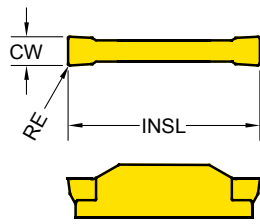


Parting & Grooving

Parting & Grooving Inserts









Recommended Cutting Conditions : p.222



Series	INSL	CW
TD* 2	20	2
TD* 3	20	3
TD* 4	20	4
TD* 5	25	5

* CDX : Cutting Depth Maximum

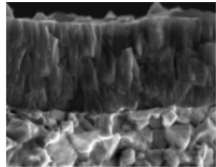
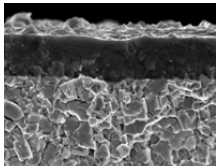
● : Stock item ○ : Order made item

TD.	Designation	RE	Parting & Grooving		Turning		EDP 5200..		
			Fn (mm/rev.)	CDX (mm)	Fn (mm/rev.)	Ap (mm)	YG602	YG602G	YG603
-P  Parting & Grooving (Sharp edge)  * 6° Angled Parting	TDP 2002	0.2	0.04 ~ 0.12	19	-	-	● 0012	○ 0036	● 0078
	TDP 3002	0.2	0.05 ~ 0.16	19	-	-	● 0029	○ 0030	● 0076
	TDP 4003	0.3	0.06 ~ 0.18	19	-	-	● 0023	○ 0038	● 0080
	* TDPR 2002 - 6	0.2	0.03 ~ 0.08	19	-	-	● 0045		● 0085
	* TDPR 3002 - 6	0.2	0.04 ~ 0.12	19	-	-	● 0048		● 0089
	* TDPL 2002 - 6	0.2	0.03 ~ 0.08	19	-	-	● 0046		● 0086
	* TDPL 3002 - 6	0.2	0.04 ~ 0.12	19	-	-	● 0049		● 0090
-N  Parting & Grooving (General)  * 6° Angled Parting	TDN 2002	0.2	0.05 ~ 0.18	19	-	-	● 0010	○ 0035	● 0077
	TDN 3002	0.2	0.07 ~ 0.23	19	-	-	● 0024	○ 0025	● 0075
	TDN 4003	0.3	0.08 ~ 0.28	19	-	-	● 0022	○ 0037	● 0079
	TDN 5003	0.3	0.09 ~ 0.35	24	-	-	● 0042		
	* TDNR 2002 - 6	0.2	0.04 ~ 0.14	19	-	-	● 0043		● 0083
	* TDNR 3002 - 6	0.2	0.06 ~ 0.18	19	-	-	● 0040		● 0087
	* TDNL 2002 - 6	0.2	0.04 ~ 0.14	19	-	-	● 0044		● 0084
* TDNL 3002 - 6	0.2	0.06 ~ 0.18	19	-	-	● 0047		● 0088	
* TDNL 4003 - 4	0.3	0.06 ~ 0.24	19			● 0096			
-Y  Turn Groove	TDY3E - 0.4	0.4	0.06 ~ 0.24	10	0.12 ~ 0.22	0.5 ~ 2.4		● 0027	
	TDY4E - 0.4	0.4	0.08 ~ 0.27	10	0.15 ~ 0.30	0.5 ~ 2.8		● 0020	
	TDY5E - 0.4	0.4	0.08 ~ 0.23	10	0.15 ~ 0.30	0.5 ~ 3.2		● 0082	
-Y  NEW GL  NEW GM  NEW RG	TDY2E - 0.3 - GL	0.3	0.04 ~ 0.20	10	0.06 ~ 0.18	0.4 ~ 1.5		● 0123	● 0124
	TDY3E - 0.3 - GL	0.3	0.05 ~ 0.23	10	0.08 ~ 0.20	0.4 ~ 2.0		● 0125	● 0126
	TDY4E - 0.4 - GL	0.4	0.06 ~ 0.26	10	0.10 ~ 0.25	0.5 ~ 2.3		● 0112	● 0127
	TDY3E - 0.4 - GM	0.4	0.06 ~ 0.24	10	0.12 ~ 0.22	0.5 ~ 2.4		● 0118	● 0119
	TDY4E - 0.4 - GM	0.4	0.08 ~ 0.27	10	0.15 ~ 0.30	0.5 ~ 2.8		● 0113	● 0120
	TDY4E - 0.8 - GM	0.8	0.10 ~ 0.27	10	0.18 ~ 0.32	0.8 ~ 2.8		● 0114	● 0122
TDY2E - 1.0 - RG	1.0	0.05 ~ 0.15	10	0.10 ~ 0.30	0.1 ~ 0.8		● 0111	● 0115	
TDY3E - 1.5 - RG	1.5	0.08 ~ 0.18	10	0.15 ~ 0.35	0.1 ~ 1.2		● 0108	● 0116	
TDY4E - 2.0 - RG	2.0	0.10 ~ 0.20	10	0.18 ~ 0.45	0.1 ~ 1.6		● 0109	● 0117	

Parting & Grooving Overview

Parting & Groove Turn Grades









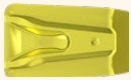



Parting and Grooving Grades		P Steel				M Stainless steel				K Cast iron			N Non Ferrous		S Super Alloy	
		P10	P20	P30	P40	M10	M20	M30	M40	K10	K20	K30	N10	N20	S10	S20
PVD	YG602G (YG602)		602G				602G				602G					602G
	YG603						603									

<p>YG602G (YG602)</p> <p>P20 - P35 M20 - M40 K20 - K40 S15 - S25</p>	<p>PVD - TiAlN</p> 	<p>Universal grade for Parting & Groove Turn</p> <ul style="list-style-type: none"> Ultra Dense PVD Coating with optimal thermal resistance & strength Sub-Micron substrate designed for demanding application YG602G : First Choice for Low Cutting Speed, Soft and Sticky Material with Low Hardness (Gold Color) YG602 : First Choice for General Application (Violet Color)
<p>YG603</p> <p>M30 - M50</p>	<p>PVD - TiAlN</p> 	<p>PVD Parting & Grooving Grade for Stainless Steel</p> <ul style="list-style-type: none"> Ultra high toughness substrate and strong adhesion Excellent cutting edge strength and chipping resistance Stable machinability and tool life for stainless steel

Parting & Grooving Inserts

	TD. Series	Inserts TDN, TDP, TDY	2, 3, 4, 5
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Parting & Grooving Chipbreakers

Parting & Grooving	-P			<ul style="list-style-type: none"> For Parting & Deep Grooving For Low Feed Rate and Difficult to Cut Materials
	-N			<ul style="list-style-type: none"> For External Parting And Grooving For General Use
Turning & Grooving	-Y			<ul style="list-style-type: none"> For External Turning & Grooving For Medium feed rate
	NEW GL			<ul style="list-style-type: none"> For External, Internal turning and Grooving Face grooving and Face turning For low feed rate
	NEW GM			<ul style="list-style-type: none"> For External, Internal turning and Grooving First choice Face Grooving and Face turning For Medium feed rate
	NEW RG			<ul style="list-style-type: none"> For External, Internal turning and Grooving Full radius Insert for Profiling

Grade Naming System

TURNING

1	2	3	4	5	(6)
YG	3	0	2	0	(G)
YG Brand	Workpiece Material	Grade Version	Application Range (1st Digit)	Application Range (2nd Digit)	Minor Variation

PARTING & GROOVING

Carbide CVD (4 Digits)	●	●	●	●	YG3020
Carbide PVD (3 Digits)	●	●	●		YG211
Carbide Uncoated (2 Digits)	●	●			YG10

MILLING

1 - YG Brand




2 - Workpiece Material

Symbol	Workpiece Material	Turning	Milling	Drilling	Parting
1	K Cast Iron or N Non-Ferrous	●			
2	M Stainless Steel	●			
3	P Steel	●			
4	S Superalloys	●			
5	K Cast Iron or N Non-Ferrous		●	●	●
6	M Stainless Steel or Universal		●	●	●
7	P Steel		●	●	●
8	Universal	●			

DRILLING

TECHNICAL INFORMATION

4 & 5 — Application Range

Symbol	
05	 Stable Wear Resistant Grade Stable Application Continuous Cut Finishing
10	
15	
20	 General Balanced Grade High Versatility General Application
25	
30	
35	 Unstable Tougher Grade Unstable Application Interrupted Cut Chipping Resistance Roughing
40	
45	

3 — Grade Version

(6) — (Minor Variation)

G — Gold Coated Version