

DOCUMENT ID AP-CKL-SMT-3040	REVISION v2.0 (Updated Official)	TARGET APPLICATION SMT Prototyping & Batch Assembly	EQUIPMENT CATEGORY High-Precision Manual Stencil Printer
--------------------------------	-------------------------------------	--	---

Procurement Verification Overview: Verify these key spatial, mechanical, process window, and logistics parameters prior to purchasing the **AP CHM-T3040 Stencil Printer** to ensure seamless integration into your Surface Mount Technology (SMT) assembly line.

1. AP CHM-T3040 TECHNICAL REFERENCE

Max PCB Dimensions	250 mm × 400 mm (9.8" × 15.7")	Worktable Size	300 mm × 400 mm (11.8" × 15.7")
Max Stencil Frame Size	370 mm × 470 mm (14.5" × 18.5")	Substrate Height Range	0 mm to 80 mm (Adjustable)
Printing Repeatability	±0.01 mm to ±0.025 mm	Fine-Tuning Adjustments	X/Y Axis ±10 mm, Angular Rotation ±30°

2. PRE-PURCHASE TECHNICAL CHECKLIST

✓	#	VERIFICATION ITEM & TECHNICAL REQUIREMENTS	EVALUATION & NOTES
☐	01	PCB & Panel Dimensional Envelope Verification Confirm largest PCB or panel fits within 250 mm × 400 mm print area with at least 15 mm edge clearance for squeegee stroke over-travel. Max Print: 250 x 400 mm Substrate Height: 0 - 80 mm	Max PCB Size: _____ [] Pass [] Exceeds Limit
☐	02	Stencil Frame Standard & Supplier Compatibility Verify stencil supplier provides outer frame dimensions matching 370 mm × 470 mm with border tubing thickness compatible with frame clamps. Frame Compatibility: 370 x 470 mm Outer Size	Supplier Name: _____ [] Confirmed [] Adapter Req.
☐	03	Component Pitch & Process Repeatability Window Analyze smallest component pitch (e.g., 0.4mm QFP/BGA or 0201 passives). Ensure printer's ±0.01 mm repeatability meets aperture aspect (>1.5) & area (>0.66) ratios. Target Pitch: 0.4 mm Fine-Pitch & 0201 Passives	Smallest Pitch: _____ [] Pitch Compatible
☐	04	Workstation Footprint & SMT Line Ergonomics Measure bench space adjacent to Pick-and-Place machine and Reflow Oven. Allow at least 800 mm (W) × 600 mm (D) clear area for printer (~22 kg) and operation. Footprint: ~540 x 380 x 320 mm Weight: 22 kg	Allocated Space: _____ [] Bench Space Ready
☐	05	Consumables, Tooling & Storage Infrastructure Prepare required accessories: stainless squeegees (200mm/300mm), lint-free wipes, IPA solvent, PCB support thimbles, and paste refrigeration (+2°C to +10°C). Accessories: Stainless Squeegees, Thimbles, Solvent	Paste Fridge: [] Ready [] Consumables In-Stock
☐	06	Vendor Support Terms, Warranty & Delivery SLA Confirm official Applied Physics USA warranty coverage, spare parts lead times (fine-tuning screws, struts), technical support terms, and delivery schedules. Support: Applied Physics Official SLA & Warranty	Quotation Ref: _____ [] Approved for Order