#### The world minimum footprint

# FULL AUTOMATIC DICING SAW AD 3000T

Tokyo Seimitsu Co.,LTD.

#### **NOTICE for CONFIDENTIALITY**

The confidential contents which should be protected legally are contained in this documents. These contents should be treated based on the confidential maintenance contract.



# **ACCRETECH Twin Dicer Series**

2011 1999 2000 2001 2006

The first in the world **AD3000T A-WD-300TX** twin dicer is released High speed spindle: 80,000 RPM Higher throughput Improved quality for Ultra-thin wafers A-WD-300T, 300TLDP First Twin-spindle dicer for 300mm Highest throughput **A-WD-200T** Proven accuracy and reliability First Twin-spindle dicer for 200mm Unprecedented accuracy Highest throughput - Smallest machine

- Fastest machine
- Easy operation

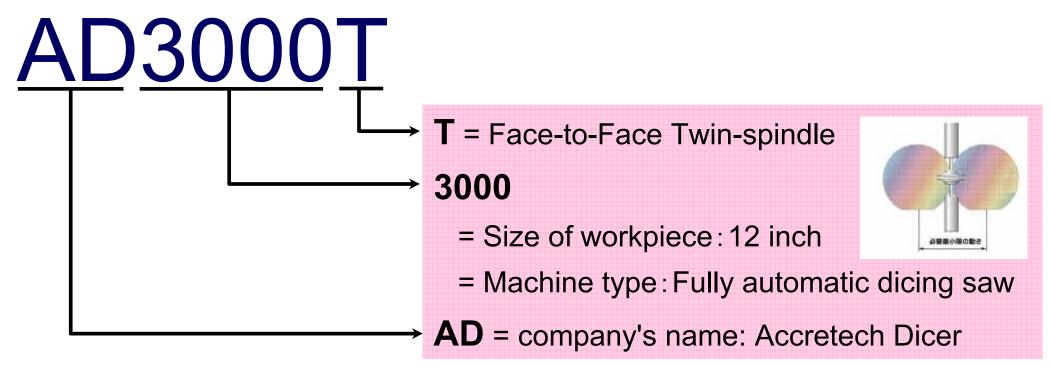
**Confidential** 

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# Model name/Product concept

#### Model name



#### Product Concept

Fully automatic dicing saw for 12 inch workpieces, with improved CoO, high throughput, less energy consumption and reduced footprint.

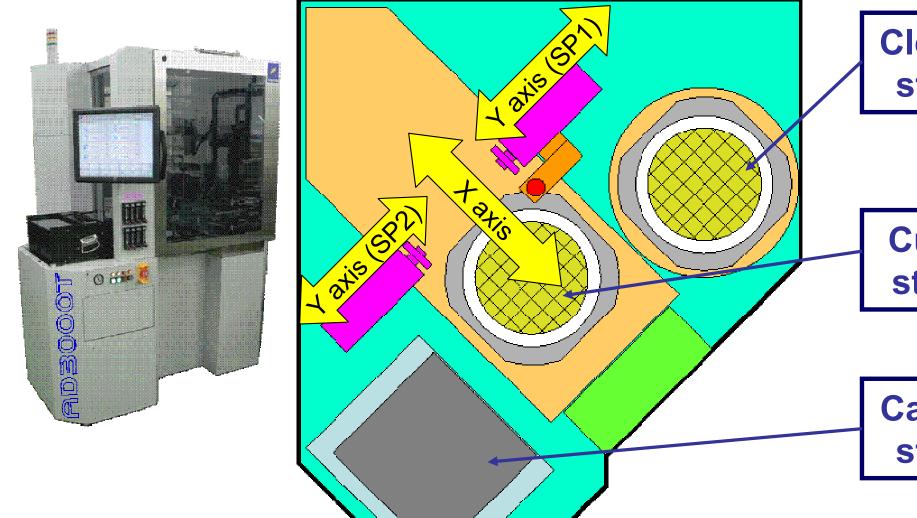


# **Exterior of AD3000T**





# **Component Layout**



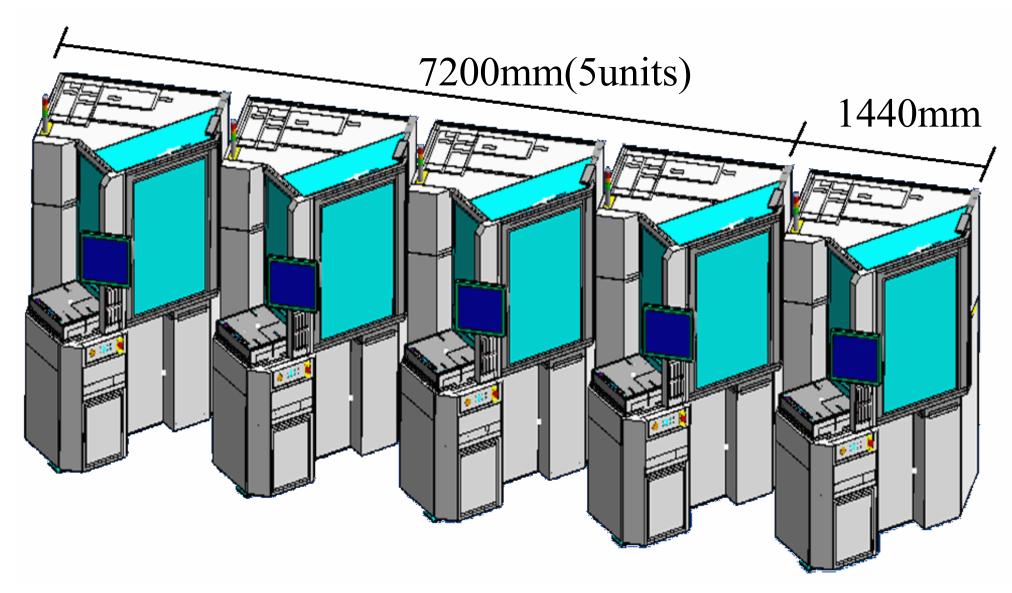
**Cleaning** station

**Cutting station** 

**Cassette** station



# Sample Layout





## **Throughput Comparison**

Exterior	AD3000T	DFD6361	
Footprint	1.61m2	1.86mm2	
X-axis max speed	1000mm/sec	600mm/sec	
Y-axis max speed	300mm/sec	200mm/sec	
Throughput ratio	1.00	1.10	



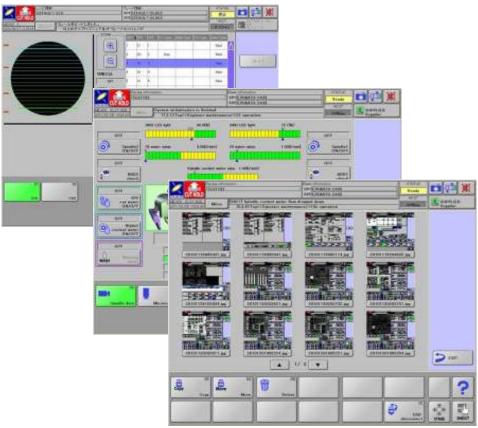
# **Total Time Saved = 10% reduction**



### The good point of the new GUI

◆The improvement of the operability, the visibility It made all button an icon and it made the button and a character big.Also, it used a graphic and it improved operability visually.







# **Easy Access**



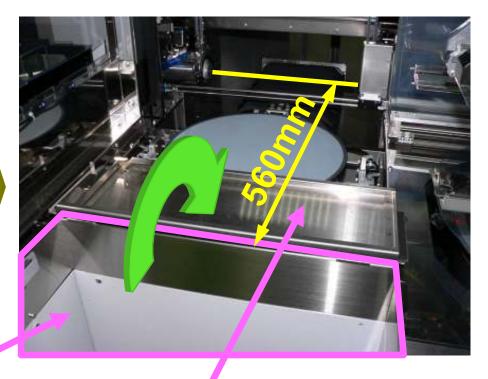
Wide space for maintenance Confidential



# Easy Access

#### Easy access to both spindle





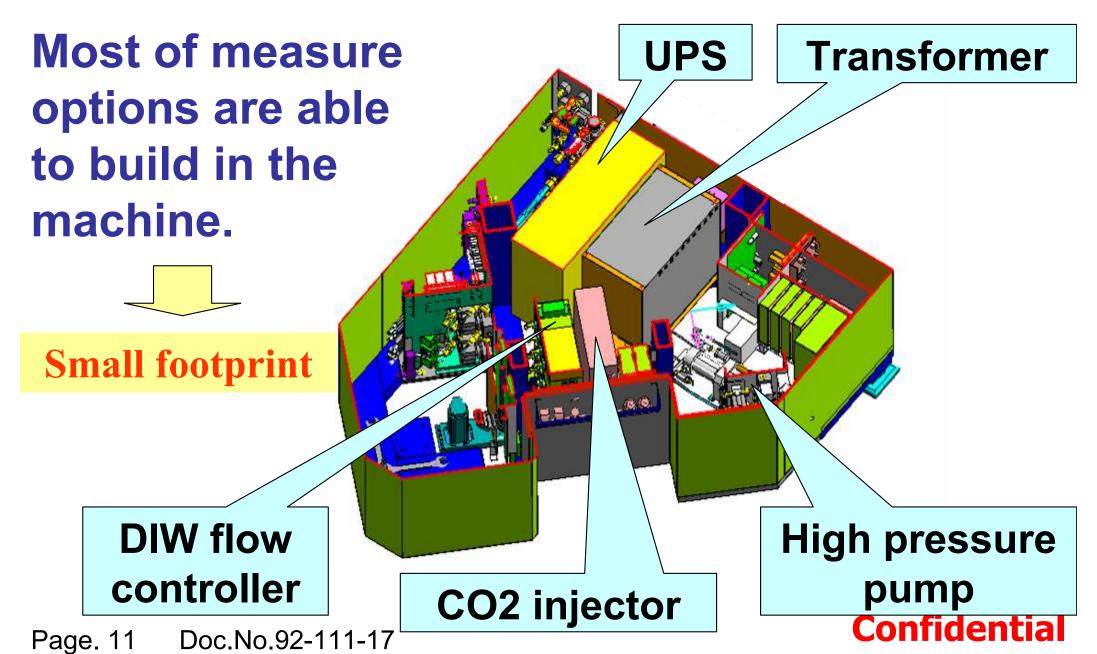
Approach space

**Tool tray** 

Note) There is an interlock sensor to protect miss operation.



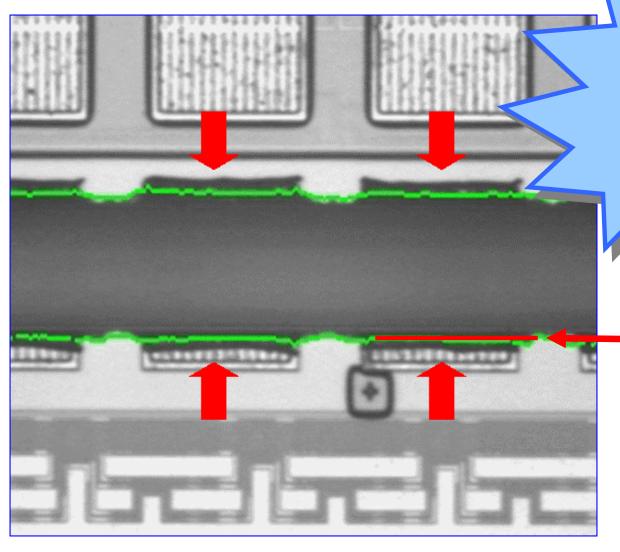
# **Optional Function**





## **New Kerf Check function**

#### **Noise reduction function**



Auto
Chipping
recognition
with noise
canceller.

TEG peeling

High Reliability!!

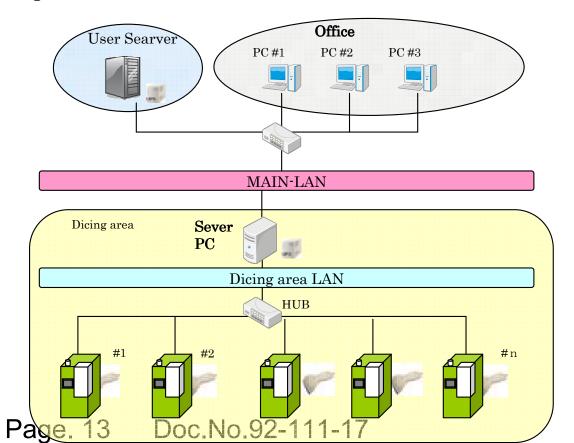


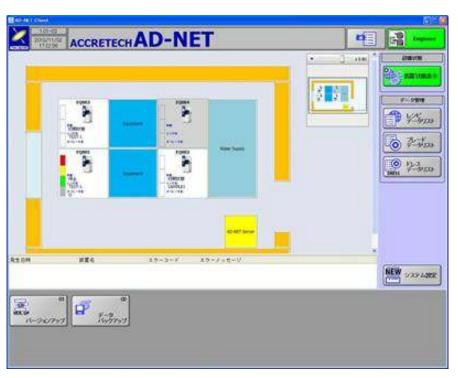
#### **ACCT NETWORK**

#### ◆Network (AD-NET)

It connects a server PC (the Windows server) and equipment only with the LAN cable and the network can be easily built.

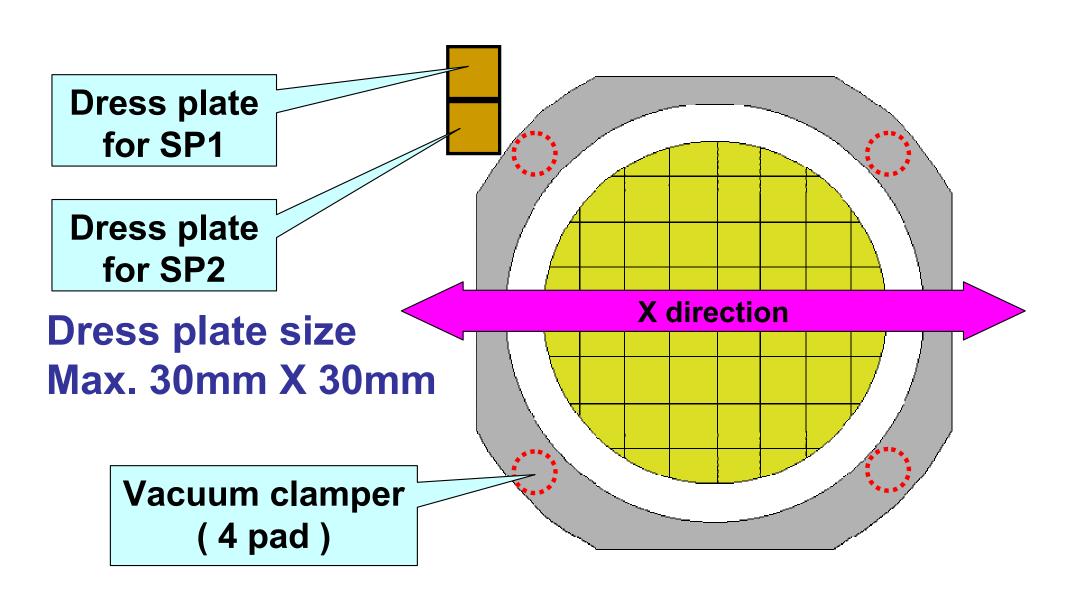
Even if it is in the office, the watch of the equipment and the data management become possible.







#### **Dress Plate Function**





## The specification comparison

		AD3000T	DFD6361		
Maximum work size		φ310	$\phi$ 300		
Maxin	num compatible frame	12inch(430Φ)	12inch		
	Number of rotations	60,000rpm	60,000rpm		
Spindle	number of rotations	OP:80,000rpm	OP:80,000rpm		
	Maximum blade diameter	$\phi60$	$\phi$ 58		
	Pitch among the blades	21mm	24mm		
	Cutting stroke	<b>3</b> 10mm	310mm		
	Max speed	1000mm/s	600mm/s		
X axis		Ball screw + LM guide	Ball screw + LM guide		
	Driving method	AC servo	AC servo		
	Option linear motor + Air guide		-		
	Cutting stroke	310mm	310mm		
	Max speed	300mm/s	<b>200</b> mm/s		
Y1、Y2 axis	Positioning resolution	0.0002mm	0.0001mm		
	Straightness	0.002mm/310mm	0.003/310mm		
	Driving method	Ball screw + LM guide	Ball screw + LM guide		
Z1、Z2 axis	Stroke	34mm	14.7mm		
	Repeatability	0.001mm	0.001mm		
	Driving method	Ball screw + LM guide	Ball screw + LM guide		
	Rotation range	380°	380°		
heta axis	Positioning resolution	0.00014°	?		
	Driving	Direct drive motor	Direct drive motor		



## The specification comparison

		AD3000T	DFD6361	
Microscope Unit	Structure	STD:1unit(H, L) OP:2unit(H, L + H)	2unit(H,L + H)	
	Lens Shutter	Installed	<b>I</b> nstalled	
Optical Cutter- set	Unit Num.	2	2	
unit	Cover	<b>I</b> nstalled	Installed	
Spinner unit	Cleaning method	bubbling /low pressure/ rinse	bubbling /low pressure/ rinse	
Handling unit	Method	2ARM/ELEVETOR/FINGER	2ARM/ELEVETOR/FINGER	

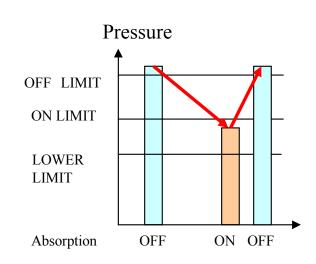


## Low energy design (ECOLOGY)

#### Air consumption reduction

# It suppresses air consumption in doing ON/OFF of Ejector Valve

No	Unit	air consumption [l/min]		
110	Offic	A-WD-300TX	AD3000T	
1	Spindle 1/2	180	110	
2	STAGE Vacume	90	20	
3	C.T Work Vacume	88	5	
4	SPNNER STAGE Vacume	26	26	
5	Arm1 Vacume	30	6	
6	Arm2 Vacume	1	1	
7	Camera blow	30	30	
	合計	446	198	



It reduces 60 % of A-WD-300TX ratio.



## ECO



#### Special function for Energy Saving

		AD3000T	DFD6361	Spindle	Spindle coolant	D.I.W.	Motor Power	Remarks
Level-1	Warming up mode	< 2.2kW	2.2kW	ON	ON	ON	ON	Immediately restart to cut
Level-2	Standby mode	< 1.8kW	1.8kW	ON	ON	OFF	ON	Required slightly stabilizing time before cutting
Level-3	Save mode	< 1.0kW		OFF	OFF	OFF	ON	Required stabilizing time before cutting
Level-4	Suspend mode	< 0.5kW		OFF	OFF	OFF	OFF	Required machine initializing and stabilizing time before cutting

AD3000T has 4 level of energy saving mode and programmable mode setting and waiting time.



# Accretech dicing family

A-WD-10B

AD-20T/S

**A-WD-250S** 

**A-WD-300TX** 









#### Thank you very much for your attention.

We provide the ultimate technology in the both blade and LASER dicing technology.

**PS280** 



**A-WD-200T** 



**ML200** 



ML300RME

