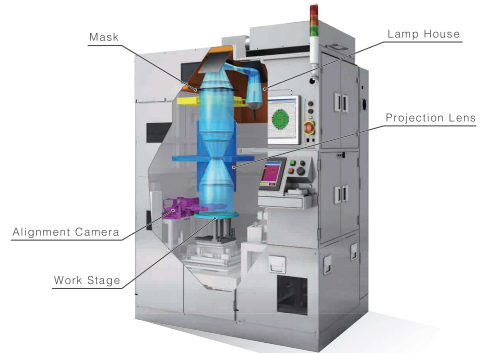




UX-4 Full-Field Projection Aligner

Resolution	2 μ m L/S~
Overlay	Top Side : $\pm 1\mu$ m, Back Side : $\pm 1.5\mu$ m
Throughput	120wph
Wafer Size	$\Phi 100$ mm / 150mm / 200mm Si, Sapphire, GaN, GaAs, SiC, Glass
Wafer Transfer	Cassette to Cassette Automatic



Benefit for customers

✓ Flexible on surface shape

✓ Higher productivity with no-mask damage system/
One shot per wafers

Aligner	Yield Cost (%)	Running Cost (%)	Initial Cost (%)
Company A Proximity Aligner	~100	~50	~150
Second Hand Stepper	~100	~50	~100
Company C Stepper	~100	~50	~180
Company D Stepper	~100	~50	~130
UX-4477SC	~100	~50	~100

Advantage of Full-Field Projection Lithography

	UX-4(Full-Field Projection)	Proximity/Contact Aligner
Mask Damage Free	<p>Good</p> <p>No mask-wafer contact throughout the process.</p>	<p>Not Good</p> <p>Damaged</p>
High Productivity	<p>Good</p> <p>Full-Field Projection > Proximity/Contact Aligner</p>	<p>Not Good</p> <p>Exposure → Alignment → Exposure</p>
3D Lithography	<p>Wafer Top</p> <p>500μm Bottom</p> <p>Good</p> <p>Large Depth of Focus. High resolution on both top and bottom of step.</p>	<p>Wafer Top</p> <p>500μm Bottom</p> <p>Not Good</p>
Thick Resist Process	<p>Good</p> <p>No mask-wafer sticking problem with thick-sticky resist.</p>	<p>Not Good</p> <p>Stuck</p>