

Properties of BEKAERT's DLC Coatings

COATING MATERIAL	DLC	Dylyn® DLN	Metal - Dylyn® Me-DLN	SOREVI	TiN *
NAME	DIAMOND LIKE COATING	DIAMOND - LIKE NANOCOMPOSITE COATING	METAL DOPED Dylyn®	DIAMOND LIKE COATING	TITANIUM NITRIDE
MICROHARDNESS (GPa)	18 - 26	8 - 19	12 - 17	27	23
ROCKWELL C	77 - 82	64 - 78	68 - 76	85 - 88	80
COEFFICIENT OF FRICTION AGAINST STEEL (DRY) COATING	0.1 - 0.2	0.05 - 0.1	0.2 - 0.3	0.11	0.4 - 0.5
THICKNESS (UM)	0.5 - 4	0.2 - 6	0.2 - 8	1 - 4	1 - 4
MAX. WORKING TEMPERATURE	570 °F 300 °C	750 °F 400 °C	950 °F 500 °C	840 °F 450 °C	1000 °F 600 °C
COATING TEMPERATURE	300 - 440 °F 150 - 200 °C	300 - 440 °F 150 - 200 °C	300 - 440 °F 150 - 200 °C	480 - 660 °F 250 - 350 °C	500 - 950 °F 260 - 500 °C
ELECTRICAL RESISTIVITY (ohm-cm)	10 ⁺¹² - 10 ⁺⁶	10 ⁺¹² - 10 ⁺⁸	10 ⁺⁸ - 10 ⁻³	NA	25 x 10 ⁻⁶
WEAR FACTOR (x 10 ⁻⁸ mm ³ /Nm)	1	1 - 10	10 - 100	NA	250
Adherence Lc (N)	17	15	20	30 - 34	NA
SURFACE ENERGY (mN/m)	40 - 50	20 - 40	30 - 50		40 - 42
COATING METHOD	PACVD	PACVD	PACVD	PVD/PACVD	PVD

* Not a Bekaert Product listed for comparison purposes only.