Sigma	± 12.5 µm @ 6 Sigma
Cycletime	12 s + print time	7 s + print time (High speed mode) 12 s + print time (Standardmode)

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