

PCBN

Polycrystalline Cubic Boron Nitride



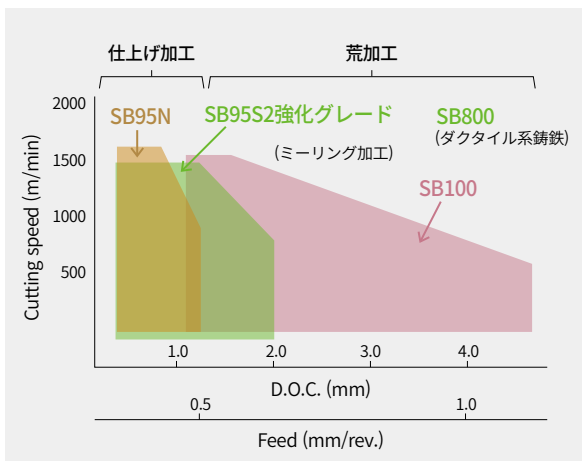
IBON

ILJIN Polycrystalline Cubic Boron Nitride

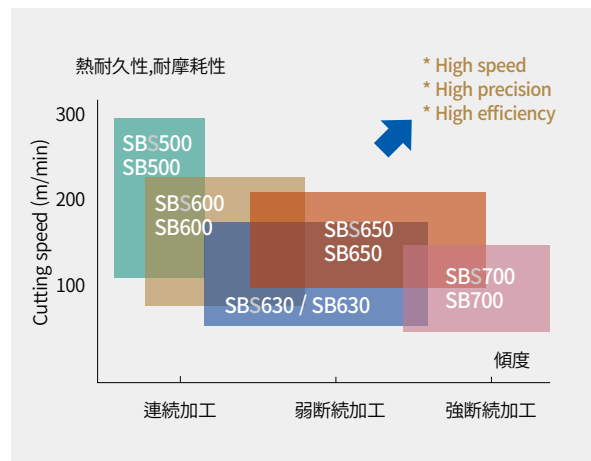
■ 超硬基盤付き ■ ソリッド

	Type	グレード	特長	アプリケーション
高含量 CBN	■	SB100	高cBN含有量 優れた耐摩耗性	鋳鉄及び粉末焼結合金の荒加工
	■	SB95S2	高cBN含有量かつ微粒 優れた耐摩耗性,と耐衝撃性	鋳鉄及び粉末金属加工
	■	SB95N	高cBN含有量 優れた耐摩耗性	汎用鋳鉄加工
	■	SB800	耐摩耗性と耐熱性の両立	ダクタイル鋳鉄向け
低含量 CBN	■ ■	SB700 SBS700	微粒cBN 優れた耐衝撃性	焼入れ鋼の強断続加工
	■ ■	SB650 SBS650	耐摩耗性と熱安定性の両立	焼入れ鋼の中・強断続加工
	■ ■	SB630 SBS630	耐摩耗性と耐衝撃性の両立	焼入れ鋼の連続及び中・弱断続加工
	■ ■	SB600 SBS600	耐摩耗性と熱安定性の両立	焼入れ鋼の連続及び弱断続加工
	■ ■	SB500 SBS500	優れた熱安定性	焼入れ鋼の高速連続加工

高cBN含有量PCBN切削条件



低cBN含有量PCBN切削条件



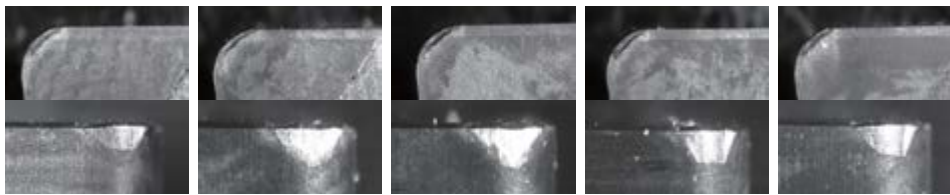
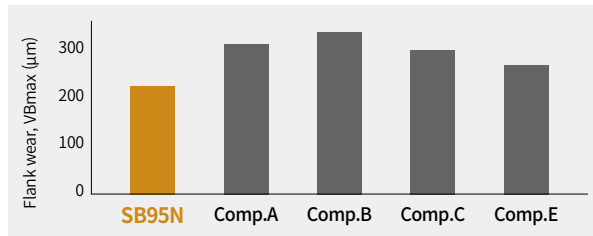
Performance Test

SB95N

Cast Iron

連続ターニング加工

Material	Gray cast iron
Speed	500m/min
D.O.C	0.25mm
Feed	0.1mm/rev
Coolant	Dry
Insert type	CNGA120408
Holder type	PCLNR2525-M12



SB95N Comp.A Comp.B Comp.C Comp.E

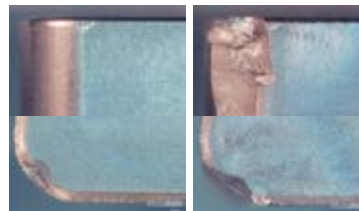
Performance Test

SB650 / SBS650

Hardened Steel

断続ターニング加工

Material	Alloy steel / SCM440(H)
Hardness	HRC 55~60
Size	Ø100 × 300 mm
Path	Flank wear after 10 path cutting
Speed	150m/min
D.O.C	0.4mm
Feed	0.1mm/rev
Coolant	Dry
Insert type	CNGA120408 T01225



SB650 Comp.B

Result	SB650	Comp.B
Cutting time	117.90 min	6.02 min.
Cutting length	2.68 km	0.90 km

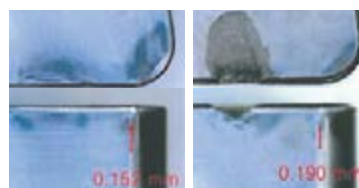
Performance Test

SB600 / SBS600

Hardened Steel

断面、内径荒加工

Material	Annulus gear(Ø145) SCr420H
Hardness	>HV650
Speed	80m/min
N	180rev/min
Feed	0.12mm/rev
Coolant	Wet



SB600 Comp.S

Result	SB600	Comp.S
Tool life	4,000	2,500

Application guideline

Hardened steel	Cast iron	Powder metal	Super alloy
Transmission spider Bearing Gear Shaft Connection coupling	Brake disc Brake drum Cylinder liner Flywheel Clutch plate Pump impeller	Transmission part Sprocket * < HRc 45 ** > HRc 45	Aircraft fastener Turbine disc
SB100	SB100	SB100	SB100
SB95S2	SB95S2	SB95S2 *	SB95S2
SB95N	SB95N	SB95N *	SB95N
SB800	SB800	SB800	SB800
SB700/SBS700	SB700/SBS700	SB700/SBS700 **	SB700/SBS700
SB650/SBS650	SB650/SBS650	SB650/SBS650	SB650/SBS650
SB630/SBS630	SB630/SBS630	SB630/SBS630	SB630/SBS630
SB600/SBS600	SB600/SBS600	SB600/SBS600	SB600/SBS600
SB500/SBS500	SB500/SBS500	SB500/SBS500	SB500/SBS500

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