



# **Plasma Processing Equipment**

Dry Etcher

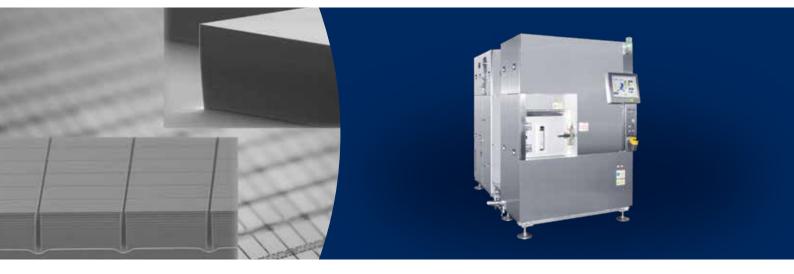
Catalogue

Model ID

APX300 (Dicer Module)

Model No.

NM-EFE4AA-D



#### **Plasma Dicer**

- Damageless dicing of whole wafer's surface at one time to realize high chip strength.
- Single chamber configuration to find extensive applications ranging from research development to mass-production.
- · Possible to continue dicing wafers of different materials in the same chamber without interruption. (Si + Dielectric layer \*)
- Capable of handling wafers with 200 / 300 mm ring frame.

\*SiO2, SiN, etc.



\*It may not conform to Machinery Directive and EMC Directive in case of optional configuration and custom-made specification.

Model ID	APX300
Model No.	NM-EFE4AA-D
Plasma method	ICP (Inductive Coupled Plasma)
Process gas	4 Line ( standard ) ( Maximum 6 lines : Fluoride Gas , Ar , O2 , He , etc. )
Wafer size *1	$\phi$ 200 mm or $\phi$ 300 mm with ring frame ( standard )
Dimensions *2	W 1 350 mm $\times$ D 2 230 mm $\times$ H 2 000 mm ( Single chamber system )
Mass	2 330 kg ( differs dipending on machine configuration )
Power source *3	3-phase AC 200 / 208 / 220 / 230 / 240 ± 10 V , 50 / 60 Hz , 21.0 kVA
Pneumatic source	0.5 MPa to 0.7 MPa , 250 L / min ( A.N.R. )
N <sub>2</sub> Source	0.1 MPa to 0.2 MPa , 50 L / min ( A.N.R. )

Please refer to the specifications on details.

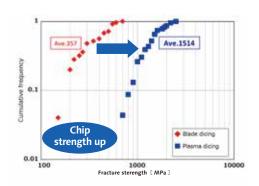
- \*1 : For other wafer sizes, please contact us.
  \*2 : Protrusions, such as touch panel, operation panel, signal tower and piping, are not included.
- Peripheral devices, such as dry pump and chiller, are not included.

  \*3: 2-line 3-phase power source, and this shows the total. Peripheral devices, such as dry pump and chiller, are not included.

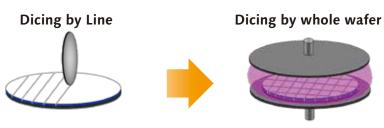
#### Higher productivity thanks to dicing of one whole wafer at a time into more chips

# **Blade Dicing Plasma Dicing** ,60 μm ,5 µm

## Higher chip strength



## Minimized dicing line width



Front side

**Chipping Free** 

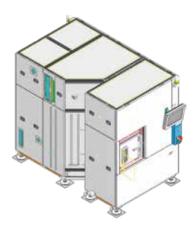


Dicing of entire wafer at once

**Damage Free Dicing** 

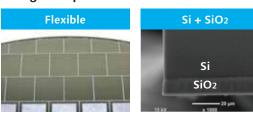
### Compact single chamber system

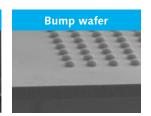
A wide range of applications from R&D to mass-production

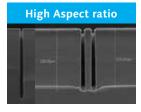


## Dicer capable of different devices

#### Dicing examples











## Safety Cautions

- Please read the User's Manual carefully to familiarize yourself with safe and effective usage procedures.
- ●To ensure safety when using this equipment, all work should be performed according to that as stated in the supplied Operating Instructions. Read your operating instruction manual thoroughly.

Panasonic Group products are built with the environment in mind.

For details



Panasonic GREEN IMPACT

Inquiries...

Panasonic Connect Co., Ltd.

Process Automation Business Division

2-7 Matsuba-cho, Kadoma City, Osaka 571-8502, Japan

All data as of August 15, 2024

Ver.August 15, 2024

© Panasonic Connect Co., Ltd. 2024

- Changes in specifications and appearance may be made without notice for product improvement. 
   Please contact us via our website at https://industrial.panasonic.com/ww/r/fw