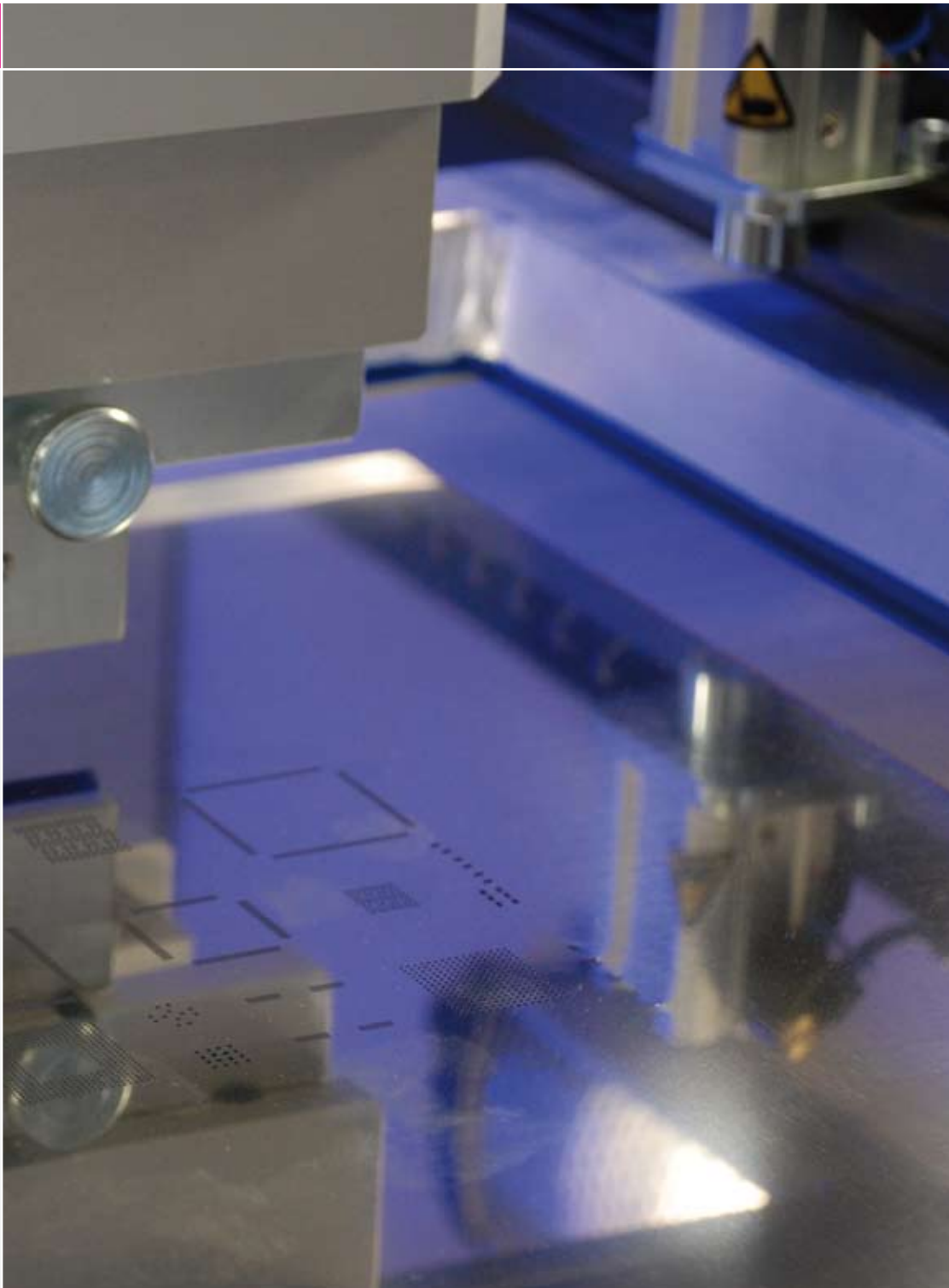


X5 Professional – Automatic Screen and Stencil Printer



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Performance

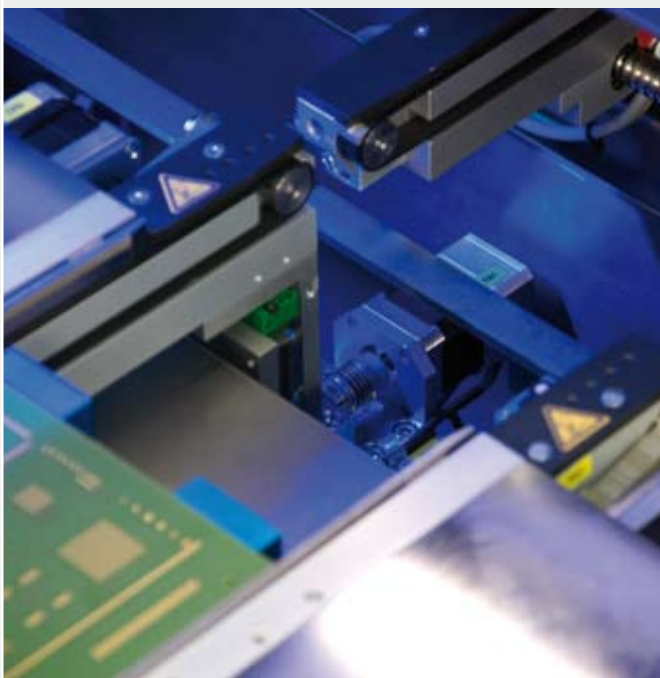
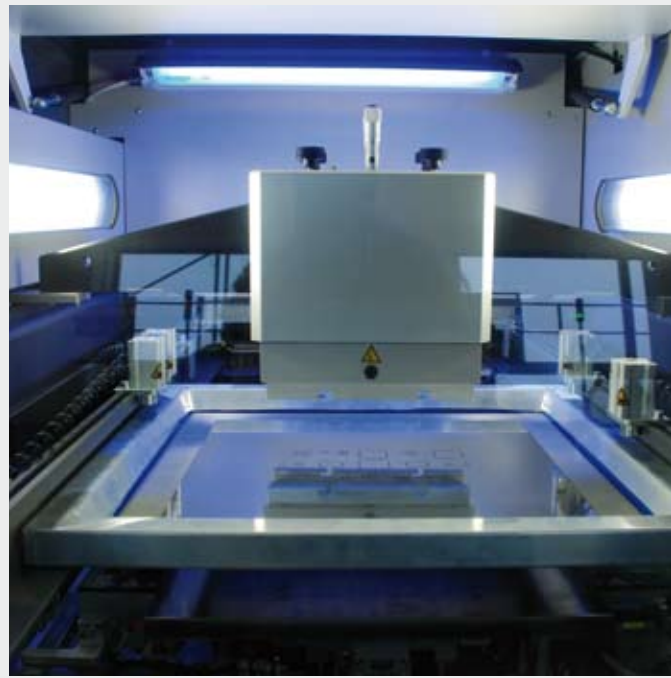
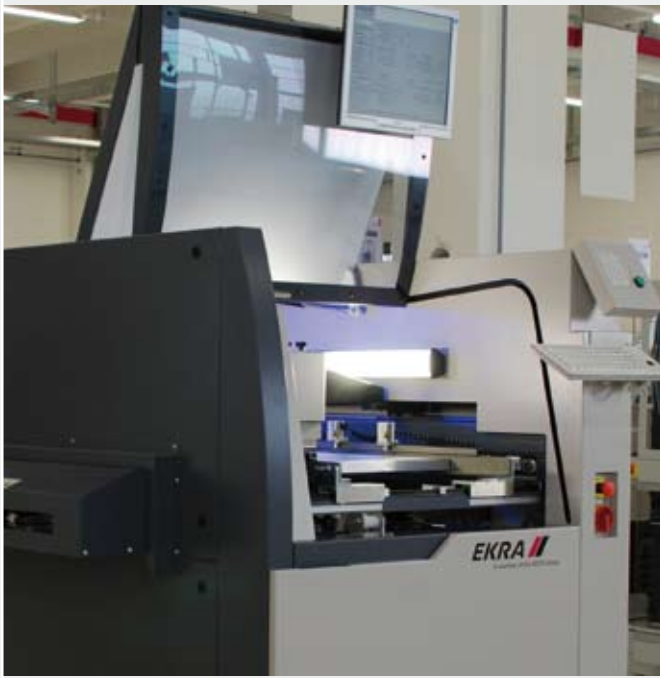
The X5-Prof automatic screen and stencil printer continues more than 30 years of successful printer development by EKRA, guaranteeing the EKRA typical unmatched ease of use and flexibility. Using newest servo drives for all relevant movements including integrated linear scales is leading to the best-in-class alignment repeatability and process capability. The ever optimized triple transport system (HSP) in the X5-Prof offers handling times of 5 s. With access to all kind of options within the EKRA product range, the X5-Prof is designed to match the next level of productivity and performance requirements of today's and tomorrow's electronics industry. The X5-Prof can be used for solder paste and/or glue applications on PCBs, ceramics or glass substrates, with an extended printing area of up to max. 508 x 508 mm (20 x 20 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 740 mm (29 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 2½ D post print inspection verifies the position and quality of the glue or solder depots, and is comparable to simple 2D systems – a qualified feedback on the printed volume of the pad and potential height deviations is given.

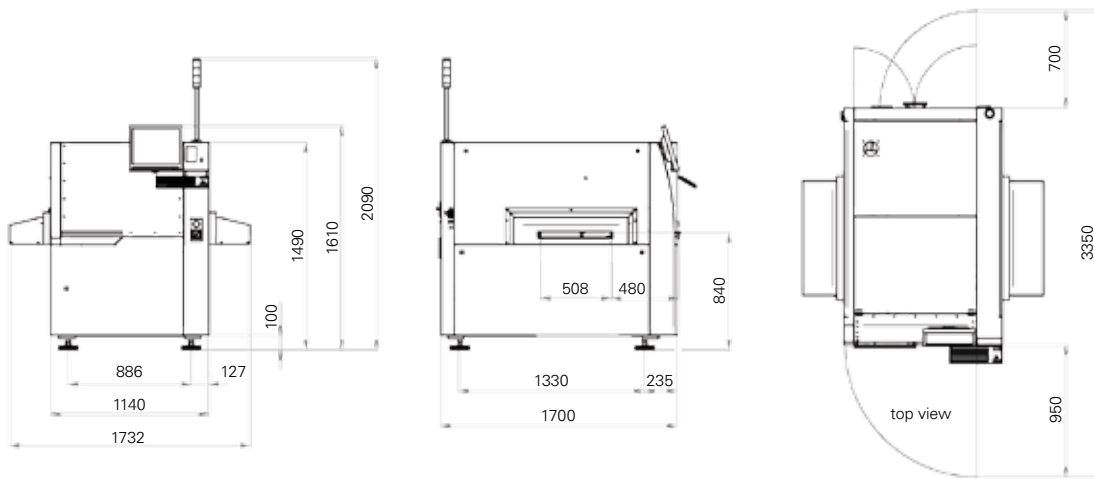
Furthermore, the EKRA 2½ D Option is also used on short cuts (bridging) and on stencil bottom side (clogging) control. Another common option is the programmable, automatic stencil cleaning system, which will ensure quick and efficient cleaning results of the bottom side of the stencil whenever a cleaning cycle is necessary.

X5-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: 10 s + print (5 s + print with optional HSP transport).
- + Printing area up to 508 x 508 mm (20 x 20 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 740 mm (29 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 programming and 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 – X5 Professional

	X5 – Professional	X5 – Professional HSP
Machine dimensions		
Length x width x height	1140 x 1700 x 1610 mm	1732 x 1700 x 1610 mm
Weight	ca. 700 kg	
Colour	RAL 7015 / SF 700	
Installation requirements		
Power requirements	400 V AC, (480 V AC); 50 / 60 Hz L+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	
Print parameters		
Print speed	9 - 200 mm/s	
Print pressure	10 - 250 N	
Print mode	Print - Print Print - Flood Flood - Print Alternating print	
Print material (X/Y)		
Frame size min.	350 x 350 mm	
Frame size max.	740 x 740 mm	
Print format min.	80 x 50 mm	
Print format max.	508 x 508 mm	180 x 508 mm optional 508 x 508 mm
Print material thickness	0.5 - 6 mm	
Positioning	Fiducial recognition	
Machine capability		
Repeat accuracy	± 12,5 µm @ 6 Sigma	± 12,5 µm @ 6 Sigma
Cycle time	10 s + print time	5 s + print time (High speed mode) 10 s + print time (Standardmode)

ASYS Group

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