

	Metal Etch
Processes	Metal etch processes
Gases/Mass flow controller	MKS 1179A for non toxic mfc, MKS1479A for toxic mfc
Non toxic gases	SF6, O2,Ar,CHF3,N2
toxic gases	Cl2, HBr, BCl3
Electrode table	240mm heated electrode
temperature range	room temp to 350°C
Plasma Sources	
ICP power	3KW
RF power for DC bias	600W
Chamber Pumping Port	
Pumpdown pipe Size	200mm pumping tee with 200mm branch to sealable
Pumpdown pipe Heating	Automatic Pressure Controller (APC) Heated
Chamber Configuration	
Chamber heating kit	Heated from room temp to 80°C
Chamber vacuum measurement	100mT CM gauge, Penning gauge
Process chamber pumping config	Alcatel ATH1300M turbo pump @ 1300l/sec
Dry pump for backing turbo	Alcatel ADP122P dry mechanical pump @ 1800l/min
Clamp process (clamp ring)	6" , 8"
Chamber Liner kit	1 set
Helium cooling on electrode	Yes
Base Pressure	< 5x 10 ⁻⁶ mtorr
Leak rate	<2mtorr/min
Loadlock (LL) Chamber	
LL chamber vacuum measurement	Pirani gauge
Wafer handling	6" , 8" wafer
Dry pump for LL	Alcatel ACP15
Base Pressure	< 9x 10 ⁻³ mtorr
Leak rate	<3mtorr/min
Electrode table cooling	Julaboo FP51 chiller
Special chiller	
Software	Windows 7 and PC2000 user software
System Facilities requirement	Provided by Cleanroom facility
Standard Warranty	12 months - parts & warranty

Al Etch rate	125nm/min
Selectivity to AZ type resist (resist profile>80°)	≥2:1
Profile angle	85°
Uniformity	
Within wafer 8"	≤±5% @7mm edge exclusion

Pt Etch rate	8nm/min
Selectivity to AZ type resist (resist profile>80°)	≥2:1
Profile angle	70°
Uniformity	
Within wafer 8"	≤±5% @7mm edge exclusion