

TECHNICAL DATA SHEET

DC SPUTTERING RATES

Material	Atoms/ion Sputter Yield @ 400 Volts	Rate Relative to Cu	Static Rate (Angstroms/Minute) Measured @ 4" Source-to-Substrate Distance @ 70 watts/in ² DC @ 1 Millitor
Ag	2.70	2.41	24,955
Al	0.80	0.69	7,130
Au	2.00	1.80	18,400
Cr	1.10	0.70	7,250
Cu	1.62	1.00	10,350
Mo	0.70	0.57	5,870
Pd	1.73	1.32	13,570
Pt	1.20	0.88	8,980
Doped Si	0.33	0.33	3,335
Ta	0.28	0.26	2,650
Ti	0.42	0.39	4,025
W	0.28	0.23	2,300

Notes:

1. Rates are approximately (NOT exactly!!) proportional to the power levels applied to the target.
2. Practical maximum applied power levels are dependent upon the method of target mounting and quality of target materials and bonding method.
3. Source-to-substrate distance and background pressure will heavily influence the actual rate of deposition.
4. Use this chart as a guideline only. The posted values are NOT guaranteed. Every system and process is different. Rates @ very low power levels can be less due to smaller plasma volume.
5. The erosion pattern of the target strongly influences actual rates. These values are for SunSource™ sputtering sources ONLY.
6. Posted rates assume a duty cycle of 90%.