e3510 SINGLE WAFER ASHING SYSTEM

Product Specifications

PROCESS

Gas Flows	O_2=1000 – 4000 sccm. N_2/H_2 = 100-1000 sccm; N_2 – 100 –500 scc,
Pressure	0.5-> 5.0 torr
Platen Temperature	100 – 300 deg. C
μ-wave Power	0-1200 watt at 2.45 GHz
Lamp Utilization	0-100% (1000 watts)

Throughput	(1.2 μm blanket softbaked resist ashed to end point except for deccums ≤ 300Å)	
	Descum/S.T.	45 – 60 WPH
	Baked Photoresist	45 – 60 WPH
	Implanted & Damaged Photoresist	25 - 55 WPH
Uniformity	(1 Sigma, ashed to 50% of ≥ 1.2 μm.)	
	Within a wafer	2% - 5%
	Wafer to wafer (average)	2% - 4%

Ash Rate	< 200Å - ≥3.5. μm./min.
System Matching	2% - 5% (I sigma)
Mobile Ion Concentration	IEI0/cm2 – IEII/cm2
CV Shift	≤0.1 volt
Particle	<0.02/cm2, size of 0.2 μm.

RELIABILITY

MTBF	≥168 hr.
MTBA	≥ 36 hr.
MTTR	≤ 3 hr. for 80% of all downs
MTTA	<5 min.
UPTIME (SEMI EI0-92 STD)	89 – 95%

GENERAL INFORMATION

Substrate size	4 – 8 inch 100-200 mm
Footprint	30” 762 mm) W x 38” (965mm) D x 58” (1473mm) H
Electrical	200-240 VAC. 2 Phase. 50/60 Hz. WYE configuration, 30 Amp. Breaker
Typical Process Gases	O2, N2/H2, N2 – regulated 18 – 23 PSIG

Note – Due to the complexity of customer’s process variations and requirements, the above process performance can deviate or be improved. Therefore, customers should submit demo samples to the Application’s Lab via their sales person to establish the optimum applicable specifications and conditions. Actual numbers on reliability will depend upon specific support available through contracts, knowledge of people performing PM and sufficient consumables and spare parts on site.