

INTERNATIONAL DIRECTORY OF WLP LITHOGRAPHY EQUIPMENT

Notes: This list was compiled from data supplied by the respective providers and is not all-inclusive as to company or service offered. Advertisers in this issue are indicated by **boldface** listings. CM=Consult Manufacturer.

<p>Company Name Address ☎ Phone ✉ Fax 🏠 Year Founded</p>	<p>● Model(s) 🕒 Introduced ▲ Level of Automation <small>A=Automated, SA=Semi-Automated, M=Manual</small> ✖ Lithography Method <small>C=Contact, P=Projection, PS=Projection Scanning, PST=Projection Stepper, PMA=Proximity (Mask Aligner), O=Other</small></p>	<p>☉ Exposure Source and Wavelength in nm ★ Max. Wafer Size in mm at throughput per hour (WTH) Ⓐ Alignment Accuracy in μm and Ⓡ Resolution in μm ✓ Principal Applications <small>WB=Wafer Bumping, RDL=Wafer Redistribution Layers, Si=Silicon Layers, ICs, CS=Compound Semiconductor Wafers, MEMS=Wafers for MEMS Devices, Opto=Wafers for Opto-photonics Devices, P=Production, R&D=R&D</small></p>	<p>[web site] ✳ Contact 🌐 Additional Offices</p>
<p>EV Group (EVG) E. Thallner GmbH DI Erich Thallner Strasse 1 A4782 St. Florian/Inn, Austria 🏠 1980</p>	<p>● EVG620 🕒 1985 (continuous updates) ● EVG6200 🕒 1998 ● IQ Aligner 🕒 2002 (continuous updates) ▲ A, SA, M (all models) ✖ C, PMA, O=Imprint Lithography, Micro-Contact Printing</p>	<p>☉ Mercury (Hg) arc lamp or Mercury Xenon (HgXe) lamp with wavelength spectrum from 200 to 450nm. Different filter configurations are used to generate different output wavelength spectra. Hg Type C: 350-450nm (most common), Hg Type B: 280-350nm (most common), Hg i-line: 365nm, Hg SU-8: 365-450nm, HgXe Type A: 240-280nm, HgXe Type D: 20-240nm ★ EVG620: 150mm with 140 throughput per hour max. EVG6200: 200mm with 140 throughput per hour max. IQ: 300mm with 124 throughput per hour max. Ⓐ 0.5μm Ⓡ 0.5μm minimum ✓ WB, RDL, Si, CS, MEMS, Opto, P, R&D</p>	<p>[evgroup.com] ✳ Steven Dwyer, VP and GM—North America s.dwyer@evgroup.com ☎ 480.727.9600 🌐 EV Group Inc. 7700 S. River Pkwy. Tempe, AZ 85284</p>
<p>SUSS MicroTec Lithography GmbH Division of SUSS MicroTec Schleissheimerstr. 90 85748 Garching, Germany 🏠 1949 (1999, IPO)</p>	<p>● MA300Plus 🕒 2001 ● MA200Compact 🕒 2004 ▲ A (both models) ✖ PMA</p>	<p>☉ Direct current Mercury short arc lamps 330-450nm (ghi-line) ★ MA300Plus: 300mm with >100 throughput per hour MA200Compact: 200mm with >100 throughput per hour Ⓐ 0.5μm (both with DirectAlign Technology) Ⓡ >3μm (both at proximity exposure) ✓ WB, RDL, Si, P (both) CS, MEMS, Opto, R&D (MA200Compact)</p>	<p>[suss.com] ✳ Ralph Zoberbier, International Product Manager—Mask Aligner r.zoberbier@suss.de ☎ +49.89.32007.382</p>
<p>Tamarack Scientific Co. Inc. 220 Klug Circle Corona, CA 92880 🏠 1966</p>	<p>● Series 300/400 Projection Tools 🕒 1980-1985 ▲ A, SA, M ✖ C, P, PS, PST, PMA</p>	<p>☉ Mercury short arc lamp at 350-450nm ★ CM Ⓐ CM Ⓡ CM ✓ WB, Si, MEMS, Opto, P, R&D</p>	<p>[tamsci.com] ✳ Matt Souter msouter@tamsci.com ☎ 951.817.3700</p>
<p>Ultratech Inc. 3050 Zanker Rd. San Jose, CA 95134 🏠 1979</p>	<p>● CM 🕒 CM ▲ CM ✖ CM</p>	<p>☉ No data supplied at press time ★ CM Ⓐ CM Ⓡ CM ✓ CM</p>	<p>[ultratech.com] ☎ 408.321.8835</p>