Expansion 1.0

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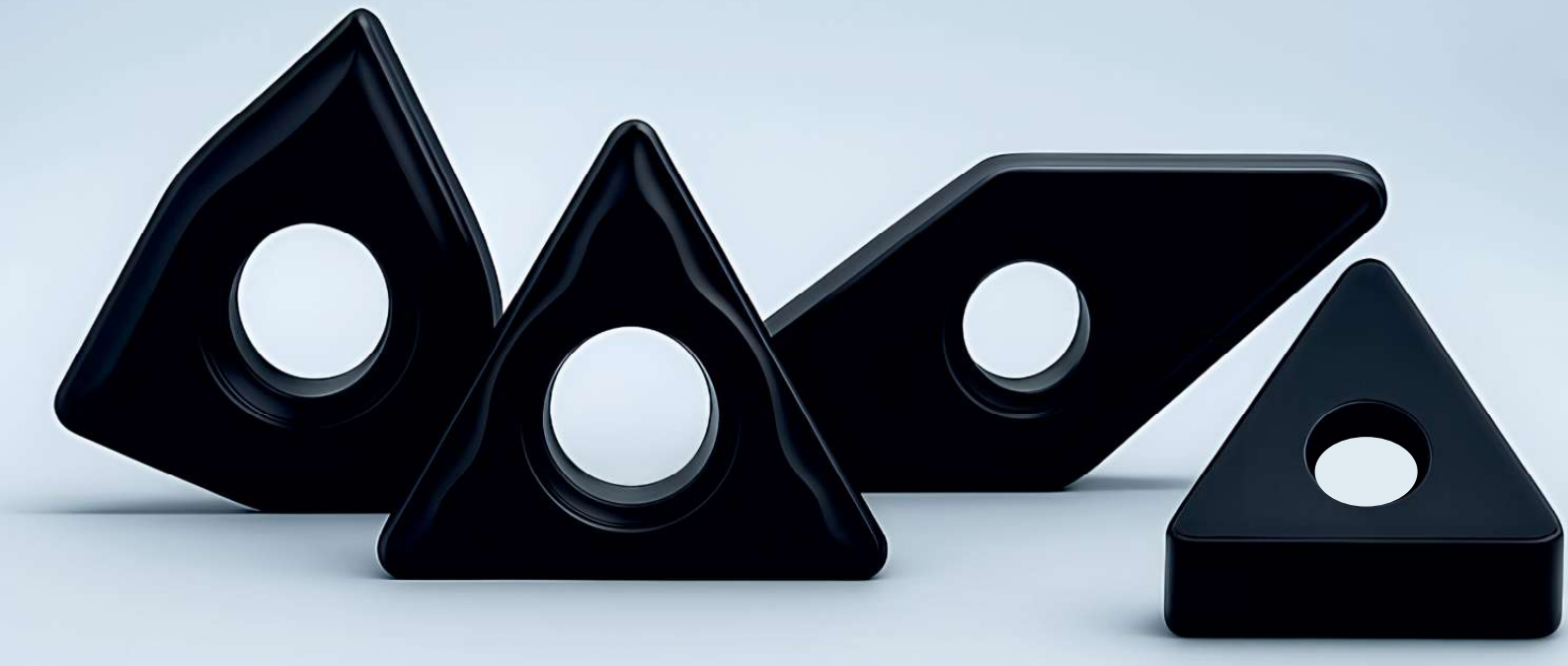
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New **CVD** coated Turning insert grade

DTC3000K series

Durable . Tough . Consistent

ISO K
Grey & Ductile



2 Grades DTC3005K & DTC3015K
1 Goal High Performance

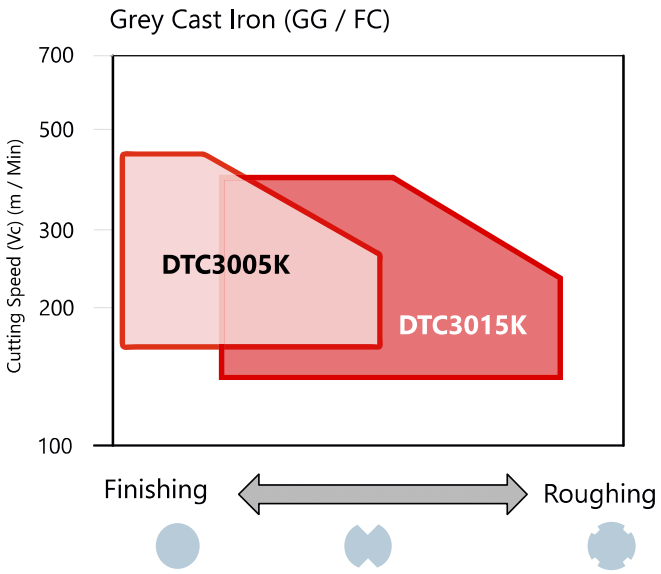
Brochure/MDC/2025/003

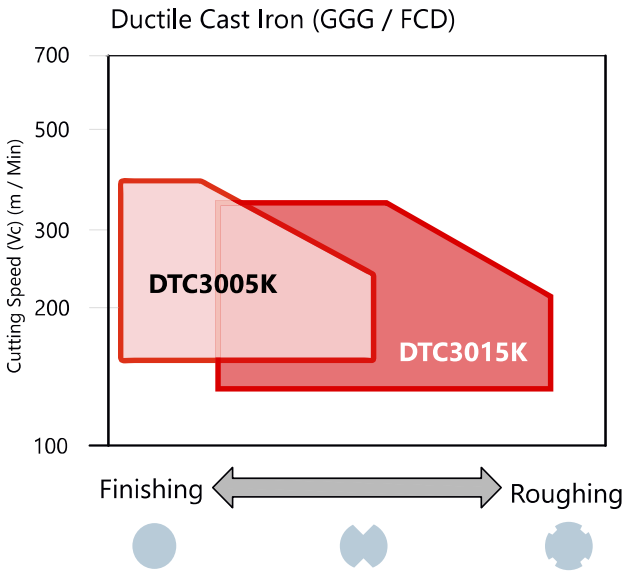
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Application area





Grade description

★ **Push the boundaries of the cutting parameters.**

Multilayer CVD Coating of TiCN–Al_2O_3: Superb wear resistance in high speed machining.

Tough Substrate: Withstands interrupted cuts on grey cast iron

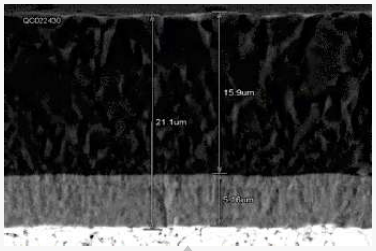
Balanced Performance: Handles light interruptions on ductile cast iron

Optimized Grain Structure: WC–Co for enhanced toughness



DTC3005K

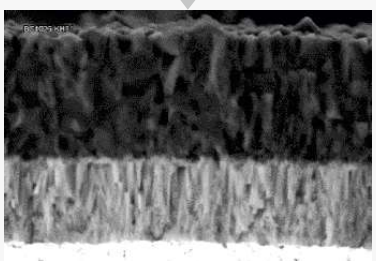
First choice grade for high speed finishing
and general machining under **stable conditions**.



(TiCN-Al2O3 Coatings)

DTC3015K

First choice grade for general machining
under **medium cutting parameters**, even for interrupted cuts.



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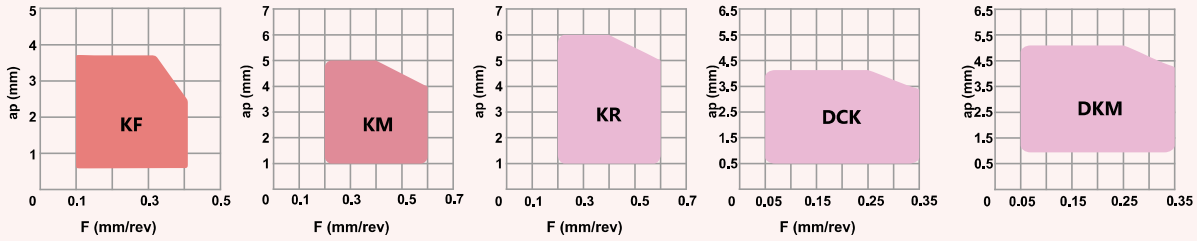
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RECOMMENDED Cutting parameters

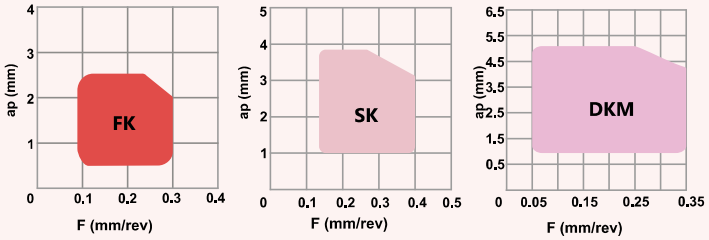
Material	Parameters	for DTC3005K			for DTC3015K		
Grey Cast Iron	Speed (m/min)	200	300 Ideal condition	450	150	250 Ideal condition	400
	Feed (mm/tooth)	0.10	0.25	0.40	0.10	0.30	0.50
Ductile Cast Iron	Speed (m/min)	180	250 Ideal condition	400	150	220 Ideal condition	350
	Feed (mm/tooth)	0.10	0.25	0.36	0.10	0.30	0.50

Chipbreaker application range

Negative



Positive



Success Case

10% ↑ tool life

DTC3005K

Continuous Cutting of Alloy Wheel

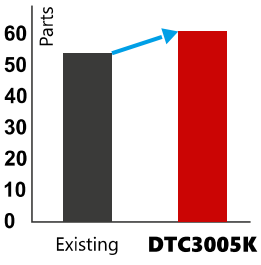
Application : Boring

Cast Iron (ISO K)

Insert: WNMG080412-KF-DTC3005K

Vc=572m/min, f=0.25mm/rev, ap=1.50mm, Wet





70% ↑ tool life

> Rs.3Lakh annual savings

DTC3015K

Continuous Cutting of Camshaft (Ø = 28mm)

*Stable machining even on a very small component

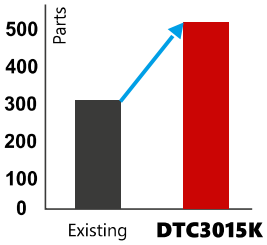
Application : Turning

FCD700 (ISO K)

Insert: TNMA160408-DTC3015K

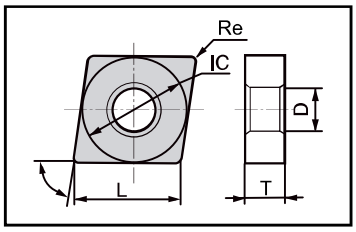
Vc=151m/min, f=0.25mm/rev, ap=1.50mm, Wet





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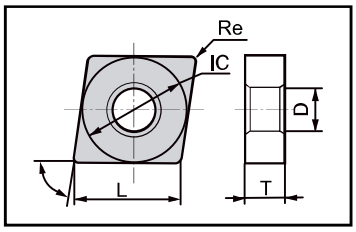
In Stock - ● Make to Order - ○

NEW In Stock - ● Make to Order - ○ **(All dimensions are in mm)**

Shape	Catalogue No.	Re Nose Radius	Grades		IC Inscribed circle	T Thickness	D Hole Dia.
			DTC3005K	DTC3015K			
Negative with Chip Breaker Geometry							
C 80°	CNMG120404-KF	0.4	●	●	12.7	4.76	5.16
	CNMG120404-DCK	0.4	●	○	12.7	4.76	5.16
	CNMG120404-DKM	0.4	○	●	12.7	4.76	5.16
	CNMG120408-KM	0.8	●	●	12.7	4.76	5.16
	CNMG120408-DCK	0.8	●	○	12.7	4.76	5.16
	CNMG120408-DKM	0.8	○	●	12.7	4.76	5.16
	CNMG120412-KM	1.2	●	●	12.7	4.76	5.16
	CNMG120412-DCK	1.2	●	○	12.7	4.76	5.16
	CNMG120412-DKM	1.2	○	●	12.7	4.76	5.16
	CNMG160608-KM	0.8	●	●	15.875	6.35	6.35
	CNMG160608-DCK	0.8	●	○	15.875	6.35	6.35
	CNMG160608-DKM	0.8	○	●	15.875	6.35	6.35
	CNMG160612-KM	1.2	●	○	15.875	6.35	6.35
	CNMG160612-KR	1.2	○	●	15.875	6.35	6.35
	CNMG160612-DCK	1.2	●	○	15.875	6.35	6.35
	CNMG160612-DKM	1.2	○	●	15.875	6.35	6.35
	CNMG160616-DKM	1.6	○	●	15.875	6.35	6.35
	CNMG190612-KR	1.2	○	●	19.05	6.35	7.94
	CNMG190612-DKM	1.2	○	●	19.05	6.35	7.94
	CNMG190616-KR	1.6	○	●	19.05	6.35	7.94
	CNMG190616-DKM	1.6	○	●	19.05	6.35	7.94

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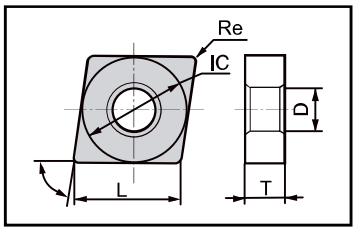
In Stock - ● Make to Order - ○

NEW In Stock - ● Make to Order - ○ (All dimensions are in mm)

Shape	Catalogue No.	Re Nose Radius	Grades		IC Inscribed circle	T Thickness	D Hole Dia.
			DTC3005K	DTC3015K			
Negative with Chip Breaker Geometry							
D 55°	DNMG110408-DKM	0.8	○	●	9.525	4.76	3.81
	DNMG150404-DKM	0.4	○	●	12.7	6.35	5.16
	DNMG150408-DCK	0.8	●	○	12.7	6.35	5.16
	DNMG150408-DKM	0.8	○	●	12.7	6.35	5.16
	DNMG150412-DKM	1.2	○	●	12.7	6.35	5.16
	DNMG150608-KF	0.8	●	○	12.7	6.35	5.16
	DNMG150608-DCK	0.8	●	○	12.7	6.35	5.16
	DNMG150608-DKM	0.8	○	●	12.7	6.35	5.16
	DNMG150608-KM	0.8	○	●	12.7	6.35	5.16
	DNMG150612-KF	1.2	●	○	12.7	6.35	5.16
	DNMG150612-KM	1.2	○	●	12.7	6.35	5.16
	DNMG150612-DCK	1.2	●	○	12.7	6.35	5.16
	DNMG150612-DKM	1.2	○	●	12.7	6.35	5.16
S 90°	SNMG120408-KF	0.8	●	○	12.7	4.76	5.16
	SNMG120408-KM	0.8	○	●	12.7	4.76	5.16
	SNMG120408-DCK	0.8	●	○	12.7	4.76	5.16
	SNMG120408-DKM	0.8	○	●	12.7	4.76	5.16
	SNMG120412-KM	1.2	○	●	12.7	4.76	5.16
	SNMG120412-DCK	1.2	●	○	12.7	4.76	5.16
	SNMG120412-DKM	1.2	○	●	12.7	4.76	5.16
	SNMG190612-KR	1.2	○	●	19.05	6.35	7.94
	SNMG190612-DKM	1.2	○	●	19.05	6.35	7.94
	SNMG190616-KR	1.6	○	●	19.05	6.35	7.94
	SNMG190616-DKM	1.6	○	●	19.05	6.35	7.94

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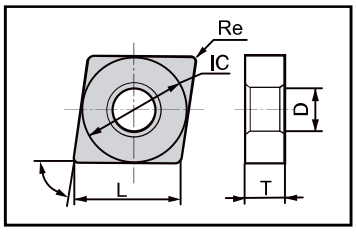
In Stock - ● Make to Order - ○

NEW In Stock - ● Make to Order - ○ (All dimensions are in mm)

Shape	Catalogue No.	Re Nose Radius	Grades		IC Inscribed circle	T Thickness	D Hole Dia.
			DTC3005K	DTC3015K			
Negative with Chip Breaker Geometry							
T 60°	TNMG160404-KF	0.4	●	●	9.525	4.76	3.81
	TNMG160404-DCK	0.4	●	○	9.525	4.76	3.81
	TNMG160404-DKM	0.4	○	●	9.525	4.76	3.81
	TNMG160408-KM	0.8	●	●	9.525	4.76	3.81
	TNMG160408-DCK	0.8	●	○	9.525	4.76	3.81
	TNMG160408-DKM	0.8	○	●	9.525	4.76	3.81
	TNMG160412-KM	1.2	●	●	9.525	4.76	3.81
	TNMG160412-DCK	1.2	●	○	9.525	4.76	3.81
	TNMG160412-DKM	1.2	○	●	9.525	4.76	3.81
V 35°	VNMG160404-KF	0.4	●	●	9.525	4.76	3.81
	VNMG160404-DCK	0.4	●	○	9.525	4.76	3.81
	VNMG160404-DKM	0.4	○	●	9.525	4.76	3.81
	VNMG160408-KF	0.8	○	●	9.525	4.76	3.81
	VNMG160408-KM	0.8	●	○	9.525	4.76	3.81
	VNMG160408-DCK	0.8	●	○	9.525	4.76	3.81
	VNMG160408-DKM	0.8	○	●	9.525	4.76	3.81
	VNMG160412-KF	1.2	●	○	9.525	4.76	3.81
	VNMG160412-KM	1.2	○	●	9.525	4.76	3.81
	VNMG160412-DCK	1.2	●	○	9.525	4.76	3.81
	VNMG160412-DKM	1.2	○	●	9.525	4.76	3.81
W 80°	WNMG060408-KR	0.8	●	●	9.525	4.76	3.81
	WNMG060408-DCK	0.8	●	○	9.525	4.76	3.81
	WNMG080404-DCK	0.8	●	○	9.525	4.76	3.81
	WNMG080404-DKM	0.8	○	●	9.525	4.76	3.81
	WNMG080408-KM	0.8	●	●	12.7	4.76	5.16
	WNMG080408-DCK	0.8	●	○	12.7	4.76	5.16
	WNMG080408-DKM	0.8	○	●	12.7	4.76	5.16
	WNMG080412-KF	1.2	●	○	12.7	4.76	5.16
	WNMG080412-KM	1.2	●	●	12.7	4.76	5.16
	WNMG080412-DCK	1.2	●	○	12.7	4.76	5.16
	WNMG080412-DKM	1.2	○	●	12.7	4.76	5.16

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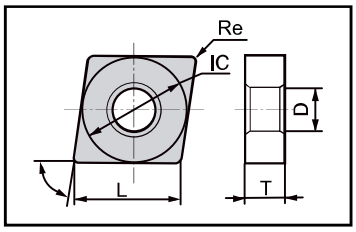
In Stock - ● Make to Order - ○

NEW In Stock - ● Make to Order - ○ (All dimensions are in mm)

Shape	Catalogue No.	Re Nose Radius	Grades		IC Inscribed circle	T Thickness	D Hole Dia.
			DTC3005K	DTC3015K			
Positive with Chip Breaker Geometry							
C 80°	CCMT060204-DKM	0.4	●	●	6.35	2.38	2.8
	CCMT060208-FK	0.8	●	●	6.35	2.38	2.8
	CCMT060208-DKM	0.8	●	●	6.35	2.38	2.8
	CCMT09T304-FK	0.4	●	●	9.525	3.97	4.4
	CCMT09T304-DKM	0.4	●	●	9.525	3.97	4.4
	CCMT09T308-FK	0.8	●	●	9.525	3.97	4.4
	CCMT09T308-DKM	0.8	●	●	9.525	3.97	4.4
	CCMT120408-SK	0.8	●	●	12.7	4.76	5.5
	CCMT120408-DKM	0.8	●	●	12.7	4.76	5.5
D 55°	DCMT11T304-FK	0.4	●	●	9.525	3.97	4.4
	DCMT11T304-DKM	0.4	●	●	9.525	3.97	4.4
	DCMT11T308-FK	0.8	●	●	9.525	3.97	4.4
	DCMT11T308-DKM	0.8	●	●	9.525	3.97	4.4
S 90°	SCMT09T304-FK	0.4	●	●	9.525	3.97	4.4
	SCMT09T304-DKM	0.4	●	●	9.525	3.97	4.4
	SCMT09T308-FK	0.8	●	●	9.525	3.97	4.4
	SCMT09T308-DKM	0.8	●	●	9.525	3.97	4.4
	SCMT120408-FK	0.8	●	●	12.7	4.76	5.5
	SCMT120408-SK	0.8	○	●	12.7	4.76	5.5
	SCMT120408-DKM	0.8	●	●	12.7	4.76	5.5
	SCMT120412-SK	1.2	●	●	12.7	4.76	5.5
	SCMT120412-DKM	1.2	●	●	12.7	4.76	5.5
T 60°	TCMT16T304-FK	0.4	●	●	9.525	3.97	4.4
	TCMT16T304-DKM	0.4	●	●	9.525	3.97	4.4
	TCMT16T308-FK	0.8	●	●	9.525	3.97	4.4
	TCMT16T308-DKM	0.8	●	●	9.525	3.97	4.4
V 35°	VBMT160408-FK	0.8	●	●	9.525	4.76	4.4
	VBMT160408-DKM	0.8	●	●	9.525	4.76	4.4

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In Stock - ● Make to Order - ○ **(All dimensions are in mm)**

Shape	Catalogue No.	Re Nose Radius	Grades		IC Inscribed circle	T Thickness	D Hole Dia.
			DTC3005K	DTC3015K			
Negative Flat Top with Chip Breaker Geometry							
C 80°	CNMA120408	0.8	●	●	12.7	4.76	5.16
	CNMA120412	1.2	●	●	12.7	4.76	5.16
	CNMA120416	1.6	○	●	12.7	4.76	5.16
	CNMA160612	1.2	○	●	15.875	6.35	6.35
	CNMA160616	1.6	○	●	15.875	6.35	6.35
	CNMA190612	1.2	○	●	19.05	6.35	7.94
	CNMA190616	1.6	○	●	19.05	6.35	7.94
D 55°	DNMA150608	0.8	○	●	12.7	6.35	5.16
	DNMA150612	1.2	○	●	12.7	6.35	5.16
S 90°	SNMA120408	0.8	○	●	12.7	4.76	5.16
	SNMA120412	1.2	○	●	12.7	4.76	5.16
	SNMA190612	1.2	○	●	19.05	6.35	7.94
T 60°	TNMA160408	0.8	●	●	9.525	4.76	3.81
	TNMA160412	1.2	○	●	9.525	4.76	3.81
W 80°	WNMA080408	0.8	○	●	12.7	4.76	5.16
	WNMA080412	1.2	●	●	12.7	4.76	5.16
	WNMA080416	1.6	○	●	12.7	4.76	5.16

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