

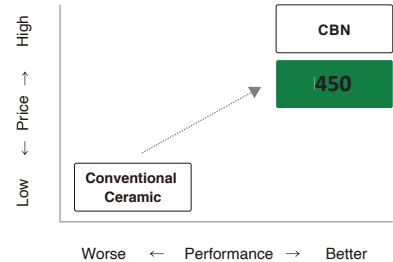
Key points

- NTK CeramiX is an advanced ceramic material achieving the performance to compete with CBN.
- New TiAlN coating offers excellent wear resistance for hard turning.
- In continuous machining materials with a hardness of 55 to 65 HRC, 450 matches the performance of CBN with the benefit of cost reductions.

Application area

Hard Turning with continuous cut Hardness range : HRC 55 to 66

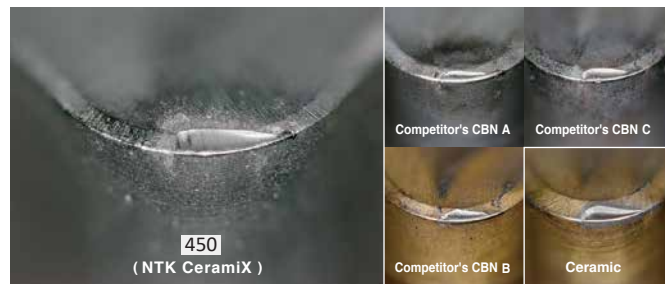
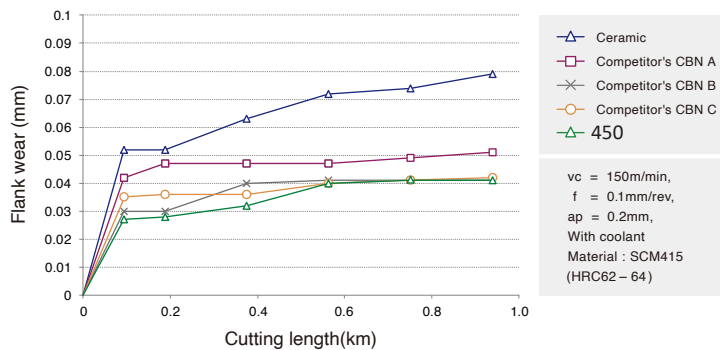
Price and Performance comparison



Recommended Cutting conditions

Grade	Material	Application	Process	Cutting speed (m/min)	Feed (mm/rev)	DOC (mm)	Without coolant	With coolant
450	Hardened materials (HRC55 to 65)	Turning	Finishing	100-200	0.08-0.15	0.1-0.5	●	●
				The same conditions as current CBN				

Wear comparison vs. CBN



Insert Item List

Geometry	Unit : 1pc/case *		Unit : 10pcs/case *		Corner R (mm)	Grade	Dimensions (mm)			Price
	EDP	Item number	EDP	Item number			IC	Thickness (mm)	Edge preparation	
	450									
	5106125	CNGA 120404 X03	5109186	CNGA 120404 X03-10	0.4	●	12.7	4.76	0.1x15° + Honed edge	\$53.52
	5106117	120408 X03	5109194	120408 X03-10	0.8	●				
	5106091	120412 X03	5109202	120412 X03-10	1.2	●				
	5106083	DNGA 150404 X03	5109236	DNGA 150404 X03-10	0.4	●	9.525	4.76	0.1x15° + Honed edge	\$58.87
	5106075	150408 X03	5109301	150408 X03-10	0.8	●				
	5106042	150412 X03	5109327	150412 X03-10	1.2	●				
	5106034	TNGA 160404 X03	5109343	TNGA 160404 X03-10	0.4	●	9.525	4.76	0.1x15° + Honed edge	\$50.84
	5106026	160408 X03	5109392	160408 X03-10	0.8	●				
	5106018	160412 X03	5109418	160412 X03-10	1.2	●				
	5106000	VNGA 160404 X03	5109426	VNGA 160404 X03-10	0.4	●	9.525	4.76	0.1x15° + Honed edge	\$56.19
	5105994	160408 X03	5109434	160408 X03-10	0.8	●				
	5105986	160412 X03	5109442	160412 X03-10	1.2	●				

* Please order Qty. you need in either item number. Insert case is the only difference.



Order the 450 Catalog today!

