

AcuReel 300 & 550

Single & Double Side UV Exposure Roll to Roll



AcuReel 300

LEDLight™

ColliLight™

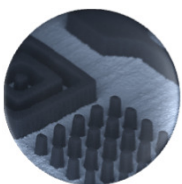


AcuReel 550



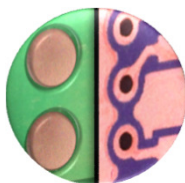
Solution For High-End Roll to Roll Exposure Processes

Resolution



Down to
15µm | 0.6 mil

Registration



±5µm | ±0.2mil
AW/AW

Throughput



Up to 8500
images / day

High Savings



High Power
UV LEDs

AcuReel 300



AcuReel 550



- Fully Intuitive & Friendly HMI
- High Exposure Resolution
- High Power UV Leds – Ultimate Cost Savings
- Led Light Source: No Artwork Expansion
- Stitching Function

Cleanliness Hood



New Unwinder / Winder with low tension material control & Anti-scratch material solution

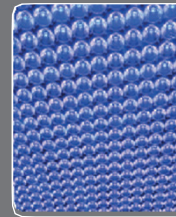
UV Light Sources



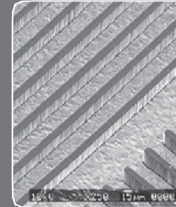
AcuReel 300 & 550 Specifications

APPLICATIONS	FPCB / Flex • Photo Chemical Milling • Photovoltaics • TouchPanel	
Process	Inner Layers, Outer Layers & Coverlay / Soldermask / PSR	
Exposure Area	Up to 300mm x 650mm • Up to 11.8" x 25.6"	
- AcuReel 300	Up to 300mm x 650mm	• Up to 11.8" x 25.6"
- AcuReel 550	Up to 550mm x 650mm	• Up to 21.6" x 25.6"
Web Thickness	Down to 15µm + copper • 0.6mil	
RESOLUTION	15µm/15µm • 0.6mil/0.6mil (Line & Space) for dry film ⁽¹⁾ Min Dam 50µm • 2mil for Soldermask ⁽¹⁾	
Light Engine	ColliLight™ 5kW & 8kW	LedLight™
Light Intensity	≥25mW/cm ² (5kW lamp) ≥40mW/cm ² (8kW lamp)	Up to 55mW/cm ²
Collimation	≤ 2° ⁽²⁾	≤ 1.6° ⁽²⁾
Declination	≤ 1° ⁽²⁾	No declination ⁽²⁾
Uniformity	≥ 80% ⁽³⁾	≥ 85% ⁽³⁾
Dry Film Resist	For all types of dry film	
Coverlay / Soldermask / PSR	For all types of solder resist: green, white, blue, red, black...	
Exposure Method	Double side or single side	
Exposure Contact	Soft or hard contact vacuum – CMI™ available	
ALIGNMENT	±5µm / 0.2mil AW/AW (after vacuum) ±8µm / 0.32mil AW/Web (after vacuum) ±3µm / 0.12mil Repeatability (after vacuum)	
CCD Cameras	4 cameras for I/L & O/L 4 cameras + 4 cameras for Coverlay / Soldermask / PSR	
Mask	Compatibility Glass Mask & Film Mask	
THROUGHPUT	Up to 8500 images/day ⁽⁴⁾	
Batch Changeover	≤ 5 minutes - Masks & Settings change	
SOFTWARE	ALTIX SUITE with 17" touch screen	
Languages	English, Simplified & Traditional Chinese, Korean, German, French...	
HIGH YIELD		
Air Cleanliness	Hepa filter class 100 & Clean Dry Air Network (CDA)	
Features	Tacky roller (web cleaner) including deionization system	
Construction	Stainless steel	
GENERAL UTILITIES		
Power Supply	220/400/480V • 3 Phases • 50/60Hz 6~7	
Air Supply	bars with 1.5 m ³ /min	
Power Consumption	17kW (2x5kW lamps) 25kW (2x8kW lamps)	6kW with LedLight™
Water Supply	20-30 l/min @3 bars (for 2x5kW unit) 50-80 l/min @3 bars (for 2x8kW unit)	20-30 l/min @3 bars
UV source cooling	Air cooled / Close Loop Lamp Cooling (CLLC)	
Machine Weight	4,750kg • 10,450lbs 5,250kg ⁽⁵⁾ • 11,550lbs ⁽⁵⁾	
Dimensions		
- With Contact Rollers	4 983mm (L) x 2 375mm (W) x 2 350mm (H) • 196" (L) x 94" (W) x 93"(H)	
- With Pulling Table	4 225mm (L) x 2 378mm (W) x 2 350mm (H) • 166" (L) x 94" (W) x 93"(H)	

(1) depending on photoresist, surface preparation & DES process • (2) depending on max. exposure area
(3) depending on exposure area - calculation: Min/Max • (4) depending on process • (5) with cabins



Best Cost / Performance Ratio:
Advanced UV Led Solution provides the Best Resolution at the Lowest Cost per Image



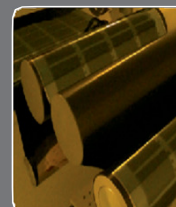
High Resolution:
15µm (Line & Space)



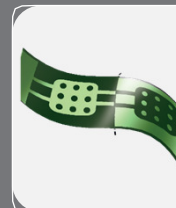
High Throughput:
> 8 500 Images per Day



High Registration Capabilities:
±5µm Artwork to Artwork



High Production Yield:
Low Tension Material Control & Anti-Scratch Material Solution



Stitching Function:
< 20µm
Patented Hardware & Algorithm to provide a perfect Stitching for Image
« N » to Image « N+1 »