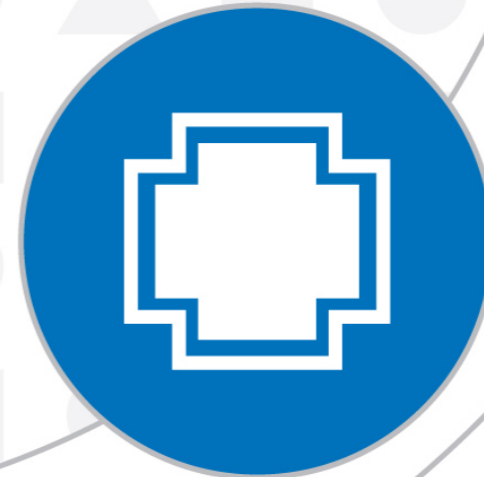
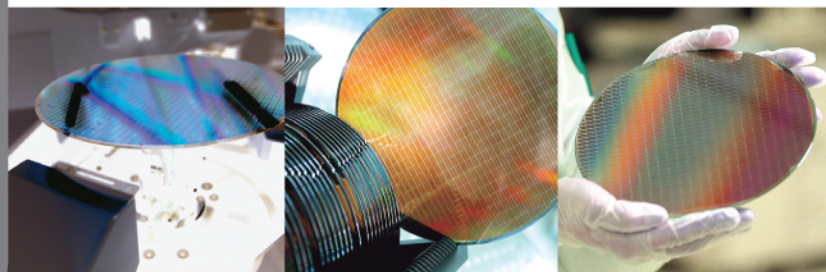


MIDAS

Mask Aligner
Spin Coater





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Greeting

Midas System develops and produces **Mask Aligner** and **Spin Coater** equipment required by laboratories and companies related Semiconductor, **MEMS**, **Bio-element** and **Nano Technologies**.

As for the **Mask Aligner** for wafer, we led the first development and commercialization in Korea, and continued to make up for the technologies in order to strengthen the basis as a technology centered company. Also the **Mask Aligner** for wafer is applicable for various fields and at present utilized in broad fields such as the **research and production of semiconductor**, the research on the **MEMS process** and the production from **MEMS application**, researches on **Bio Chips** and **Nano technologies**.

Providing the Customized Products to Fit to Customer's Applications

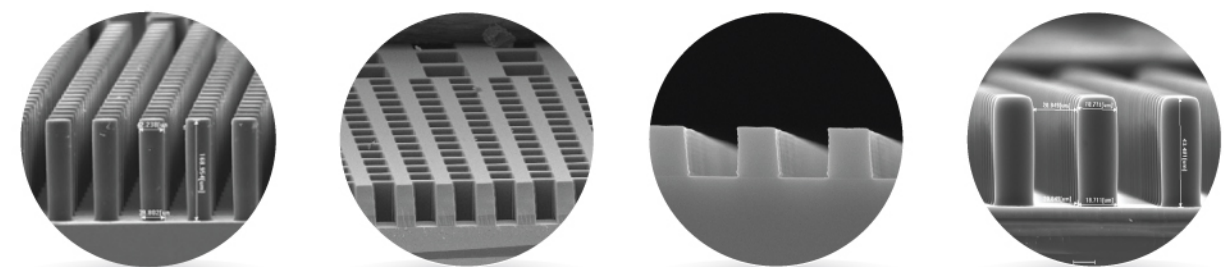
Midas System produces and supplies the Mask Aligner based on customized design to fit to demanded applications from domestic companies and research institutes, and also provides the related equipment necessary for process of semiconductor, in terms of considering conveniences of customers.

For all our customers

All our employees and managers at Midas System will do our best to become a world best company based on the confidence to produce more applicable and more efficient product for your researches and production.

we always appreciate for your attention and supports.

Gon Cheol, Lee



Manual Spin Coater

Desk Top precision Spin Coating system are designed for laboratory use and low volume production coating application. They are designed to accurately apply a variety of liquid materials to planar substrates. Film Thickness range from several to ~100 um depending on material viscosity, rotation speed & coating time

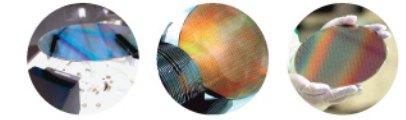
SPIN COATER



SPIN-1000T 224(W)*267(D)*183(H)mm
SPIN 1200T 230(W)*340(D)*260(H)mm
SPIN 1200D 230(W)*340(D)*260(H)mm



SPIN 3000D 390(W)*570(D)*300(H)mm
SPIN 3000A 390(W)*570(D)*340(H)mm



Auto dispenser Spin Coater

SPIN COATER

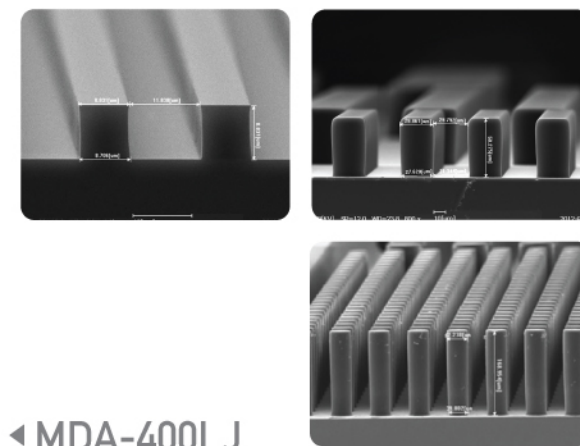


SPIN 4000A 650(W)*945(D)*1000(H)mm
SPIN 5000A / 7000A Customized
 Auto dispenser Spin Coater / Developer

	SPIN 1200T	SPIN 3000D	SPIN 3000A	SPIN 4000A	SPIN 5000A
Substrate size	Piece ~ 4"	Piece ~ 6"	Piece ~ 8"	Piece ~ 12"	Customized
Spin speed	MAX. 10000 RPM	MAX. 8000 RPM		MAX. 3000 RPM	Variable
Acceleration rate	MAX. 3000 rpm/sec				
Motor	DC Servo Motor			AC Servo Motor	
Spin state	50 Steps / 50 Recipes	50 Steps / 50 Recipes	50 Steps / 50 Recipes	20 Steps / 20 Recipes	50 Steps / 20 Recipes
Bowl	8" PP	12" STS		18" STS	Customized
Option				Option : Auto Dispenser Arm & Nozzle	Option : Auto Dispenser Arm & Nozzle Handling robot

Manual Mask Aligner

The MIDAS Mask aligner offers a higher alignment accuracy and more flexible process of all applications. It represents next generation of full-field lithography systems



◀ MDA-400LJ
800(W)*800(D)*800(H)mm



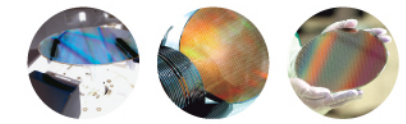
▲ MDA-400M
1080(W)*1060(D)*1580(H)mm



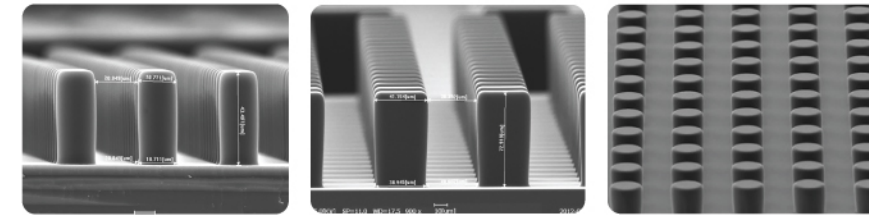
▲ MDA-400M-6
1080(W)*1060(D)*1580(H)mm

MASK ALIGNER

www.aligner.co.kr / www.midas-system.com



Semi-auto Mask Aligner



▲ MDA-600S
1256(W)*1151(D)*1600(H)mm



▲ MDA-60MS / 80MS
1400(W)*1100(D)*1600(H)mm

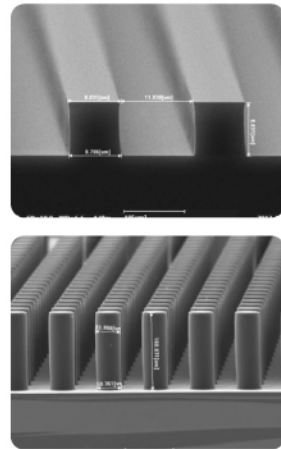
MASK ALIGNER

	MDA-400LJ (UV LED)	MDA-400M	MDA-400M-6	MDA-600S	MDA-60/80MS
Substrate size	Up to 4 inch	Up to 6 inch	Up to 6 inch	Up to 6 inch	Up to 8 inch (option 200x200mm)
Resolution	1 um with 1 um PR / Si wafer				
Alignment Accuracy	< 1 um (Alignment Accuracy)				
Lamp Uniformity	≤ 3 % (Beam Uniformity)			≤ 5 % (Beam Uniformity)	
365nm Beam Intensity	> Max. 30 mW/cm ²			> Max. 25 mW/cm ²	

Semi-auto Mask Aligner



◀ MDA-20000SA

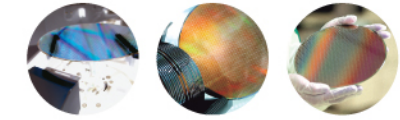


MDA-80SA ▲

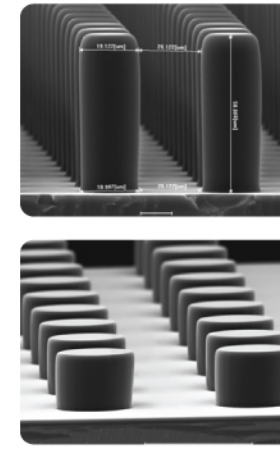


▲ MDA-12SA

	MDA-80SA	MDA-12SA	MDA-20000SA
Substage size	Up to 8 inch	Up to 12 inch	Customized (Large area)
Resolution	1 um with 1 um PR / Si wafer		10 um with 1 um PR (option 5um)
Alignment Accuracy	< 1 um (Alignment Accuracy)		
Lamp Uniformity	≤ 5 % (Beam Uniformity)		
365nm Beam Intensity	> Max. 30 mW/cm ² (365 nm)		



Fully-auto Mask Aligner



MDA-12FA ▶



MDA-40FA / 60FA ▲



▲ MDA-80FA

	MDA-40/60FA	MDA-80FA	MDA-12FA
Substage size	2, 4 inch / 4, 6 inch	Up to 8 inch	Up to 12 inch
Resolution	1 um with 1 um PR / Si wafer		1.5um with 1um PR / Si wafer
Alignment Accuracy	< 0.5um(Alignment Accuracy)		
Lamp Uniformity	≤ 3 % (Beam Uniformity)	≤ 5 % (Beam Uniformity)	
365nm Beam Intensity	> Max. 30 mW/cm ² (5kW : 80mW/cm ²)		

ETC



◀ MINILAB

- Composition
 - Spin Coater (SPIN-1200T), Hot plate, D.I water system
- Drain line
- Drain tank
- Exhaust
- N2 gun
- D.I water gun
- Dimension(mm) 1000(W) * 560(D) * 1630(H)



◀ Nanoimprint

- Sub-10nm resolution with 99% yield
- Supports both hard and soft molds
- Variable mold and substrate sizes offer unparalleled convenience and flexibility
- Auto-Release process prevents mold/substrate damage during separation and maximizes yield per imprint
- Programmable PLC with touch-screen user interface allows process control through customized parameters

Intensity meter ▶



- Measurable Intensity : 365nm (UV I-line)
- Measurable wavelength : 0 ~99.99mW/cm²
- Dimension(mm) 80(W) * 45(D) * 150(H)

History

2010 ~

- Acquired CE certificate of MDA-40(60)FA [2015]
- Developed 600 X 600 mm high resolution (1 um) Exposure module [2014]
- New model developed MDA-400LJ(UV LED), MDA-150 [2012]
- Patent Registration : UV LED Mask aligner (Korea / 10-1322737) [2011]
- Obtained CE certification of MDA-60MS [2011]
- Program registration of 'operation for automatic alignment exposure device and the control program.' [2010]

2006
~ 2009

- Obtained CE certification of MDA-400M [2009]
- Developed 300/330mm Mask Aligner for the Wafers/Ceramics [2008]
- Acquired ISO 9001:2001 / KSA 9001 : 2001 Certificate [2006]
- Registered INNO-BIZ [2006]

2002
~ 2005

- Patent Registration : Bottom side Mask Aligner(Korea / 10-0523350) [2005]
- Developed Auto Mask Aligner [2005]
- Completed a new plant at Daedeok Techno Valley [2004]
- Developed 'Mask Aligner' [2002]

1998
~ 2001

- Performed a corporation conversion to Corporation [2001]
- Established an annex research institute to company [2001]
- Developed 'Spin Coater' [1999]
- Established 'MIDAS SYSTEM' [1998]