PECVD1-SiN standard recipe-1000A			PECVD1 SIN 1000A Typical Film Properties
1. Chamber Clean (wet clean)	**2. Chamber (clean+coat)**	**3.SiN Deposition**	**Calibrated every 2-4 weeks**
WET CLEAN	**30CLN_SN**	**SiN_10**	**Check for the latest update on UCSB Nanofab WIKI**
Wipe clean upper chamber walls with DI	step1: Initial t=10", p=2x10-2 T=250C	step1: Initial t=10"	
Wipe off upper chamber walls with IPA	step2: N_2 purge t=30" p=300mT	step2: N_2 purge t=30"	
	step3: evacuate, base pressure=2x10-2, t=10"	step3: evacuate, t=10"	
	step4:loop	step4:loop	
	step5:gas stabilization, t=30"	step5: SiN gas stabilization, t=30"	**SIN-1000A Typical Film properties**
	step6:etch chamber, t=30'	**step6: SiN deposition**	**Deposition rate~11nm/min**
	step7:evacuate, t=10"	**Time=9'28.1"**	**Refractive index@632.8nm=1.942**
	step8:N_2 purge	**Temperature=250°C**	**Stress~450MPa**
	step9:evacuate	**Pressure=900mT**	**HF etch rate=89nm/min**
	step10:loop	**Gass Flow:**	**All size particles accumulated in deposition (min=70, max=469)**
	step11:SiN gas stabilization	**SiH_4=150sccm**	**Mostly small particles size (0.160-0.213)um**
	step12:SiN deposition(200A coat)	**N_2=450sccm**	**Uniformity within the wafer (98.1-99.9)%**
	step13:evacuate	**NH_3=1.54sccm**	
	step14:N_2purge, t=30"	**Power:**	
	step15:end	**RF1=22W**	
		step7:evacuate, t=10"	
		step8:N_2 purge t=30"	
		step9:evacuate t=10"	
		step10:loop	

Automatic - Process : _SIN10 Step: 6

Description: SiN Dep 1000 A
Process Pump: LOVAC
Deposition ID: SIN250
Deposition [Å]: 1000

TEMPERATURE

	Setpt	Actual
Channel 2	250	248

	Setpt	Actual
Pressure[mTorr	900	903

GAS CHANNELS

	Setpt	Actual
SiH4	150	149
N2	450	450
NH3	1.54	1.56

RF GENERATORS

RF1
RF Control: POWER
RF Config: PE

	Setpt	Actual
Power	22	21
Ref		0.0
DC		11

	Setpt	Elapsed	Left
Time	09:28.1	08:16.0	01:12.1