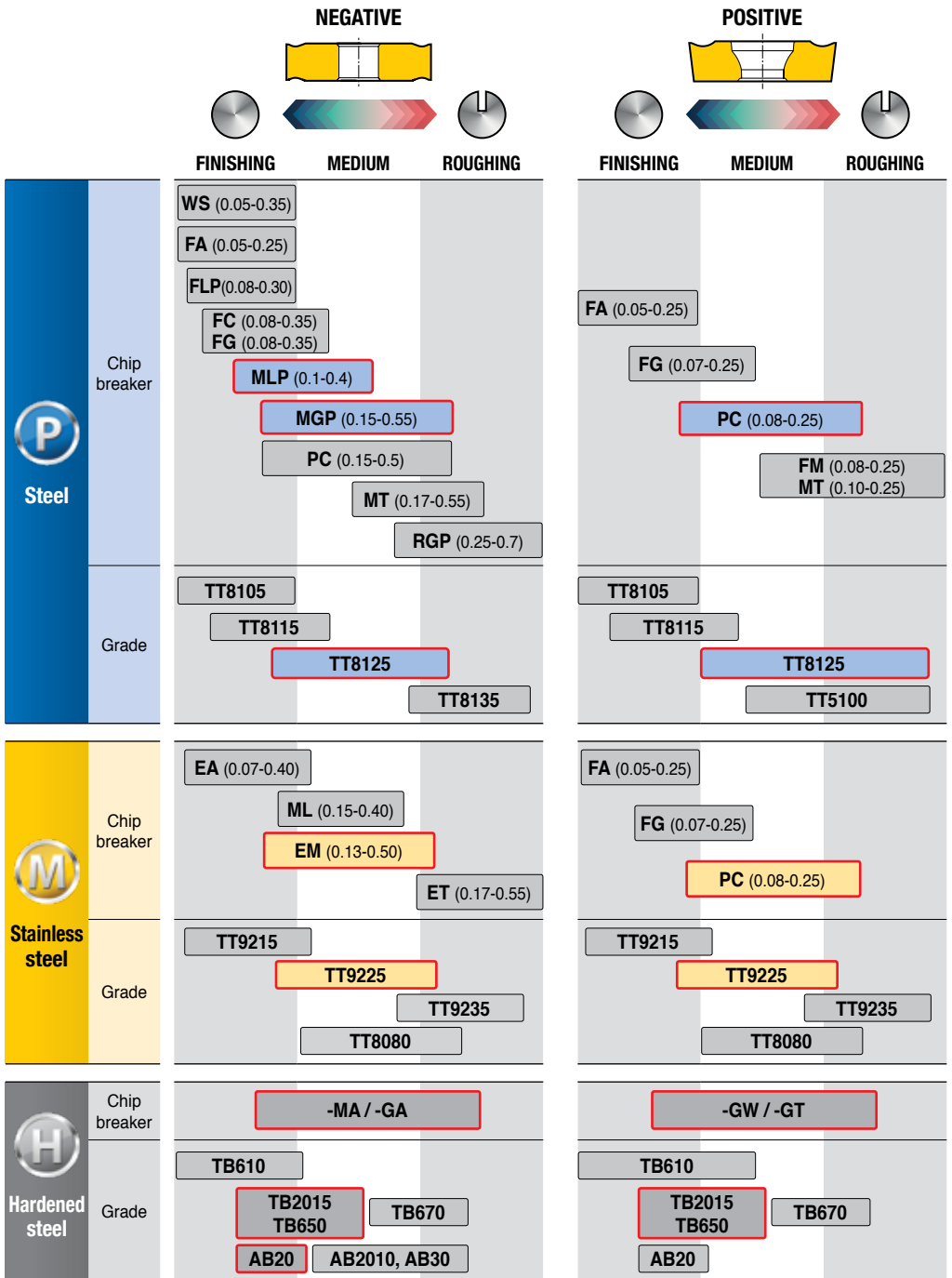


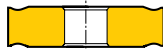
TaeguTec

Tool Selection

Guide



NEGATIVE



FINISHING

MEDIUM

ROUGHING

POSITIVE



FINISHING

MEDIUM

ROUGHING

Cast iron

Chip breaker

Grade

FG (0.08-0.35)		
MT (0.17-0.55)		
-MG (0.23-0.60)		
		KT (0.19-0.53)
		-MA ((0.15-0.60)
		RT (0.25-0.65)
KB90		
TB7015		
AB30		
AS500		
TT7005		
		TT7015

FG (0.07-0.25)		
		MT (0.10-0.25)
KB90		
TB7015		
AS500		
TT7005		
		TT7015

High temp. alloys

Chip breaker

Grade

EA (0.07-0.40)		
ML (0.12-0.35)		
		MGS (0.15-0.40)
		MP (0.12-0.40)
		ET (0.17-0.55)
TC430		
TC3020, TC3030		
TT3005		
TT3010		
		TT3020
		TT5080
		TT9080

-GT FGS (0.05-0.20)		
FG (0.07-0.25)		
		PC (0.08-0.25)
		MT (0.10-0.25)
TC430		
TC3020, TC3030		
TT3005		
TT3010		
		TT3020
		TT5080
		TT9080

Non-ferrous

Chip breaker

Grade

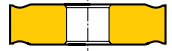
		-GG ML (0.12-0.35)
KP300		
TD810		
		K10

		-GW CB
		-GT FL
KP300		
TD810		
		K10

 : 1ST Recommended

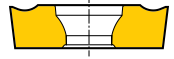
(Feed rate: mm/rev)

Negative Insert



ISO	Cutting mode	 TaeguTec	 SANDVIK	 KENNAMETAL	 SECO	 WALTER	 MITSUBISHI	 SUMITOMO	 KYOCERA
P	Finishing with wiper	WS, WA 	WF	FW	W-MF2	NF	SW	LUW, SEW	WP
	Medium with wiper	WT	WMX, WM	MW, RW	W-M3, W-M6, W-MF5	NM	MW	GUW	WQ, WE
	Finishing	FLP, FA, FS, GG-FU  FX		FF, FS	FF1, FF2	FP5 FV5	FH, FP FS, FY	FA FL	DP, GP, PP VF
		FLP, FG FM 	QF	FP MP-K, LF, FN	MF2	NF3, NF4	LP SH	SU, FE	HQ
	Semi - finishing	MLP, FC, FT 	PF, XF			NS6	SA	LU SE, SX	CQ, PQ CJ
	Medium	VF, DNUX 	K		UX	MV5	ES	GX, HM	
		MLP, MC		MN	MR3	MP3			GS
		MGP, PC MM 	PM, XM QM	P	MF3 MF5, M3	MP5 MM5 (NM4)	MP, MV MA	GU UG	PG PS
		MGP, MT	HM, XMR	MP RP, RM		MU5, NM6 NM9	MH	UX, GE	HS CS
		MGP, MG-		MG-, UN	M4 MR4	MG-	MG--	UZ	MG- C
	Roughing	RGP, RT	PR	RN	M5 MR7, M6	NR4, RP5 RP7	RP GH	ME MU, MX	PT, GT PH, HT
M	Finishing	EA, SF	MF	FP	MF1	FM5, NF4	FS, LM	SU	MQ, GU
	Medium	EM, ML	MM	MP, UP, MR	MF4	MM5 (NM4)	MS, GM, MA	EX, UP, GU	MS, MU, SK
	Roughing	ET	MR MM-MR	RP	MR6, MF5 MM-RR6	RM5, NR4 NRS	RM	MU, HM	HU
K	Finishing - medium	MT	KF KM	FN	MF5 M4		LK MA, MK	UZ	KQ MG-
		MG-		MG-, RN	M5	NM5, RK5	MG-, GK		KG, C
	Roughing	KT	KR			MV7, RK7			KH
		RT		UN	MR7		GH, RK	GZ	ZS, GC
N	Medium	ML	QM, 23	MS, MP			MJ	UP, GX, AG	A3, AH
S	Finishing	EA, SF	SF	GG-FS	MF1	NF4	FJ, LS	EF	MQ
	Medium	GG-ML	SGF, GP-	MS, GP-K	M1	GG-NFT	MJ	SU, UP	TK
		MGS, MP, MK 	QM, SM, 23	UP, P	MF4, MF5	NMS, NMT	MS	EG, EX	MS, MU, SQ
	Roughing	ET	SR, SMR	RP	M5, MR3, MR4	RM5, NRS, NRT	GJ, RS	MU	

Positive Insert



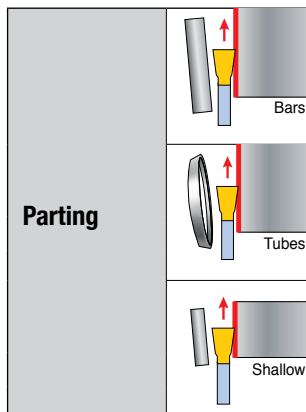
ISO	Cutting mode								
P	Medium with wiper	WT	WM	MW	W-F2, W-M3	PM	MW		
	Finishing	FA FX	PF, UF	UF, 11, GM	FF1	PF4, FP4	FV	LU FP	XP GK, GP, DP VF
		GT-SL GT-SA, GT-SM				FV4	SMG	FC	CF GF CK
		FG	UM XF	FP LF	F1	PS5	FK SU SQ, SV	SC, SK	XQ GK
	Medium	PC, GT-SH FM	PM	MP		FP6, MV4			GQ HQ
		GT-SH MT	XM PR, UR XR	MF	F2, MF2, M5	PM5 E47, MT-	MQ, MV MT- G	SF, MU	MT-
		PMR-	PMR-	PMR-		PMR-	PMR-	UJ	G, PMR-
	Finishing - medium - G Tolerance	GT-SA, FL	AL	HP	AL	GW-FS-1	AZ	AW, AG	AH
	Finishing - G Tolerance	GT-FGS, SA	GT-UM	GT-HP, LF	GT-F1	GT-PF2, FM4	GT-FJ	GT-SI	
	Finishing	FG	MF, UM	FP, LF	F1, F2	PF4, PS5, MM4	FM, LM, SV	SU	MQ
	Medium	PC	MM		MF2	PM5, RM4	MM, MV	MU	
S									



Steel
(HB 200-220)

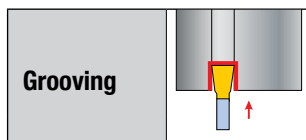


Stainless steel
(HB 180-200)



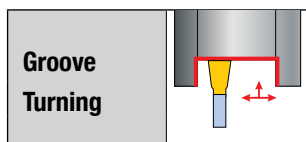
SFC TT9080	TDC TT9080
(Vc 100-150, fn 0.1-0.4)	
SFC TT9080	TDC TT9080
(Vc 100-150, fn 0.1-0.4)	
TQC TT9080	TQS TT4430
(Vc 100-150, fn 0.06-0.15)	

SFC TT9080	TDC TT9080
(Vc 80-120, fn 0.1-0.15)	
SFJ TT9080	TDJ TT9080
(Vc 80-120, fn 0.1-0.15)	
TQJ TT9080	TQS TT4430
(Vc 80-120, fn 0.05-0.13)	



TDC TT9080	TDXU TT9080
(Vc 100-150, fn 0.1-0.4)	

TDJ TT9080	TDXU TT9080
(Vc 80-120, fn 0.1-0.15)	



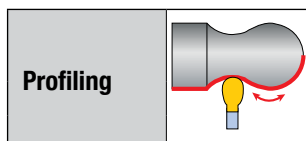
TDXU TT9080
(Vc 100-150, fn 0.1-0.4)

TDXU TT9080
(Vc 80-120, fn 0.1-0.15)



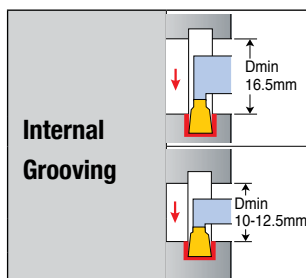
TDXU TT9080	TDFX TT9080
(Vc 100-150, fn 0.1-0.4)	

TDXU TT9080	TDFX TT9080
(Vc 80-120, fn 0.1-0.15)	



TDT-RU TT9080
(Vc 100-150, fn 0.1-0.4)

TDT-RU TT9080
(Vc 80-120, fn 0.1-0.15)



TQIS TT9080	TDXU TT9080
(Vc 100-150, fn 0.1-0.4)	
TMIS TT4430	TDIM TT9080
(Vc 100-150, fn 0.1-0.4)	

TQIS TT9080	TDXU TT9080
(Vc 80-120, fn 0.1-0.15)	
TMIS TT4430	TDIM TT9080
(Vc 80-120, fn 0.1-0.15)	



Cast iron
(HB 220-250)



Non-ferrous



**High temp.
alloys**
(HB 300-350)



**Hardened
steel**
(HRC > 40)



TDC TT9080

(Vc 120-180, fn 0.1-0.4)



TDC TT9080

(Vc 120-180, fn 0.1-0.4)



TQC TT9080

(Vc 120-180, fn 0.1-0.4)



TDJ K10

(Vc 150-330, fn 0.1-0.5)



TDJ K10

(Vc 150-330, fn 0.1-0.5)



TQS TT4430

(Vc 150-330, fn 0.1-0.5)



SFJ TT9080 TDJ TT9080

(Vc 30-60, fn 0.08-0.12)



SFJ TT9080 TDJ TT9080

(Vc 30-60, fn 0.08-0.12)



TQJ TT9080 TQS TT4430

(Vc 30-60, fn 0.08-0.12)



TDX TT6080

(Vc 120-180, fn 0.1-0.4)



TDJ K10



TDXU K10

(Vc 150-330, fn 0.1-0.5)



TDXU TT3010

(Vc 30-60, fn 0.08-0.12)



Special

TSG TB2015

(Vc 80-120, fn 0.1-0.15)



TDX TT6080

(Vc 120-180, fn 0.1-0.4)



TDXU K10

(Vc 150-330, fn 0.1-0.5)



TDXU TT3010

(Vc 30-60, fn 0.1-0.15)



TSG TB2015

(Vc 80-120, fn 0.1-0.15)



TDX TT6080

(Vc 120-180, fn 0.1-0.3)



TDXU K10

(Vc 150-330, fn 0.1-0.4)



TDXU TT3010 TDX TT6080

(Vc 30-60, fn 0.1-0.15)



Special

TSG TB2015

(Vc 80-120, fn 0.1-0.15)



TDT-RU TT6080

(Vc 120-180, fn 0.1-0.4)



TDA K10

(Vc 150-330, fn 0.1-0.4)



TDT-RU TT3010

(Vc 30-60, fn 0.1-0.15)



Special

TSG TB2015

(Vc 80-120, fn 0.1-0.15)



TQIS TT9080 TDX TT6080

(Vc 120-180, fn 0.1-0.3)



TDXU K10

(Vc 150-330, fn 0.1-0.4)



TDXU TT3010

(Vc 150-330, fn 0.1-0.4)



Special

TSG TB2015

(Vc 80-120, fn 0.1-0.15)



TDIM TT9080 TDIP TT9080

(Vc 120-180, fn 0.1-0.3)



TMIS TT4430 TDIP TT9080

(Vc 150-330, fn 0.1-0.4)



TMIS TT4430 TDIP TT9080

(Vc 30-60, fn 0.1-0.15)

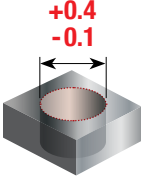
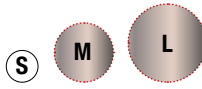
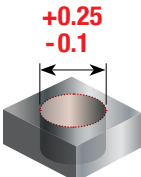
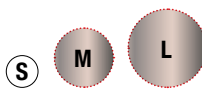
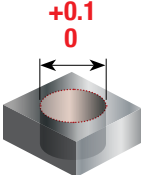
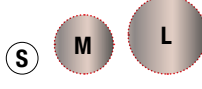
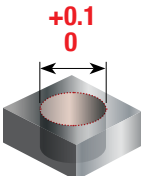
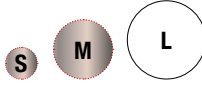
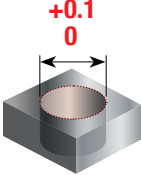
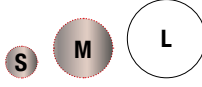
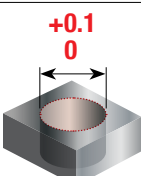


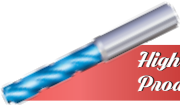
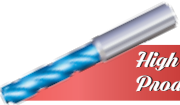
Special

TSIP TB2015

(Vc 80-120, fn 0.1-0.15)

(Vc cutting speed: m/min, fn feed rate: mm/rev)

	Hole tolerance	Application	Recommended drill series	Diameter range (DC)
Rough Drilling	 +0.4 -0.1	 Medium to large hole drilling	 TOP 2 TOP 3 TOP 4 TOP 5	Direct mounting Ø12.0 - Ø50.0 mm Cartridge type Ø51.0 - Ø80.0 mm
	 +0.25 -0.1	 Medium to large hole drilling	 MDB-3 MDB-5	Ø26.0 - Ø50.0 mm
Medium Drilling	 +0.1 0	 Medium to large hole drilling	 LCD-3D LCD-5D LCD-8D	Ø20.0 - Ø41.0 mm
	 +0.1 0	 Small to medium hole drilling	 TCD-1.5D TCD-3D TCD-5D TCD-8D TCD-12D	Ø6.0 - Ø25.9 mm
Finish Drilling	 +0.1 0	 Small to medium hole drilling	 3ED-3D 3ED-5D	Ø16.0 - Ø20.9 mm
	 +0.1 0	 Small hole drilling	 3HD-PI3 3HD-PI5	Ø4.0 - Ø12.0 mm

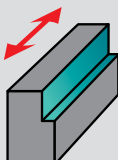
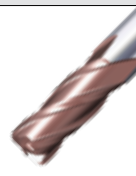
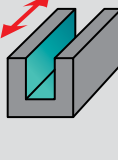
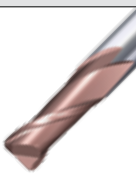
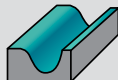
ISO materials			
	  for Alloy steel for Low carbon steel SOMT-DP TT9080 SOMT-DL TT9080 Vc 140 - 160 - 180 fn 0.08 - 0.12 - 0.14	 SOMT-DP TT9080 Vc 160 - 180 - 220 fn 0.06 - 0.08 - 0.10	 SOMT-DK TT9080 Vc 140 - 160 - 200 fn 0.10 - 0.15 - 0.20
P M K N S			
	  TCD-P-CO+ TT9080 SPGX-DW TT9080 Vc 100 - 140 - 180 fn 0.20 - 0.25 - 0.35	-	  TCD-P-CO+ TT9080 SPGX-DW TT9080 Vc 120 - 160 - 200 fn 0.20 - 0.30 - 0.50
P K			
	 LCD-P TT9080 Vc 80 - 100 - 200 fn 0.20 - 0.25 - 0.30	 LCD-P TT9080 Vc 80 - 60 - 70 fn 0.12 - 0.20 - 0.25	 LCD-P TT9080 Vc 100 - 120 - 150 fn 0.20 - 0.35 - 0.50
P M K N			
	 TCD-P TT9080 Vc 70 - 100 - 200 fn 0.20 - 0.25 - 0.30	 TCD-M TT9080 Vc 50 - 60 - 70 fn 0.12 - 0.18 - 0.25	 TCD-K TT9080 Vc 100 - 120 - 150 fn 0.20 - 0.27 - 0.35
P M K N			
	 <i>High Productivity</i> 3ED-P+ TT5130 Vc 70 - 100 - 140 fn 0.30 - 0.40 - 0.55	-	 <i>High Productivity</i> 3ED-P+ TT5130 Vc 80 - 120 - 160 fn 0.40 - 0.50 - 0.60
P K			
	 <i>High Productivity</i> 3HD TT5130 Vc 70 - 100 - 140 fn 0.20 - 0.35 - 0.55	-	 <i>High Productivity</i> 3HD TT5130 Vc 80 - 100 - 140 fn 0.25 - 0.45 - 0.60
P K			

(Vc cutting speed: m/min, fn feed rate: mm/rev)

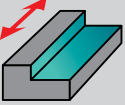
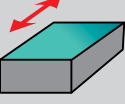
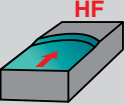
Tool Selection by Material

	General Purpose		Special Purpose	
	Edge type	1 st Recommended	Special purpose	1 st Recommended
 TT5525	Flat 	TSE 2/4	High feed	HFM 2/4
	Corner R 	HES 2/4	Chamfering	CEM 2/4 ECM 2/4
	Ball 	SBE 2/4	Roughing	REL 2/4
 TT5515	Flat 	SED 4	Roughing	SER
	Corner R 			
	Ball 	SBT		
 UF10	Flat 	AES 2/3	Waved cutting edge	AWE 3
	Corner R 		Roughing	REA 3
	Ball 	AEB 2/3		
 TT5505	Flat 	HSF	CBN Ball	HSB 2CBN
	Corner R 	HSR		
	Ball 	HSB		
	For Trochoidal 		For Inconel	
	Corner R 	SED 7 TT5515	Ceramic corner R	CRF 4/6 TC3030
			Ceramic high feed	CRH 4 TC3030

Tool Selection by Application

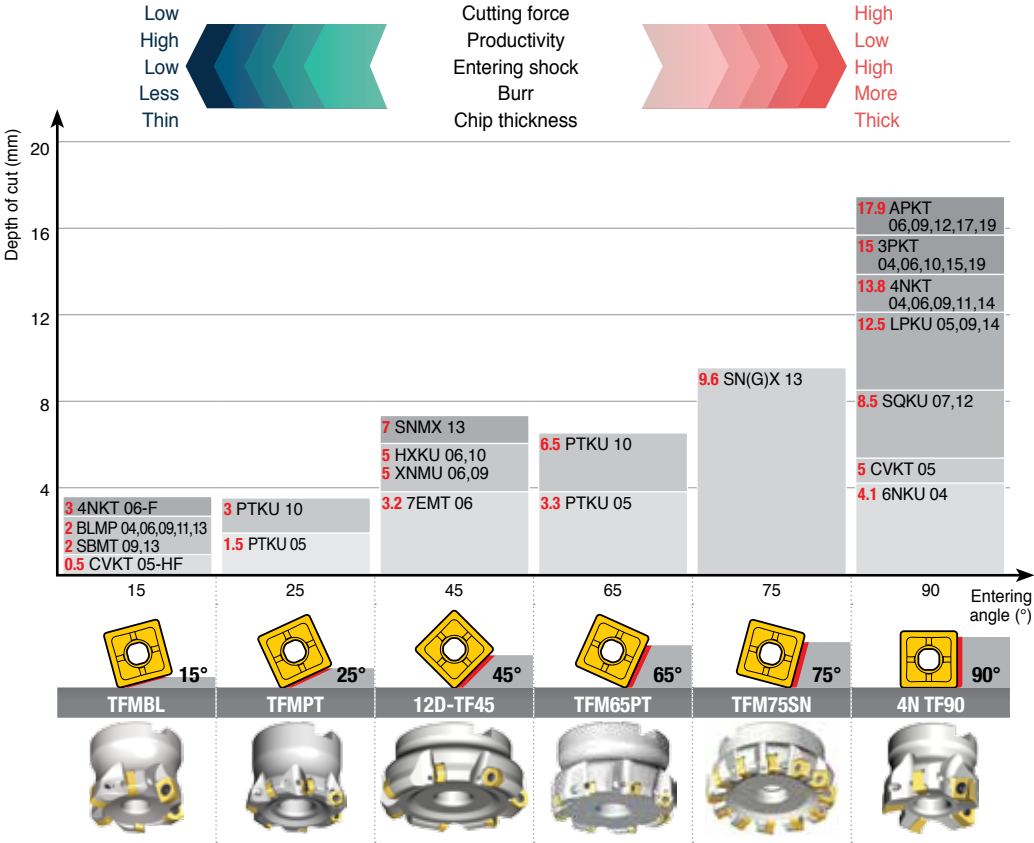
		 TT5525	 TT5515	 TT5505	 UF10
 Shouldering	 Flat	 TSE 4	 SED 4/7	 HSF 4/6	 AES 3
	 Corner R	 HES 4		 HSR 4/6	
 Slotting	 Flat	 TSE 2	  Only for trochoidal SED 4/7	 HSF 2	 AES 2/3
	 Corner R	 HES 2		 HSR 2	
 Profiling	 Ball	 SBE 2/4	 SBT	 HSB	 AEB

Tool Selection by Application

			 TT9080 (TT8080)	 TT8080 (TT8020)	 TT6080 (TT7515)	 K10	 TT8080 (TT9540, TT3540)	 TT2510 (CBN)
 Shouldering	Roughing	1 st						
		2 nd						
		1 st						
		2 nd						
	Finishing							
 Facing	Roughing	1 st						
		2 nd				-		-
		1 st						
		2 nd	-		-	-	-	
	Finishing							
 High feed milling	Roughing	1 st				-		
		2 nd				-		

1st : First recommended tool2nd : Second recommended tool

Tool Selection by Entering Angle & Depth of Cut



Properties by Cutter Pitch

Coarse pitch



Medium pitch



Fine pitch

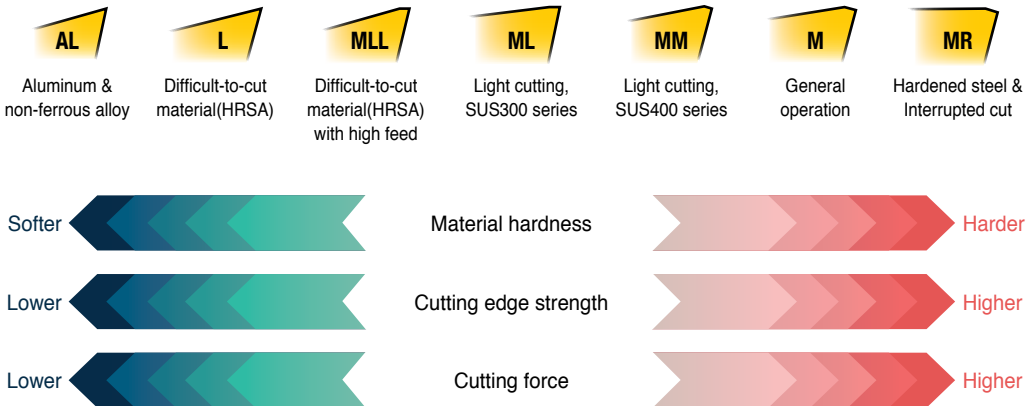
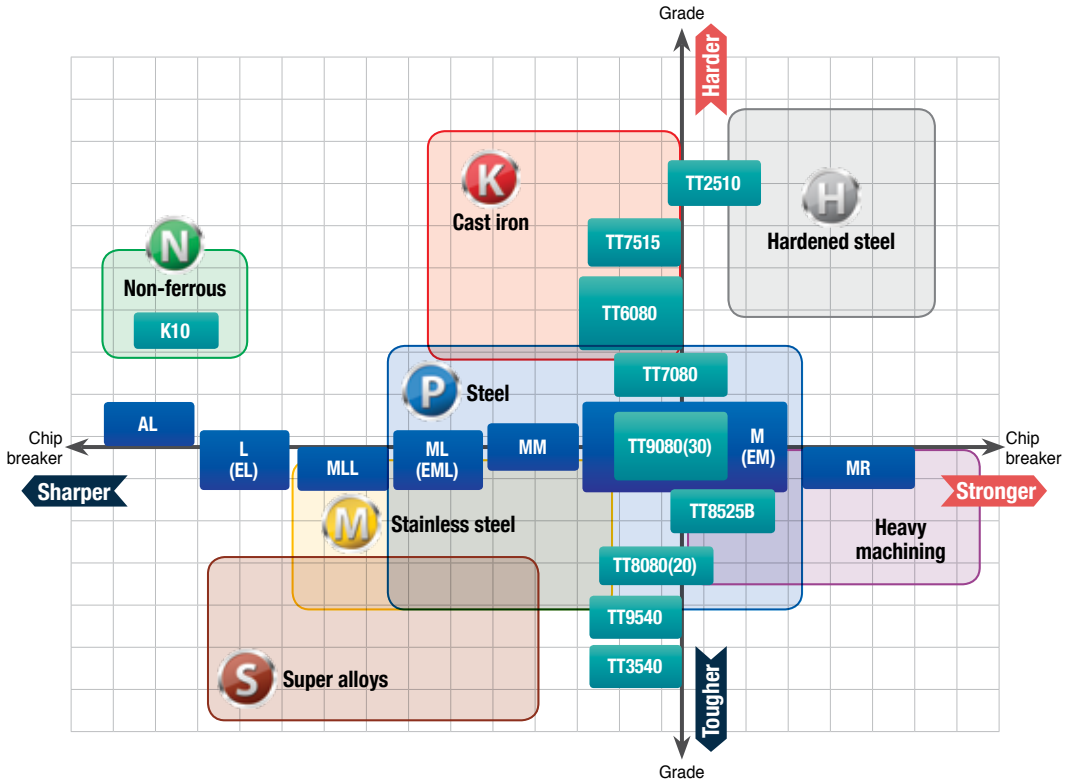


Low
Low
Big
Good

Table feed
Cutting force
Chip gullet
Anti vibration

High
High
Small
Bad

Grade and Chip Former Selection Map



INDUSTRY 4.0



TaeguTec
INDUSTRY 4.0



- Cat. no.: 6226827
- English version: CT 01/2021
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