Typical DDR Values

Metal Mode Sputtering

Target material	DC nDDR*	AC nDDR*	Maximum power (kW/m)
Aluminum	9.00	7.65	90.0
Chromium	9.90	8.42	75.0
Copper	16.2	13.77	90.0
Germanium	9.00	7.65	37.5
Molybdenum	7.20	6.12	75.0
Nickel	12.60	10.71	75.0
Niobium	5.40	4.59	75.0
Silicon	4.50	3.83	20.0
Stainless Steel	6.50	5.20	100.0
Tantalum	4.50	3.83	75.0
Tin	9.90	8.42	75.0
Titanium	4.05	3.44	75.0
Tungsten	4.50	3.83	75.0
Zirconium	4.50	3.83	75.0

*((nm) x (m/min))/(kW/m)

To avoid damaging targets, check all maximum power densities with the target vendor.

This data is a collection of averaged published rates and of in-house testing; individual rates may vary. The data is subject to change without notice.

Conductive Ceramic Sputtering

Target material	DC nDDR*	Maximum power (kW/m)
AZ0	8.20	27.0
ITO	10.00	15.0

*((nm) x (m/min))/(kW/m)

Reactive Sputtering (mid frequency AC/pulse DC)

Target material	Coating material	Typical DDR*	Optimized DDR*	Maximum power (kW/m)
Aluminum	Al_2O_2	20	60	75
Niobium	Nb_2O_5	25	60	50
Silicon	SiO_2	10	45	20
Titanium	TiO_2	20	40	75
Titanium	TiN	10	22	75
Zinc	ZnO	16	120	25

*nm x m/min

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