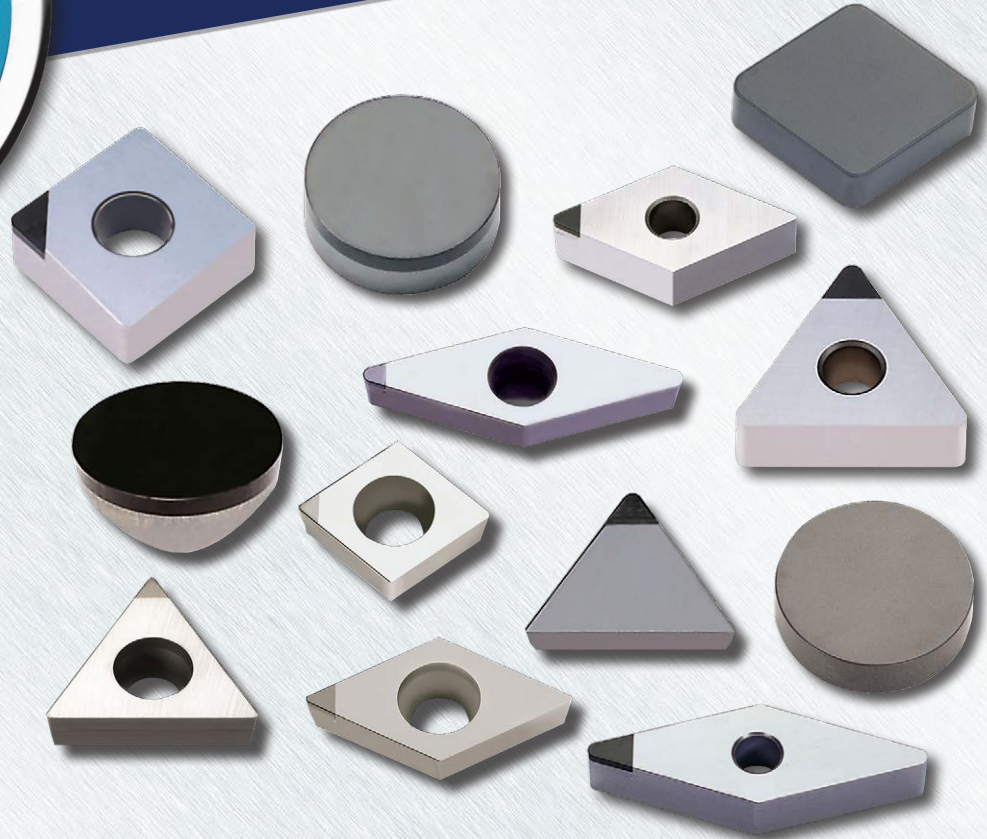




TTURN™

TURNING PRODUCTS



Material:
Cast Iron

Series Phase Out:
KB90 & KB90A

Series Phase In:
TB7015 & TB7020

Positive Inserts
CCGW, DCGW, RCGX
TCGW, TPG, VBGW

Negative Inserts
CNGA, CNGN, CNGX
DNGA, RNGN, SNGA
TNGA, VNGA

ISO Turning CBN Grade Change

Ingersoll has introduced two new CBN grades for cast iron.

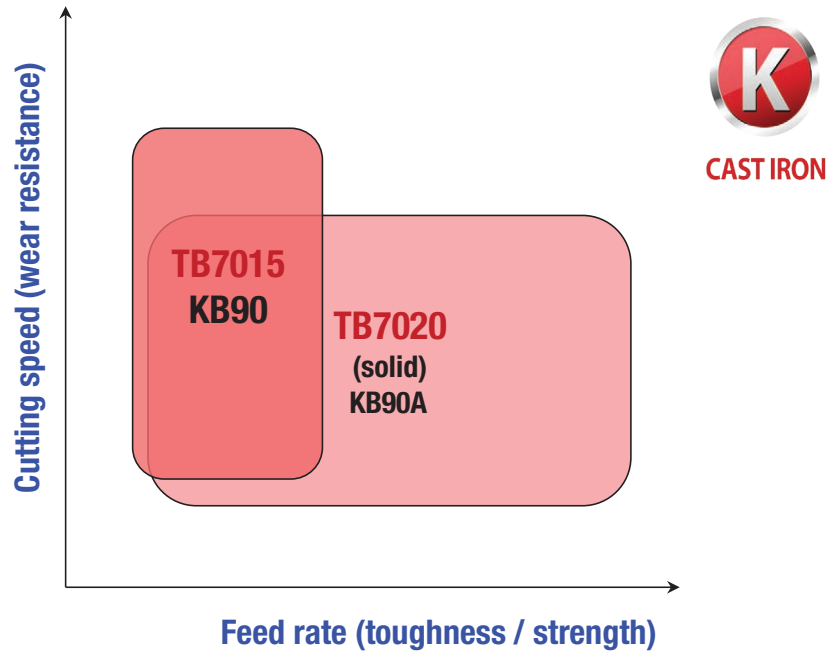
- TB7015 is the new grade designation for tipped inserts and is suitable for rough to finish turning of cast iron. Inserts are available with one, two or four CBN tips. There are two tip sizes depending on the application and depth of cut requirement. This grade replaces KB90.
- TB7020 is the new grade designation for solid CBN inserts and replaces KB90A. These inserts are suitable for larger cutting depths in cast iron.

As a result of these new grades and superior performance, grades KB90 and KB90A are being phased out as stock is depleted.

A complete list of old and new items is included at the end of this announcement.

TTURN™ APPLICATION RANGE

PCBN FOR CAST IRON



Grade	Materials Category	Usage
TB7015 CBN	H25 - H35 K10 - K20	High Speed Turning of cast iron and general turning of carbide roll
TB7020 Solid CBN	K10 - K25	High Speed and light interrupted turning of cast iron. Solid CBN insert



TTURN™ GRADE KB90/KB90A TO TB7015/TB7020 TRANSITION

KB90/KB90A PHASE OUT					➡	TB7015/TB7020 PHASE IN				
Item Number	ANSI Description		ISO Description			Item Number	ANSI Description2		ISO Description3	
5400899	CCGW21.50.5LS	KB90	CCGW060202LS	KB90	➡	6210503	CCGW21.50.5LS	TB7015	CCGW060202LS	TB7015
5400902	CCGW21.51LS	KB90	CCGW060204LS	KB90	➡	6210504	CCGW21.51LS	TB7015	CCGW060204LS	TB7015
5400904	CCGW32.51LS	KB90	CCGW09T304LS	KB90	➡	6210505	CCGW32.51LS	TB7015	CCGW09T304LS	TB7015
			n/a		➡	6210506	CCGW32.51LS	TB7015	CCGW09T304LS2	TB7015
5400907	CCGW32.52LS	KB90	CCGW09T308LS	KB90	➡	6210507	CCGW32.52LS	TB7015	CCGW09T308LS	TB7015
5401036	CCGW432LS	KB90	CCGW120408LS	KB90	➡	6210508	CCGW432LS	TB7015	CCGW120408LS	TB7015
5400817	CNGA431LN	KB90	CNGA120404LN	KB90	➡	6210509	CNGA431LN	TB7015	CNGA120404LN	TB7015
			n/a		➡	6210510	CNGA431LS	TB7015	CNGA120404LS	TB7015
5400826	CNGA432LN	KB90	CNGA120408LN	KB90	➡	6210511	CNGA432LN	TB7015	CNGA120408LN	TB7015
5400830	CNGA432LS	KB90	CNGA120408LS	KB90	➡	6210512	CNGA432LS	TB7015	CNGA120408LS	TB7015
5401066	CNGA432LS2	KB90	CNGA120408LS2	KB90	➡	6210513	CNGA432LS2	TB7015	CNGA120408LS2	TB7015
5400831	CNGA432LS4	KB90	CNGA120408LS4	KB90	➡	6210514	CNGA432LS4	TB7015	CNGA120408LS4	TB7015
5401689	CNGA432WZ-LS	KB90	CNGA120408WZ-LS	KB90	➡	6210515	CNGA432LS-WZ	TB7015	CNGA120408LS-WZ	TB7015
5400833	CNGA433LN	KB90	CNGA120412LN	KB90	➡	6210516	CNGA433LN	TB7015	CNGA120412LN	TB7015
5400835	CNGA433LS2	KB90	CNGA120412LS2	KB90	➡	6210517	CNGA433LS2	TB7015	CNGA120412LS2	TB7015
5401492	CNGA433WZ-LS	KB90	CNGA120412WZ-LS	KB90	➡	6210518	CNGA433LS-WZ	TB7015	CNGA120412LS-WZ	TB7015
5400836	CNG322SD	KB90A	CNGN090308SD	KB90A	➡	6338816	CNG322SD	TB7020	CNGN090308SD	TB7020
5400837	CNG323SD	KB90A	CNGN090312SD	KB90A	➡				n/a	
5400838	CNG324SD	KB90A	CNGN090316SD	KB90A	➡				n/a	
			n/a		➡	6177461	CNG433SD	TB7020	CNGN120412SD	TB7020
			n/a		➡	6177464	CNG434SD	TB7020	CNGN120416SD	TB7020
			n/a		➡	6343544	CNGX432DA	TB7020	CNGX120408DA	TB7020
			n/a		➡	6320832	CNGX433DA	TB7020	CNGX120412DA	TB7020
			n/a		➡	6190385	CNGX434DA	TB7020	CNGX120416DA	TB7020
5400910	DCGW21.51LS	KB90	DCGW070204LS	KB90	➡	6210519	DCGW21.51LS	TB7015	DCGW070204LS	TB7015
			n/a		➡	6210520	DCGW32.51LN	TB7015	DCGW11T304LN	TB7015
			n/a		➡	6210521	DCGW32.51LS	TB7015	DCGW11T304LS	TB7015
5400914	DCGW32.52LS	KB90	DCGW11T308LS	KB90	➡	6210522	DCGW32.52LS	TB7015	DCGW11T308LS	TB7015
5400843	DNGA431LS	KB90	DNGA150404LS	KB90	➡	6210523	DNGA431LS	TB7015	DNGA150404LS	TB7015
5400847	DNGA432LN	KB90	DNGA150408LN	KB90	➡	6210524	DNGA432LN	TB7015	DNGA150408LN	TB7015
5400851	DNGA432LS	KB90	DNGA150408LS	KB90	➡	6210525	DNGA432LS	TB7015	DNGA150408LS	TB7015
5400852	DNGA433LN	KB90	DNGA150412LN	KB90	➡	6210526	DNGA433LN	TB7015	DNGA150412LN	TB7015



TTURN™ GRADE KB90/KB90A TO TB7015/TB7020 TRANSITION (CONT.)

KB90/KB90A PHASE OUT					➡	TB7015/TB7020 PHASE IN				
Item Number	ANSI Description		ISO Description			Item Number	ANSI Description2		ISO Description3	
5400990	DNGA441LN	KB90	DNGA150604LN	KB90	➡	6210527	DNGA441LN	TB7015	DNGA150604LN	TB7015
			n/a		➡	6210528	DNGA442LS2	TB7015	DNGA150608LS2	TB7015
5400348	RCGX22FT	KB90	RCGX060300FT	KB90	➡	6210529	RCGX22FT	TB7015	RCGX060300FT	TB7015
			n/a		➡	6210530	RCGX32FT	TB7015	RCGX090300FT	TB7015
5400350	RCGX43FT	KB90	RCGX120400FT	KB90	➡	6210531	RCGX43FT	TB7015	RCGX120400FT	TB7015
5401078	RNG32FT	KB90	RNGN090300FT	KB90	➡	6210532	RNG32FT	TB7015	RNGN090300FT	TB7015
5400856	RNG32SD	KB90A	RNGN090300SD	KB90A	➡	6320830	RNG32SD	TB7020	RNGN090300SD	TB7020
5401079	RNG42FT	KB90	RNGN120300FT	KB90	➡	6210533	RNG42FT	TB7015	RNGN120300FT	TB7015
5400857	RNG42SD	KB90A	RNGN120300SD	KB90A	➡				n/a	
			n/a		➡	6341339	RNG43FT	TB7015	RNGN120400FT	TB7015
5401028	RNG43SD	KB90A	RNGN120400SD	KB90A	➡	6320831	RNG43SD	TB7020	RNGN120400SD	TB7020
			n/a		➡	6210534	SNGA431LS	TB7015	SNGA120404LS	TB7015
5400865	SNGA432LN	KB90	SNGA120408LN	KB90	➡	6210536	SNGA432LN	TB7015	SNGA120408LN	TB7015
			n/a		➡	6210535	SNGA432LS	TB7015	SNGA120408LS	TB7015
			n/a		➡	6210537	SNGA432LS2	TB7015	SNGA120408LS2	TB7015
5400868	SNG322SD	KB90A	SNGN090308SD	KB90A	➡				n/a	
5400869	SNG323SD	KB90A	SNGN090312SD	KB90A	➡	6338820	SNG323SD	TB7020	SNGN090312SD	TB7020
			n/a		➡	6177465	SNG434SD	TB7020	SNGN120416SD	TB7020
			n/a		➡	6320833	SNGX434DA	TB7020	SNGX120416DA	TB7020
5401012	TCGW21.51LS	KB90	TCGW110204LS	KB90	➡	6210538	TCGW21.51LS	TB7015	TCGW110204LS	TB7015
5400919	TCGW21.52LS	KB90	TCGW110208LS	KB90	➡	6210539	TCGW21.52LS	TB7015	TCGW110208LS	TB7015
			n/a		➡	6210540	TCGW32.51LS	TB7015	TCGW16T304LS	TB7015
5400921	TCGW32.52LS	KB90	TCGW16T308LS	KB90	➡	6210541	TCGW32.52LS	TB7015	TCGW16T308LS	TB7015
5400875	TNGA331LN	KB90	TNGA160404LN	KB90	➡	6210542	TNGA331LN	TB7015	TNGA160404LN	TB7015
			n/a		➡	6210543	TNGA332LN	TB7015	TNGA160408LN	TB7015
5400887	TNGA332LS3	KB90	TNGA160408LS3	KB90	➡	6210544	TNGA332LS3	TB7015	TNGA160408LS3	TB7015
			n/a		➡	6210545	TPG221LS	TB7015	TPGN110304LS	TB7015
			n/a		➡	6210546	VBGW331LS	TB7015	VBGW160404LS	TB7015
5401069	VBGW332LS	KB90	VBGW160408LS	KB90	➡	6210547	VBGW332LS	TB7015	VBGW160408LS	TB7015
5400895	VNGA332LS	KB90	VNGA160408LS	KB90	➡	6210548	VNGA332LS	TB7015	VNGA160408LS	TB7015
5401301	VNGA332LS4	KB90	VNGA160408LS4	KB90	➡	6210550	VNGA332LS4	TB7015	VNGA160408LS4	TB7015