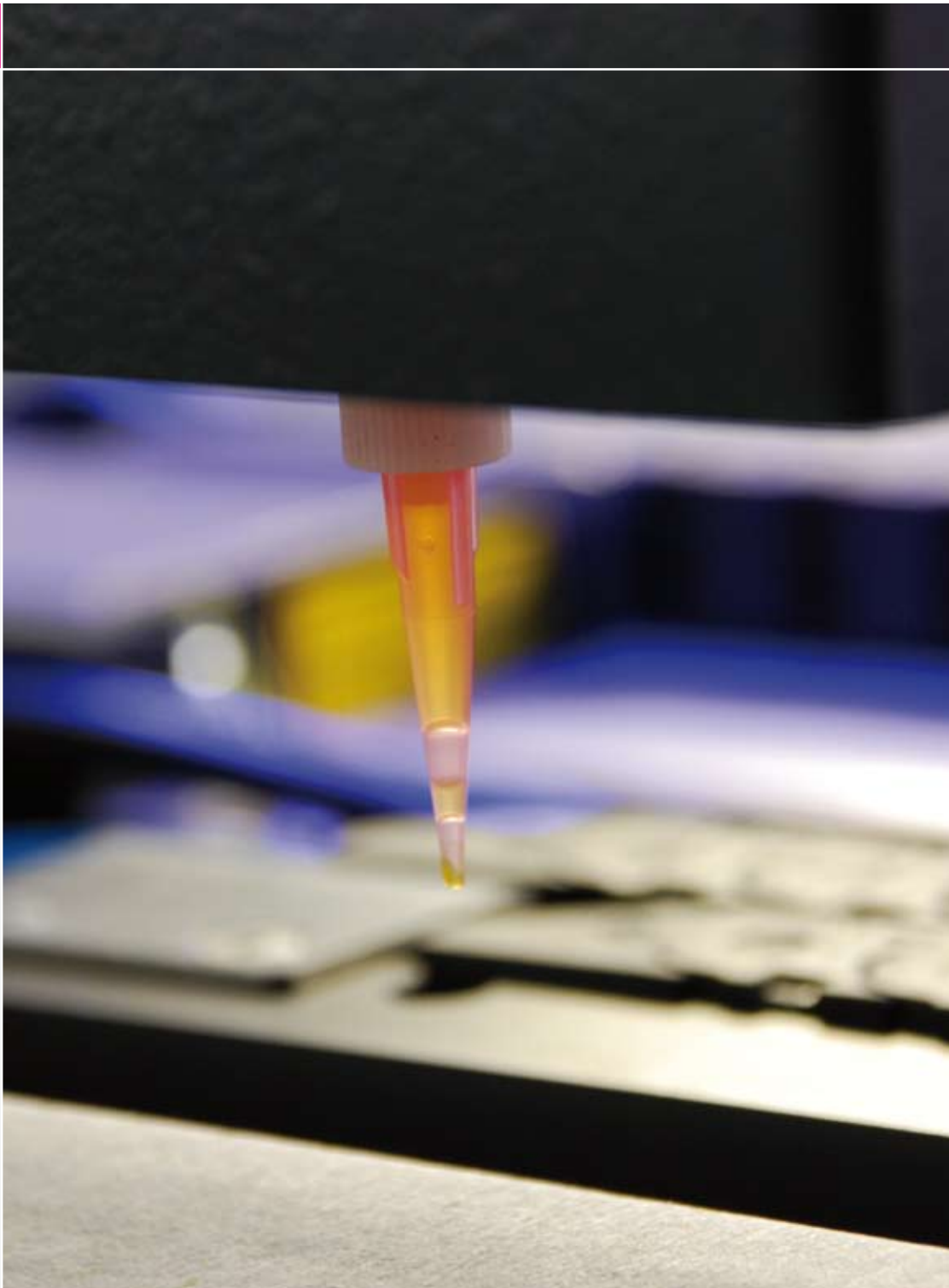


X4 Professional – Automatic Screen and Stencil Printer



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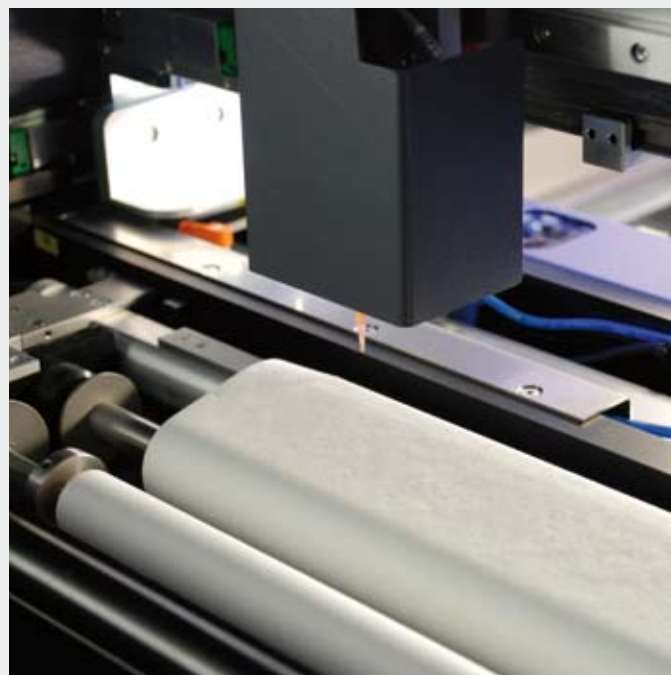
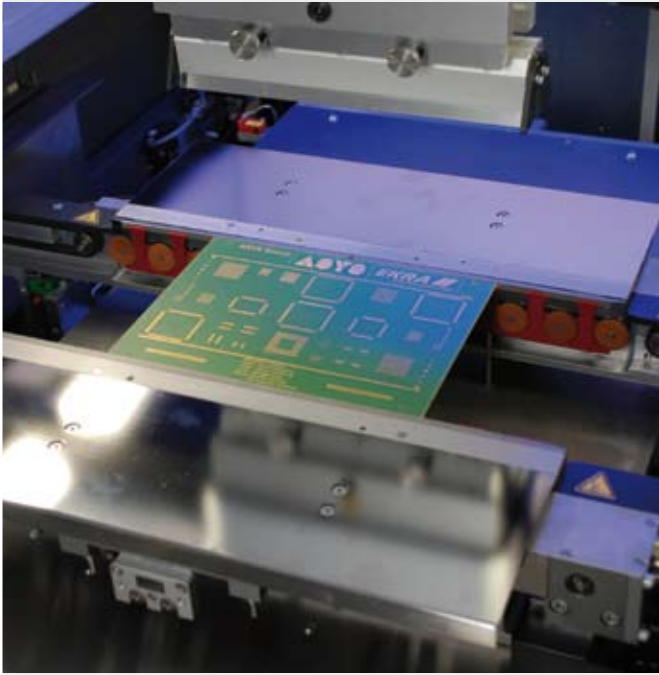
Universal

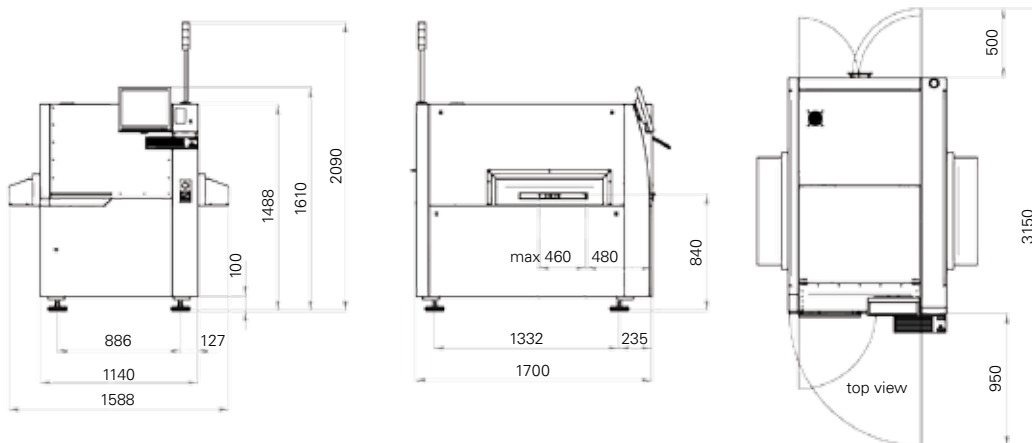
The X4-Prof automatic screen and stencil printer is specially designed to perform any kind of production demands within the electronic industry, and therefore paying special attention to its universal usage. The X4-Prof features the exceptional EKRA ease of use and flexibility which are unmatched. The X4-Prof can be used for the application of solder paste and/or glue onto PCBs, ceramics or glass substrates up to a size of max. 460 x 460 mm (18 x 18 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 clamping 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 2½ D post print inspection verifies the position and quality of the glue or solder depots, and – compared to simple 2D systems – a qualified feedback on the printed volume of the pad and potential height deviations is given. Furthermore the EKRA 2½D option is as well used on short cuts (bridging) and on stencil bottom side (clogging) control. 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.

X4-Prof – Machine Characteristics

- + „Made in Germany“; with high quality welded steel frame for maximum stability and stiffness.
- + Alignment repeatability: $\pm 15\mu\text{m}@6\text{Sigma}$
- + Cycle time: 12 s + print (8 s + print with optional HSP transport).
- + Printing area up to 460 x 460 mm (18 x 18 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 operation of the machine with easy to use Microsoft Windows based software.
- + Quickest product changeover in < 5 min.
- + Large variety of additional options can be integrated and are available upon request







Technical data – X4 Professional

	X4 – Professional	X4 – Professional HSP
Machine dimensions		
Length x width x height	1140 x 1700 x 1610 mm	1588 x 1700 x 1610 mm
Weight	ca. 700 kg	
Colour	RAL 7015 / SF 700	
Installation requirements		
Power requirements	230 V AC, (208 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.	300 x 300 mm	
Frame size max.	740 x 740 mm	
Print format min.	80 x 50 mm	
Print format max.	460 x 460 mm	250 x 460 mm optional 460 x 460 mm
Print material thickness	0.5 - 6 mm	
Positioning	Fiducial recognition	
Machine capability		
Repeat accuracy	± 15 µm @ 6 Sigma	± 15 µm @ 6 Sigma
Cycle time	12 s + print time	8 s + print time (High speed mode) 12 s + print time (Standardmode)

ASYS Group

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