



NSK Global Quality

ASEAN & Oceania

www.nsk.com

HDY2 CERAMIC-COATED INSULATING BEARINGS

NSK's new ceramic-coated insulating bearings are designed to support energy efficiency and the expanding adoption of inverter-controlled motors, while effectively contending with the associated risk of electrical current damage to bearings. With advancements in product design to optimize insulation and thermal conductivity characteristics, NSK's HDY2 series bearings deliver a reliable contribution to energy efficiency and reduced power consumption.

PROVEN BENEFITS

- › Effective prevention of electrical corrosion damage
- › Superior insulation properties, with performance improved greater than 10 times
- › Improved durability, with new optimized coating demonstrating 3 times the shock resistance of conventional ceramic-coated bearings
- › Excellent heat dissipation
- › Dimensionally interchangeable with standard bearings

CONDITIONS

- › Electrical Current
- › High Speeds
- › Low Noise

APPLICATIONS

- › Industrial motors
- › Power generation

DESIGN FEATURES

- › Alumina-based ceramic coating material with optimized additives
- › Bearings are manufactured from ultra-clean steel for extended fatigue life
- › Bearings are plasma sprayed to ensure appropriate bonding to the bearing steel
- › Coating is sealed with a special acrylic resin
- › High-grade balls for quiet and smooth operation at high speeds
- › Super-finished raceways – minimize noise and improve lubricant distribution
- › Open type, with C3 radial internal clearance



HDY2 CERAMIC-COATED INSULATING BEARINGS

PRODUCT PERFORMANCE

FIG. 1 - BREAKDOWN VOLTAGE

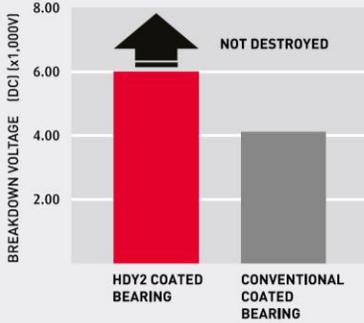


FIG. 3 - MECHANICAL STRENGTH : CERAMIC COATING IMPACT TEST RESULTS (6311 OUTER RACE)

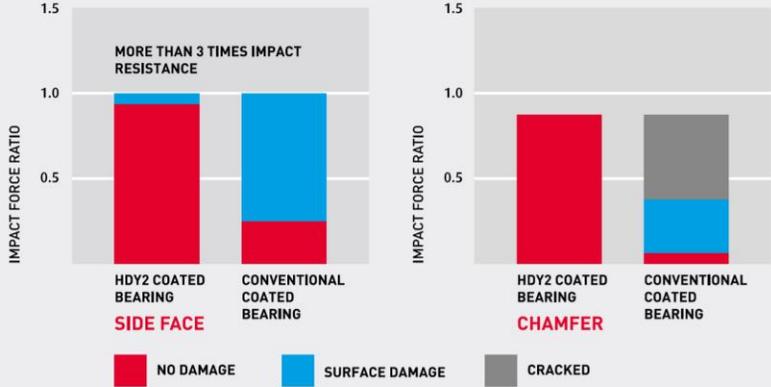


FIG. 2 - INSULATION RESISTANCE (at DC 1,000V)

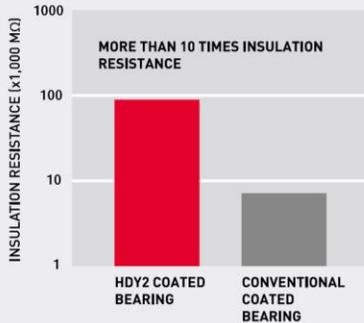
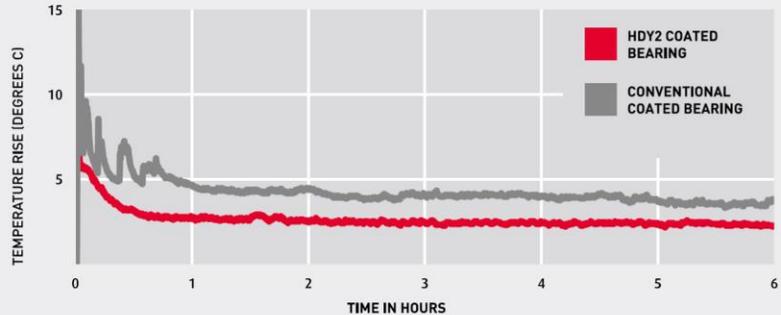


FIG. 4 - HEAT DISSIPATION PERFORMANCE (6311 OUTER RACE)



PRODUCT SERIES

	Boundary dimensions (mm)		
	Bore diameter	Outside diameter	Width
6214HDY2C3	70	125	24
6215HDY2C3	75	130	25
6216HDY2C3	80	140	26
6217HDY2C3	85	150	28
6218HDY2C3	90	160	30
6219HDY2C3	95	170	32
6220HDY2C3	100	180	34
6222HDY2C3	110	200	38
6224HDY2C3	120	215	40
6226HDY2C3	130	230	40
6228HDY2C3	140	250	42
6230HDY2C3	150	270	45

	Boundary dimensions (mm)		
	Bore diameter	Outside diameter	Width
6311HDY2C3	55	120	29
6312HDY2C3	60	130	31
6313HDY2C3	65	140	33
6314HDY2C3	70	150	35
6315HDY2C3	75	160	37
6316HDY2C3	80	170	39
6317HDY2C3	85	180	41
6318HDY2C3	90	190	43
6319HDY2C3	95	200	45
6320HDY2C3	100	215	47
6322HDY2C3	110	240	50
6324HDY2C3	120	260	55
6326HDY2C3	130	280	58
6330HDY2C3	150	320	65

For enquiries, please contact your local sales.

NSK Ltd is a leading supplier of bearings, precision machinery parts, automotive components and conditioning monitoring systems. Founded in 1916 and headquartered in Tokyo, the group operates 106 sales sites and 67 production sites in 31 countries, employing over 25,632 (as of March 31, 2024) people worldwide.