

MILLING INSERTS · COPY MILLING AND PROFILING

BNM (ball nose)

Ball nose insert for copy milling cutters, from Ø12 to Ø32 mm, for finishing moulds and 3D surfaces.



KEY DATA

Product type	Milling Inserts
ISO materials	P steel M stainless K cast iron H hardened
Operation	Finishing · Semi-finishing
INNOT grades	IT5130 · IT5210 ★ · IT5220 ★ recommended
Nose radii	R6 · R8 · R10 · R12.5 · R15 · R16
Online page	innot-it.com/en/prodotto/bnm-testa-sferica

Specifications

Code	Ø (W1)	S	D1	RE	APMX
BNM1203-S	12	3	3.5	6	6
BNM1604-S	16	4	4	8	8
BNM2005-S	20	5	5	10	10
BNM2506-S	25	6	6	12.5	12.5
BNM3007-S	30	7	8	15	15
BNM3207-S	32	7	8	16	16
BNM2005	20	5	5	10	10
BNM2506	25	6	6	12.5	12.5
BNM3007	30	7	8	15	15
BNM3207	32	7	8	16	16

Dimensions in mm. IC = inscribed circle, S = thickness, D1 = hole, BS = wiper flat, RE = corner radius, AN = clearance angle, APMX = maximum depth of cut.

Technical data

Operation	Milling - Copy milling and profiling
Shape	Ball nose
ISO material	P (steels), M (stainless steels), K (cast irons), H (hardened steels)
Features	Full-radius insert for ball nose cutters: 3D profiles, moulds and free-form surfaces. -S version with chipbreaker.
Compatible cutters	Indexable cutters with BNM seat: send us your cutter code and we will check compatibility.

Available INNOT grades

Grade	ISO	Coating	Composition	Application
IT5210 ★	P · H	PVD	AlTiN + TiSiN	Milling of hardened steels 50–65 HRC. Coating with high thermal stability and oxidation resistance: withstands the most severe cutting temperatures.
IT5220	P · M · K	PVD	AlTiN + TiSiN	Universal grade for steels, stainless steels and cast irons up to 40–50 HRC. Double-layer coating: strength, toughness and protection against edge chipping.
IT5130	P · M	PVD	AlTiN	High-efficiency milling of steels and stainless steels below 30 HRC. Specially formulated substrate that reduces the risk of chipping, with a latest-generation nano coating.

★ Recommended grade. Other grades are available on request.

Parametri e consigli d'uso

Preferably climb mill with the tool tilted by 10–15° to avoid cutting with the insert centre (zero speed).

INNOT · CUTTING TOOLS FOR CNC MACHINE SHOPS

Quote within 30 minutes

Send us the code or the drawing: we reply with price and availability. Free test inserts on request, 24/48h shipping.

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Cutting data are indicative starting values: adjust them to machine, clamping, tool overhang and workpiece material. Data and images may change without notice.