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YF-2015/1(EN)

Yes Carbide Cutting Tools

— High Performance
Carbide Tools Line



● **YESTOOL's worldwide network**



- | | | | |
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| ▶ Australia | ▶ France | ▶ Morocco | ▶ Spain |
| ▶ Austria | ▶ Germany | ▶ Netherlands | ▶ Sweden |
| ▶ Belarus | ▶ Greece | ▶ Norway | ▶ Switzerland |
| ▶ Belgium | ▶ Hong Kong | ▶ Pakistan | ▶ Taiwan |
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Yes® **YESTOOL Co., Ltd.**



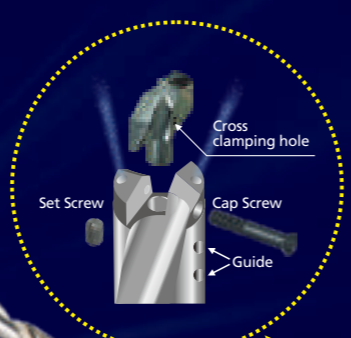
F1 Drill & IDSH insert

F1DR

IDSH

New evolutionary deep hole drill, World first !!
releasing max. 1.25meters from a pioneer of carbide indexable drill manufacturer, YESTOOL Co., Ltd.

- ❖ Designed to use either gun-drill machine or machining center
- ❖ Higher feeding rate 2 times or over than gun-drill
- ❖ Internal coolant and fit IDSH carbide insert
- ❖ Carbide wear parts on flute(optional)
 - $\phi 8.0 \sim 9.5 \Rightarrow 20xD$
 - $\phi 10.0 \sim 11.5 \Rightarrow 30xD$
 - $\phi 12.0 \sim 23.5 \Rightarrow 50xD$
 - $\phi 24.0 \sim 25.0 \Rightarrow 45xD$
 - $\phi 25.0$ or over available max. 1,250mm(OAL)



※ Visit our below website for more test drilling
($\phi 20.0$, steel cutting depth 400mm)
www.yestool.com

cutting speed	S: 2,000 rpm
	f: 0.25mm/rev
	F: 500mm/min



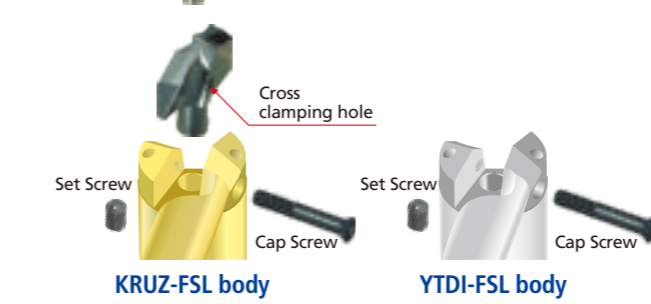
KRUZ-FSL, YTDI-FSL Flange body & Carbide insert



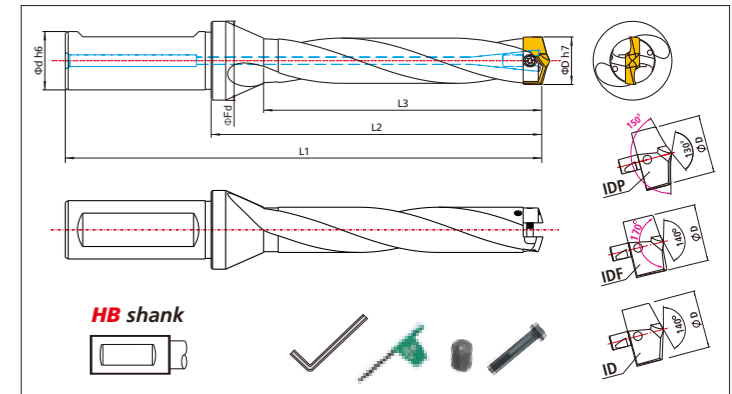
KRUZ-FSL

Insert selection

- IDP** Deep hole & general purpose
- IDF** Thin plate & shallow depth
- ID** General purpose



- ▶ Rugged flange type body to decrease vibration or chattering
- ▶ Interchangeable <IDP>, <IDF>, <ID> carbide drill inserts
- ▶ Drill body consists of premium tool steel with heat treatment
- ▶ Increased tool life by less vibration
- ▶ Internal coolant fed design



Please make required cutting depth in the □ like T, P, H, L

Hole size range	Body Code No.	Shank Size(ϕd)	Cutting depth (Length x ϕD)	L1	L2	L3	Flanged dia. (ϕFd)	Insert Code No. to fit in body	Cap Screw	Torx driver	Set Screw	L-wrench
$\phi 8.0$ ~ $\phi 8.4$	YTDI 080 □ FSL	10.0 (HA)	T(3xD)	87	42	32	18	IDP 080, IDP 081, IDP 082, IDP 083, IDP 084	CS 080 -085 SL	T6 Torque 0.6Nm (Max)	None	None
	KRUZ 080 □ FSL		P(5xD)	103	58	48		IDF 080, IDF 081, IDF 082, IDF 083, IDF 084				
			H(7xD)	119	74	64		ID 080, ID 081, ID 082, ID 083, ID 084				
$\phi 8.5$ ~ $\phi 8.9$	YTDI 085 □ FSL	10.0 (HA)	T(3xD)	89	44	34		IDP 085, IDP 086, IDP 087, IDP 088, IDP 089				
	KRUZ 085 □ FSL		P(5xD)	106	61	51		IDF 085, IDF 086, IDF 087, IDF 088, IDF 089				
			H(7xD)	123	78	68		ID 085, ID 086, ID 087, ID 088, ID 089				
$\phi 9.0$ ~ $\phi 9.4$	YTDI 090 □ FSL	10.0 (HA)	T(3xD)	92	47	36		IDP 090, IDP 091, IDP 092, IDP 093, IDP 094				
	KRUZ 090 □ FSL		P(5xD)	110	65	54		IDF 090, IDF 091, IDF 092, IDF 093, IDF 094				
			H(7xD)	128	83	72		ID 090, ID 091, ID 092, ID 093, ID 094				
$\phi 9.5$ ~ $\phi 9.9$	YTDI 095 □ FSL	10.0 (HA)	T(3xD)	97	49	38		IDP 095, IDP 096, IDP 097, IDP 098, IDP 099				
	KRUZ 095 □ FSL		P(5xD)	116	68	57		IDF 095, IDF 096, IDF 097, IDF 098, IDF 099				
			H(7xD)	135	87	76		ID 095, ID 096, ID 097, ID 098, ID 099				
$\phi 10.0$ ~ $\phi 10.4$	YTDI 100 □ FSL	12.0 (HA)	T(3xD)	99	51	40		IDP 100, IDP 101, IDP 102, IDP 103, IDP 104				
	KRUZ 100 □ FSL		P(5xD)	119	71	60		IDF 100, IDF 101, IDF 102, IDF 103, IDF 104				
			H(7xD)	139	91	80		ID 100, ID 101, ID 102, ID 103, ID 104				
$\phi 10.5$ ~ $\phi 10.9$	YTDI 105 □ FSL	12.0 (HA)	T(3xD)	102	54	42		IDP 105, IDP 106, IDP 107, IDP 108, IDP 109				
	KRUZ 105 □ FSL		P(5xD)	123	75	63		IDF 105, IDF 106, IDF 107, IDF 108, IDF 109				
			H(7xD)	144	96	84		ID 105, ID 106, ID 107, ID 108, ID 109				
$\phi 11.0$ ~ $\phi 11.4$	YTDI 110 □ FSL	12.0 (HA)	T(3xD)	104	56	44	IDP 110, IDP 111, IDP 112, IDP 113, IDP 114					
	KRUZ 110 □ FSL		P(5xD)	126	78	66	IDF 110, IDF 111, IDF 112, IDF 113, IDF 114					
			H(7xD)	148	100	88	ID 110, ID 111, ID 112, ID 113, ID 114					
$\phi 11.5$ ~ $\phi 11.9$	YTDI 115 □ FSL	12.0 (HA)	L(10xD)	181	133	121	IDP 115, IDP 116, IDP 117, IDP 118, IDP 119					
	KRUZ 115 □ FSL		T(3xD)	107	59	46	IDF 115, IDF 116, IDF 117, IDF 118, IDF 119					
			P(5xD)	130	82	69	ID 115, ID 116, ID 117, ID 118, ID 119					
$\phi 12.0$ ~ $\phi 12.4$	YTDI 120 □ FSL	16.0	H(7xD)	153	105	92	IDP 120, IDP 121, IDP 122, IDP 123, IDP 124					
	KRUZ 120 □ FSL		L(10xD)	188	140	127	IDF 120, IDF 121, IDF 122, IDF 123, IDF 124					
			T(3xD)	109	61	48	ID 120, ID 121, ID 122, ID 123, ID 124					
			P(5xD)	133	85	72						
			H(7xD)	157	109	96						
			L(10xD)	193	145	132						

Continued ▶▶

KRUZ-FSL, YTDI-FSL Flange body & Carbide insert

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body	Cap Screw	Torx driver	Set Screw	L-wrench																															
Φ12.5 ~Φ12.9	YTDI 125 □ FSL	16.0	T(3xD)	111	63	50	21	IDP 125, IDP 126, IDP 127, IDP 128, IDP 129 IDF 125, IDF 126, IDF 127, IDF 128, IDF 129 ID 125-, ID 126, ID 127, ID 128, ID 129	CS 120 -135 SL	T6 Torque 0.6Nm (Max)																																	
	KRUZ 125 □ FSL		P(5xD)	136	88	75							H(7xD)	161	113	100	L(10xD)	199	151	138																							
Φ13.0 ~Φ13.4	YTDI 130 □ FSL		T(3xD)	114	66	52							21	IDP 130, IDP 131, IDP 132, IDP 133, IDP 134 IDF 130, IDF 131, IDF 132, IDF 133, IDF 134 ID 130, ID 131, ID 132, ID 133, ID 134	CS 120 -135 SL	T6 Torque 0.6Nm (Max)																											
	KRUZ 130 □ FSL		P(5xD)	140	92	78													H(7xD)	166	118	104	L(10xD)	205	157	143																	
Φ13.5 ~Φ13.9	YTDI 135 □ FSL		T(3xD)	116	68	54	21	IDP 135, IDP 136, IDP 137, IDP 138, IDP 139 IDF 135, IDF 136, IDF 137, IDF 138, IDF 139 ID 135, ID 136, ID 137, ID 138, ID 139											CS 120 -135 SL	T6 Torque 0.6Nm (Max)																							
	KRUZ 135 □ FSL		P(5xD)	143	95	81																	H(7xD)	170	122	108	L(10xD)	211	163	149													
Φ14.0 ~Φ14.4	YTDI 140 □ FSL		T(3xD)	119	71	56							21	IDP 140, IDP 141, IDP 142, IDP 143, IDP 144 IDF 140, IDF 141, IDF 142, IDF 143, IDF 144 ID 140, ID 141, ID 142, ID 143, ID 144									CS 140 -155 SL	T7 Torque 0.9Nm (Max)	M2.5x4	1.3mm																	
	KRUZ 140 □ FSL		P(5xD)	147	99	84																					H(7xD)	175	127	112	L(10xD)	217	169	154									
Φ14.5 ~Φ14.9	YTDI 145 □ FSL		T(3xD)	123	73	58	21	IDP 145, IDP 146, IDP 147, IDP 148, IDP 149 IDF 145, IDF 146, IDF 147, IDF 148, IDF 149 ID 145, ID 146, ID 147, ID 148, ID 149																			CS 140 -155 SL	T7 Torque 0.9Nm (Max)	M2.5x4	1.3mm													
	KRUZ 145 □ FSL		P(5xD)	152	102	87																									H(7xD)	181	131	116	L(10xD)	225	175	160					
Φ15.0 ~Φ15.4	YTDI 150 □ FSL		T(3xD)	127	77	60							21	IDP 150, IDP 151, IDP 152, IDP 153, IDP 154 IDF 150, IDF 151, IDF 152, IDF 153, IDF 154 ID 150, ID 151, ID 152, ID 153, ID 154																	CS 140 -155 SL	T7 Torque 0.9Nm (Max)	M2.5x4	1.3mm									
	KRUZ 150 □ FSL		P(5xD)	157	107	90																													H(7xD)	187	137	120	L(10xD)	232	182	165	
Φ15.5 ~Φ15.9	YTDI 155 □ FSL		T(3xD)	130	80	62	21	IDP 155, IDP 156, IDP 157, IDP 158, IDP 159 IDF 155, IDF 156, IDF 157, IDF 158, IDF 159 ID 155, ID 156, ID 157, ID 158, ID 159																											CS 160 -175 SL	T8 Torque 1.5Nm (Max)							
	KRUZ 155 □ FSL		P(5xD)	161	111	93																																	H(7xD)	192	142	124	L(10xD)
Φ16.0 ~Φ16.4	YTDI 160 □ FSL		T(3xD)	132	82	64							21	IDP 160, IDP 161, IDP 162, IDP 163, IDP 164 IDF 160, IDF 161, IDF 162, IDF 163, IDF 164 ID 160, ID 161, ID 162, ID 163, ID 164																									CS 160 -175 SL	T8 Torque 1.5Nm (Max)			
	KRUZ 160 □ FSL		P(5xD)	164	114	96																																					H(7xD)
Φ16.5 ~Φ16.9	YTDI 165 □ FSL	T(3xD)	135	85	66	21	IDP 165, IDP 166, IDP 167, IDP 168, IDP 169 IDF 165, IDF 166, IDF 167, IDF 168, IDF 169 ID 165, ID 166, ID 167, ID 168, ID 169	CS 160 -175 SL	T8 Torque 1.5Nm (Max)																																		
	KRUZ 165 □ FSL	P(5xD)	168	118	99							H(7xD)																															201
Φ17.0 ~Φ17.4	YTDI 170 □ FSL	T(3xD)	137	87	68							27	IDP 170, IDP 171, IDP 172, IDP 173, IDP 174 IDF 170, IDF 171, IDF 172, IDF 173, IDF 174 ID 170, ID 171, ID 172, ID 173, ID 174	CS 180 -195 SL	T8 Torque 1.5Nm (Max)																												
	KRUZ 170 □ FSL	P(5xD)	171	121	102													H(7xD)																									205
Φ17.5 ~Φ17.9	YTDI 175 □ FSL	T(3xD)	139	89	70	27	IDP 175, IDP 176, IDP 177, IDP 178, IDP 179 IDF 175, IDF 176, IDF 177, IDF 178, IDF 179 ID 175, ID 176, ID 177, ID 178, ID 179											CS 180 -195 SL	T8 Torque 1.5Nm (Max)																								
	KRUZ 175 □ FSL	P(5xD)	174	124	105																	H(7xD)																					209
Φ18.0 ~Φ18.4	YTDI 180 □ FSL	T(3xD)	142	92	72							27	IDP 180, IDP 181, IDP 182, IDP 183, IDP 184 IDF 180, IDF 181, IDF 182, IDF 183, IDF 184 ID 180, ID 181, ID 182, ID 183, ID 184									CS 180 -195 SL	T8 Torque 1.5Nm (Max)																				
	KRUZ 180 □ FSL	P(5xD)	178	128	108																					H(7xD)																	214
Φ18.5 ~Φ18.9	YTDI 185 □ FSL	T(3xD)	144	94	74	27	IDP 185, IDP 186, IDP 187, IDP 188, IDP 189 IDF 185, IDF 186, IDF 187, IDF 188, IDF 189 ID 185, ID 186, ID 187, ID 188, ID 189																			CS 180 -195 SL	T8 Torque 1.5Nm (Max)																
	KRUZ 185 □ FSL	P(5xD)	181	131	111																									H(7xD)													218
Φ19.0 ~Φ19.4	YTDI 190 □ FSL	T(3xD)	147	97	76							32	IDP 190, IDP 191, IDP 192, IDP 193, IDP 194 IDF 190, IDF 191, IDF 192, IDF 193, IDF 194 ID 190, ID 191, ID 192, ID 193, ID 194																	CS 200 -215 SL	T8 Torque 1.5Nm (Max)												
	KRUZ 190 □ FSL	P(5xD)	185	135	114																													H(7xD)									223
Φ19.5 ~Φ19.9	YTDI 195 □ FSL	T(3xD)	149	99	78	32	IDP 195, IDP 196, IDP 197, IDP 198, IDP 199 IDF 195, IDF 196, IDF 197, IDF 198, IDF 199 ID 195, ID 196, ID 197, ID 198, ID 199																											CS 200 -215 SL	T8 Torque 1.5Nm (Max)								
	KRUZ 195 □ FSL	P(5xD)	188	138	117																																	H(7xD)					227
Φ20.0 ~Φ20.4	YTDI 200 □ FSL	T(3xD)	157	101	80							32	IDP 200, IDP 201, IDP 202, IDP 203, IDP 204 IDF 200, IDF 201, IDF 202, IDF 203, IDF 204 ID 200, ID 201, ID 202, ID 203, ID 204																									CS 200 -215 SL	T8 Torque 1.5Nm (Max)				
	KRUZ 200 □ FSL	P(5xD)	197	141	120																																					H(7xD)	237

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body	Cap Screw	Torx driver	Set Screw	L-wrench																															
Φ20.5 ~Φ20.9	YTDI 205 □ FSL	25.0	T(3xD)	160	104	82	32	IDP 205, IDP 206, IDP 207, IDP 208, IDP 209 IDF 205, IDF 206, IDF 207, IDF 208, IDF 209 ID 205, ID 206, ID 207, ID 208, ID 209	CS 200 -215 SL	T8 Torque 1.5Nm (Max)																																	
	KRUZ 205 □ FSL		P(5xD)	201	145	123							H(7xD)	242	186	164	L(10xD)	304	248	226																							
Φ21.0 ~Φ21.4	YTDI 210 □ FSL		T(3xD)	162	106	84							32	IDP 210, IDP 211, IDP 212, IDP 213, IDP 214 IDF 210, IDF 211, IDF 212, IDF 213, IDF 214 ID 210, ID 211, ID 212, ID 213, ID 214	CS 200 -215 SL	T8 Torque 1.5Nm (Max)																											
	KRUZ 210 □ FSL		P(5xD)	204	148	126													H(7xD)	246	190	168	L(10xD)	309	253	231																	
Φ21.5 ~Φ21.9	YTDI 215 □ FSL		T(3xD)	165	109	86	32	IDP 215, IDP 216, IDP 217, IDP 218, IDP 219 IDF 215, IDF 216, IDF 217, IDF 218, IDF 219 ID 215, ID 216, ID 217, ID 218, ID 219											CS 200 -215 SL	T8 Torque 1.5Nm (Max)																							
	KRUZ 215 □ FSL		P(5xD)	208	152	129																	H(7xD)	251	195	172	L(10xD)	316	260	237													
Φ22.0 ~Φ22.4	YTDI 220 □ FSL		T(3xD)	167	111	88							32	IDP 220, IDP 221, IDP 222, IDP 223, IDP 224 IDF 220, IDF 221, IDF 222, IDF 223, IDF 224 ID 220, ID 221, ID 222, ID 223, ID 224									CS 220 -235 SL	T8 Torque 1.5Nm (Max)																			
	KRUZ 220 □ FSL		P(5xD)	211	155	132																					H(7xD)	255	199	176	L(10xD)	321	265	242									
Φ22.5 ~Φ22.9	YTDI 225 □ FSL		T(3xD)	169	113	90	32	IDP 225, IDP 226, IDP 227, IDP 228, IDP 229 IDF 225, IDF 226, IDF 227, IDF 228, IDF 229 ID 225, ID 226, ID 227, ID 228, ID 229																			CS 220 -235 SL	T8 Torque 1.5Nm (Max)															
	KRUZ 225 □ FSL		P(5xD)	214	158	135																									H(7xD)	259	203	180	L(10xD)	327	271	248					
Φ23.0 ~Φ23.4	YTDI 230 □ FSL		T(3xD)	172	116	92							32	IDP 230, IDP 231, IDP 232, IDP 233, IDP 234 IDF 230, IDF 231, IDF 232, IDF 233, IDF 234 ID 230, ID 231, ID 232, ID 233, ID 234																	CS 220 -235 SL	T8 Torque 1.5Nm (Max)											
	KRUZ 230 □ FSL		P(5xD)	218	162	138																													H(7xD)	264	208	184	L(10xD)	333	277	253	
Φ23.5 ~Φ23.9	YTDI 235 □ FSL		T(3xD)	174	118	94	32	IDP 235, IDP 236, IDP 237, IDP 238, IDP 239 IDF 235, IDF 236, IDF 237, IDF 238, IDF 239 ID 235, ID 236, ID 237, ID 238, ID 239																											CS 240 -255 SL	T15 Torque 3.5Nm (Max)							
	KRUZ 235 □ FSL		P(5xD)	221	165	141																																	H(7xD)	268	212	188	L(10xD)
Φ24.0 ~Φ24.4	YTDI 240 □ FSL		T(3xD)	181	121	96							32	IDP 240, IDP 241, IDP 242, IDP 243, IDP 244 IDF 240, IDF 241, IDF 242, IDF 243, IDF 244 ID 240, ID 241, ID 242, ID 243, ID 244																									CS 240 -255 SL	T15 Torque 3.5Nm (Max)			
	KRUZ 240 □ FSL		P(5xD)	229	169	144																																					H(7xD)
Φ24.5 ~Φ24.9	YTDI 245 □ FSL	T(3xD)	183	123	98	32	IDP 245, IDP 246, IDP 247, IDP 248, IDP 249 IDF 245, IDF 246, IDF 247, IDF 248, IDF 249 ID 245, ID 246, ID 247, ID 248, ID 249	CS 240 -255 SL	T15 Torque 3.5Nm (Max)																																		
	KRUZ 245 □ FSL	P(5xD)	232	172	147							H(7xD)																															281
Φ25.0 ~Φ25.4	YTDI 250 □ FSL	T(3xD)	185	125	100							32	IDP 250, IDP 251, IDP 252, IDP 253, IDP 254 IDF 250, IDF 251, IDF 252, IDF 253, IDF 254 ID 250, ID 251, ID 252, ID 253, ID 254	CS 260 -275 SL	T15 Torque 3.5Nm (Max)																												
	KRUZ 250 □ FSL	P(5xD)	235	175	150													H(7xD)																									285
Φ25.5 ~Φ25.9	YTDI 255 □ FSL	T(3xD)	188	128	102	32	IDP 255, IDP 256, IDP 257, IDP 258, IDP 259 IDF 255, IDF 256, IDF 257, IDF 258, IDF 259 ID 255, ID 256, ID 257, ID 258, ID 259											CS 260 -275 SL	T15 Torque 3.5Nm (Max)																								
	KRUZ 255 □ FSL	P(5xD)	239	179	153																	H(7xD)																					290
Φ26.0 ~Φ26.4	YTDI 260 □ FSL	T(3xD)	190	130	104							32	IDP 260, IDP 261, IDP 262, IDP 263, IDP 264 IDF 260, IDF 261, IDF 262, IDF 263, IDF 264 ID 260, ID 261, ID 262, ID 263, ID 264									CS 260 -275 SL	T15 Torque 3.5Nm (Max)																				
	KRUZ 260 □ FSL	P(5xD)	242	182	156																					H(7xD)																	294
Φ26.5 ~Φ26.9	YTDI 265 □ FSL	T(3xD)	193	133	106	32	IDP 265, IDP 266, IDP 267, IDP 268, IDP 269 IDF 265, IDF 266, IDF 267, IDF 268, IDF 269 ID 265, ID 266, ID 267, ID 268, ID 269																			CS 260 -275 SL	T15 Torque 3.5Nm (Max)																
	KRUZ 265 □ FSL	P(5xD)	246	186	159																									H(7xD)													299
Φ27.0 ~Φ27.4	YTDI 270 □ FSL	T(3xD)	195	135	108							32	IDP 270, IDP 271, IDP 272, IDP 273, IDP 274 IDF 270, IDF 271, IDF 272, IDF 273, IDF 274 ID 270, ID 271, ID 272, ID 273, ID 274																	CS 260 -275 SL	T15 Torque 3.5Nm (Max)												
	KRUZ 270 □ FSL	P(5xD)	249	189	162																													H(7xD)									303
Φ27.5 ~Φ27.9	YTDI 275 □ FSL	T(3xD)	197	137	110	32	IDP 275																																				

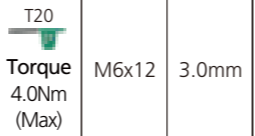
KRUZ-FSL, YTDI-FSL Flange body & Carbide insert

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body	Cap Screw	Torx driver	Set Screw	L-wrench																									
Φ28.5 ~Φ28.9	YTDI 285 □ FSL	32.0	T(3xD) 202 142 114	202	142	114	39	IDP 285, IDP 286, IDP 287, IDP 288, IDP 289 IDF 285, IDF 286, IDF 287, IDF 288, IDF 289 ID 285, ID 286, ID 287, ID 288, ID 289	CS 280 -295 SL	T15 Torque 3.5Nm (Max)	M4x8	2.0mm																									
	KRUZ 285 □ FSL		P(5xD) 259 199 171																																		
Φ29.0 ~Φ29.4	YTDI 290 □ FSL		T(3xD) 205 145 116	205	145	116		39					IDP 290, IDP 291, IDP 292, IDP 293, IDP 294 IDF 290, IDF 291, IDF 292, IDF 293, IDF 294 ID 290, ID 291, ID 292, ID 293, ID 294	CS 280 -295 SL	T15 Torque 3.5Nm (Max)	M4x8	2.0mm																				
	KRUZ 290 □ FSL		P(5xD) 263 203 174																																		
Φ29.5 ~Φ29.9	YTDI 295 □ FSL		T(3xD) 207 147 118	207	147	118							39					IDP 295, IDP 296, IDP 297, IDP 298, IDP 299 IDF 295, IDF 296, IDF 297, IDF 298, IDF 299 ID 295, ID 296, ID 297, ID 298, ID 299	CS 280 -295 SL	T15 Torque 3.5Nm (Max)	M4x8	2.0mm															
	KRUZ 295 □ FSL		P(5xD) 266 206 177																																		
Φ30.0 ~Φ30.4	YTDI 300 □ FSL		T(3xD) 209 149 120	209	149	120												39					IDP 300, IDP 301, IDP 302, IDP 303, IDP 304 IDF 300, IDF 301, IDF 302, IDF 303, IDF 304 ID 300, ID 301, ID 302, ID 303, ID 304	CS 300 -315 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm										
	KRUZ 300 □ FSL		P(5xD) 269 209 180																																		
Φ30.5 ~Φ30.9	YTDI 305 □ FSL		T(3xD) 212 152 122	212	152	122																	39					IDP 305, IDP 306, IDP 307, IDP 308, IDP 309 IDF 305, IDF 306, IDF 307, IDF 308, IDF 309 ID 305, ID 306, ID 307, ID 308, ID 309	CS 300 -315 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm					
	KRUZ 305 □ FSL		P(5xD) 273 213 183																																		
Φ31.0 ~Φ31.4	YTDI 310 □ FSL		T(3xD) 214 154 124	214	154	124																						39					IDP 310, IDP 311, IDP 312, IDP 313, IDP 314 IDF 310, IDF 311, IDF 312, IDF 313, IDF 314 ID 310, ID 311, ID 312, ID 313, ID 314	CS 300 -315 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm
	KRUZ 310 □ FSL		P(5xD) 276 216 186																																		
Φ31.5 ~Φ31.9	YTDI 315 □ FSL	T(3xD) 217 157 126	217	157	126	39	IDP 315, IDP 316, IDP 317, IDP 318, IDP 319 IDF 315, IDF 316, IDF 317, IDF 318, IDF 319 ID 315, ID 316, ID 317, ID 318, ID 319		CS 300 -315 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm																									
	KRUZ 315 □ FSL	P(5xD) 280 220 189																																			
Φ32.0 ~Φ32.4	YTDI 320 □ FSL	T(3xD) 219 159 128	219	159	128		39	IDP 320, IDP 321, IDP 322, IDP 323, IDP 324 IDF 320, IDF 321, IDF 322, IDF 323, IDF 324 ID 320, ID 321, ID 322, ID 323, ID 324						CS 300 -315 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm																				
	KRUZ 320 □ FSL	P(5xD) 283 223 192																																			
Φ32.5 ~Φ32.9	YTDI 325 □ FSL	T(3xD) 221 161 130	221	161	130			39					IDP 325, IDP 326, IDP 327, IDP 328, IDP 329 IDF 325, IDF 326, IDF 327, IDF 328, IDF 329 ID 325, ID 326, ID 327, ID 328, ID 329						CS 300 -315 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm															
	KRUZ 325 □ FSL	P(5xD) 286 226 195																																			
Φ33.0 ~Φ33.4	YTDI 330 □ FSL	T(3xD) 224 164 132	224	164	132								39					IDP 330, IDP 331, IDP 332, IDP 333, IDP 334 IDF 330, IDF 331, IDF 332, IDF 333, IDF 334 ID 330, ID 331, ID 332, ID 333, ID 334						CS 300 -315 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm										
	KRUZ 330 □ FSL	P(5xD) 290 230 198																																			
Φ33.5 ~Φ33.9	YTDI 335 □ FSL	T(3xD) 226 166 134	226	166	134													39					IDP 335, IDP 336, IDP 337, IDP 338, IDP 339 IDF 335, IDF 336, IDF 337, IDF 338, IDF 339 ID 335, ID 336, ID 337, ID 338, ID 339						CS 300 -315 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm					
	KRUZ 335 □ FSL	P(5xD) 293 233 201																																			
Φ34.0 ~Φ34.4	YTDI 340 □ FSL	T(3xD) 239 169 136	239	169	136																		40.0					IDP 340, IDP 341, IDP 342, IDP 343, IDP 344 IDF 340, IDF 341, IDF 342, IDF 343, IDF 344 ID 340, ID 341, ID 342, ID 343, ID 344					CS 320 -355 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm	
	KRUZ 340 □ FSL	P(5xD) 307 237 204																																			
Φ34.5 ~Φ34.9	YTDI 345 □ FSL	T(3xD) 241 171 138	241	171	138	40.0			IDP 345, IDP 346, IDP 347, IDP 348, IDP 349 IDF 345, IDF 346, IDF 347, IDF 348, IDF 349 ID 345, ID 346, ID 347, ID 348, ID 349	CS 320 -355 SL	T20 Torque 4.0Nm (Max)	M5x10																2.5mm									
	KRUZ 345 □ FSL	P(5xD) 310 240 207																																			
Φ35.0 ~Φ35.4	YTDI 350 □ FSL	T(3xD) 243 173 140	243	173	140		40.0		IDP 350, IDP 351, IDP 352, IDP 353, IDP 354 IDF 350, IDF 351, IDF 352, IDF 353, IDF 354 ID 350, ID 351, ID 352, ID 353, ID 354					CS 320 -355 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm																				
	KRUZ 350 □ FSL	P(5xD) 313 243 210																																			
Φ35.5 ~Φ35.9	YTDI 355 □ FSL	T(3xD) 246 176 142	246	176	142			40.0	IDP 355, IDP 356, IDP 357, IDP 358, IDP 359 IDF 355, IDF 356, IDF 357, IDF 358, IDF 359 ID 355, ID 356, ID 357, ID 358, ID 359										CS 320 -355 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm															
	KRUZ 355 □ FSL	P(5xD) 317 247 213																																			
Φ36.0 ~Φ36.4	YTDI 360 □ FSL	T(3xD) 248 178 144	248	178	144				40.0				IDP 360, IDP 361, IDP 362, IDP 363, IDP 364 IDF 360, IDF 361, IDF 362, IDF 363, IDF 364 ID 360, ID 361, ID 362, ID 363, ID 364											CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M6x12	3.0mm										
	KRUZ 360 □ FSL	P(5xD) 320 250 216																																			

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body	Cap Screw	Torx driver	Set Screw	L-wrench																									
Φ36.5 ~Φ36.9	YTDI 365 □ FSL	40.0	T(3xD) 251 181 146	251	181	146	55	IDP 365, IDP 366, IDP 367, IDP 368, IDP 369 IDF 365, IDF 366, IDF 367, IDF 368, IDF 369 ID 365, ID 366, ID 367, ID 368, ID 369	CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm																									
	KRUZ 365 □ FSL		P(5xD) 324 254 219																																		
Φ37.0 ~Φ37.4	YTDI 370 □ FSL		T(3xD) 253 183 148	253	183	148		55					IDP 370, IDP 371, IDP 372, IDP 373, IDP 374 IDF 370, IDF 371, IDF 372, IDF 373, IDF 374 ID 370, ID 371, ID 372, ID 373, ID 374	CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm																				
	KRUZ 370 □ FSL		P(5xD) 327 257 222																																		
Φ37.5 ~Φ37.9	YTDI 375 □ FSL		T(3xD) 255 185 150	255	185	150							55					IDP 375, IDP 376, IDP 377, IDP 378, IDP 379 IDF 375, IDF 376, IDF 377, IDF 378, IDF 379 ID 375, ID 376, ID 377, ID 378, ID 379	CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm															
	KRUZ 375 □ FSL		P(5xD) 330 260 225																																		
Φ38.0 ~Φ38.4	YTDI 380 □ FSL		T(3xD) 258 188 152	258	188	152												55					IDP 380, IDP 381, IDP 382, IDP 383, IDP 384 IDF 380, IDF 381, IDF 382, IDF 383, IDF 384 ID 380, ID 381, ID 382, ID 383, ID 384	CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm										
	KRUZ 380 □ FSL		P(5xD) 334 264 228																																		
Φ38.5 ~Φ38.9	YTDI 385 □ FSL		T(3xD) 260 196 154	260	196	154																	55					IDP 385, IDP 386, IDP 387, IDP 388, IDP 389 IDF 385, IDF 386, IDF 387, IDF 388, IDF 389 ID 385, ID 386, ID 387, ID 388, ID 389	CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm					
	KRUZ 385 □ FSL		P(5xD) 337 267 231																																		
Φ39.0 ~Φ39.4	YTDI 390 □ FSL		T(3xD) 263 193 156	263	193	156																						55					IDP 390, IDP 391, IDP 392, IDP 393, IDP 394 IDF 390, IDF 391, IDF 392, IDF 393, IDF 394 ID 390, ID 391, ID 392, ID 393, ID 394	CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm
	KRUZ 390 □ FSL		P(5xD) 341 271 234																																		
Φ39.5 ~Φ39.9	YTDI 395 □ FSL	T(3xD) 265 195 158	265	195	158	55	IDP 395, IDP 396, IDP 397, IDP 398, IDP 399 IDF 395, IDF 396, IDF 397, IDF 398, IDF 399 ID 395, ID 396, ID 397, ID 398, ID 399		CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm																									
	KRUZ 395 □ FSL	P(5xD) 344 274 237																																			
Φ40.0 ~Φ40.4	YTDI 400 □ FSL	T(3xD) 267 197 160	267	197	160		55	IDP 400, IDP 401, IDP 402, IDP 403, IDP 404 IDF 400, IDF 401, IDF 402, IDF 403, IDF 404 ID 400, ID 401, ID 402, ID 403, ID 404						CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm																				
	KRUZ 400 □ FSL	P(5xD) 347 277 240																																			
Φ40.5 ~Φ40.9	YTDI 405 □ FSL	T(3xD) 270 200 162	270	200	162			55					IDP 405, IDP 406, IDP 407, IDP 408, IDP 409 IDF 405, IDF 406, IDF 407, IDF 408, IDF 409 ID 405, ID 406, ID 407, ID 408, ID 409						CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm															
	KRUZ 405 □ FSL	P(5xD) 351 281 243																																			
Φ41.0 ~Φ41.4	YTDI 410 □ FSL	T(3xD) 272 202 164	272	202	164								55					IDP 410, IDP 411, IDP 412, IDP 413, IDP 414 IDF 410, IDF 411, IDF 412, IDF 413, IDF 414 ID 410, ID 411, ID 412, ID 413, ID 414						CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm										
	KRUZ 410 □ FSL	P(5xD) 354 284 246																																			
Φ41.5 ~Φ41.9	YTDI 415 □ FSL	T(3xD) 275 205 166	275	205	166													55					IDP 415, IDP 416, IDP 417, IDP 418, IDP 419 IDF 415, IDF 416, IDF 417, IDF 418, IDF 419 ID 415, ID 416, ID 417, ID 418, ID 419						CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm					
	KRUZ 415 □ FSL	P(5xD) 358 288 249																																			
Φ42.0 ~Φ42.4	YTDI 420 □ FSL	T(3xD) 277 207 168	277	207	168																		55					IDP 420, IDP 421, IDP 422, IDP 423, IDP 424 IDF 420, IDF 421, IDF 422, IDF 423, IDF 424 ID 420, ID 421, ID 422, ID 423, ID 424					CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm	
	KRUZ 420 □ FSL	P(5xD) 361 291 252																																			
Φ42.5 ~Φ42.9	YTDI 425 □ FSL	T(3xD) 279 209 170	279	209	170	55			IDP 425, IDP 426, IDP 427, IDP 428, IDP 429 IDF 425, IDF 426, IDF 427, IDF 428, IDF 429 ID 425, ID 426, ID 427, ID 428, ID 429	CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10																2.5mm									
	KRUZ 425 □ FSL	P(5xD) 364 294 255																																			
Φ43.0 ~Φ43.4	YTDI 430 □ FSL	T(3xD) 282 212 172	282	212	172		55		IDP 430, IDP 431, IDP 432, IDP 433, IDP 434 IDF 430, IDF 431, IDF 432, IDF 433, IDF 434 ID 430, ID 431, ID 432, ID 433, ID 434					CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm																				
	KRUZ 430 □ FSL	P(5xD) 368 298 258																																			
Φ43.5 ~Φ43.9	YTDI 435 □ FSL	T(3xD) 284 214 174	284	214	174			55	IDP 435, IDP 436, IDP 437, IDP 438, IDP 439 IDF 435, IDF 436, IDF 437, IDF 438, IDF 439 ID 435, ID 436, ID 437, ID 438, ID 439										CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm															
	KRUZ 435 □ FSL	P(5xD) 371 301 261																																			
Φ44.0 ~Φ44.4	YTDI 440 □ FSL	T(3xD) 287 217 176	287	217	176				55				IDP 440, IDP 441, IDP 442, IDP 443, IDP 444 IDF 440, IDF 441, IDF 442, IDF 443, IDF 444 ID 440, ID 441, ID 442, ID 443, ID 444											CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm										
	KRUZ 440 □ FSL	P(5xD) 375 305 264																																			

KRUZ-FSL, YTDI-FSL Flange body & Carbide insert

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body	Cap Screw	Torx driver	Set Screw	L-wrench
Φ44.5 ~Φ44.9	YTDI 445 □ FSL	40.0	T(3xD)	289	219	178	55	IDP 445, IDP 446, IDP 447, IDP 448, IDP 449	CS 400 -445 SL			
	KRUZ 445 □ FSL		P(5xD)	378	308	267		IDF 445, IDF 446, IDF 447, IDF 448, IDF 449				
			H(7xD)	467	397	356		ID 445, ID 446, ID 447, ID 448, ID 449				
			L(10xD)	601	531	490						
Φ45.0 ~Φ45.4	YTDI 450 □ FSL	40.0	T(3xD)	291	221	180	55	IDP 450, IDP 451, IDP 452, IDP 453, IDP 454	CS 450 -500 SL			
	KRUZ 450 □ FSL		P(5xD)	381	311	270		IDF 450, IDF 451, IDF 452, IDF 453, IDF 454				
			H(7xD)	471	401	360		ID 450, ID 451, ID 452, ID 453, ID 454				
			L(10xD)	606	536	495						
Φ45.5 ~Φ45.9	YTDI 455 □ FSL	40.0	T(3xD)	294	224	182	55	IDP 455, IDP 456, IDP 457, IDP 458, IDP 459	CS 450 -500 SL			
	KRUZ 455 □ FSL		P(5xD)	385	315	273		IDF 455, IDF 456, IDF 457, IDF 458, IDF 459				
			H(7xD)	476	406	364		ID 455, ID 456, ID 457, ID 458, ID 459				
			L(10xD)	613	543	501						
Φ46.0 ~Φ46.4	YTDI 460 □ FSL	40.0	T(3xD)	296	226	184	55	IDP 460, IDP 461, IDP 462, IDP 463, IDP 464	CS 450 -500 SL			
	KRUZ 460 □ FSL		P(5xD)	388	318	276		IDF 460, IDF 461, IDF 462, IDF 463, IDF 464				
			H(7xD)	480	410	368		ID 460, ID 461, ID 462, ID 463, ID 464				
			L(10xD)	618	548	506						
Φ46.5 ~Φ46.9	YTDI 465 □ FSL	40.0	T(3xD)	299	229	186	55	IDP 465, IDP 466, IDP 467, IDP 468, IDP 469	CS 450 -500 SL			
	KRUZ 465 □ FSL		P(5xD)	392	322	279		IDF 465, IDF 466, IDF 467, IDF 468, IDF 469				
			H(7xD)	485	415	372		ID 465, ID 466, ID 467, ID 468, ID 469				
			L(10xD)	625	555	512						
Φ47.0 ~Φ47.4	YTDI 470 □ FSL	40.0	T(3xD)	301	231	188	55	IDP 470, IDP 471, IDP 472, IDP 473, IDP 474	CS 450 -500 SL			
	KRUZ 470 □ FSL		P(5xD)	395	325	282		IDF 470, IDF 471, IDF 472, IDF 473, IDF 474				
			H(7xD)	489	419	376		ID 470, ID 471, ID 472, ID 473, ID 474				
			L(10xD)	630	560	517						
Φ47.5 ~Φ47.9	YTDI 475 □ FSL	40.0	T(3xD)	303	233	190	55	IDP 475, IDP 476, IDP 477, IDP 478, IDP 479	CS 450 -500 SL			
	KRUZ 475 □ FSL		P(5xD)	398	328	285		IDF 475, IDF 476, IDF 477, IDF 478, IDF 479				
			H(7xD)	493	423	380		ID 475, ID 476, ID 477, ID 478, ID 479				
			L(10xD)	636	566	523						
Φ48.0 ~Φ48.4	YTDI 480 □ FSL	40.0	T(3xD)	306	236	192	55	IDP 480, IDP 481, IDP 482, IDP 483, IDP 484	CS 450 -500 SL			
	KRUZ 480 □ FSL		P(5xD)	402	332	288		IDF 480, IDF 481, IDF 482, IDF 483, IDF 484				
			H(7xD)	498	428	384		ID 480, ID 481, ID 482, ID 483, ID 484				
			L(10xD)	642	572	528						
Φ48.5 ~Φ48.9	YTDI 485 □ FSL	40.0	T(3xD)	308	238	194	55	IDP 485, IDP 486, IDP 487, IDP 488, IDP 489	CS 450 -500 SL			
	KRUZ 485 □ FSL		P(5xD)	405	335	291		IDF 485, IDF 486, IDF 487, IDF 488, IDF 489				
			H(7xD)	502	432	388		ID 485, ID 486, ID 487, ID 488, ID 489				
			L(10xD)	648	578	534						
Φ49.0 ~Φ49.4	YTDI 490 □ FSL	40.0	T(3xD)	311	241	196	55	IDP 490, IDP 491, IDP 492, IDP 493, IDP 494	CS 450 -500 SL			
	KRUZ 490 □ FSL		P(5xD)	409	339	294		IDF 490, IDF 491, IDF 492, IDF 493, IDF 494				
			H(7xD)	507	437	392		ID 490, ID 491, ID 492, ID 493, ID 494				
			L(10xD)	654	584	539						
Φ49.5 ~Φ49.9	YTDI 495 □ FSL	40.0	T(3xD)	313	243	198	55	IDP 495, IDP 496, IDP 497, IDP 498, IDP 499	CS 450 -500 SL			
	KRUZ 495 □ FSL		P(5xD)	412	342	297		IDF 495, IDF 496, IDF 497, IDF 498, IDF 499				
			H(7xD)	511	441	396		ID 495, ID 496, ID 497, ID 498, ID 499				
			L(10xD)	660	590	545						
Φ50.0 ~Φ50.4	YTDI 500 □ FSL	40.0	T(3xD)	315	245	200	55	IDP 500, IDP 501, IDP 502, IDP 503, IDP 504	CS 450 -500 SL			
	KRUZ 500 □ FSL		P(5xD)	415	345	300		IDF 500, IDF 501, IDF 502, IDF 503, IDF 504				
			H(7xD)	515	445	400		ID 500, ID 501, ID 502, ID 503, ID 504				
			L(10xD)	665	595	550						



KRUZ-FSL Drills, Cutting Speed Recommendation

Drill Dia.	Φ8~16mm		Φ16~25mm		Φ25~32mm		Φ32~40mm		Φ40~50mm	
	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)
Grey cast iron (FC)	80~150	0.20~0.30	80~150	0.25~0.45	80~160	0.35~0.55	90~200	0.34~0.58	90~200	0.38~0.60
Nodular cast iron (FCD)	80~140	0.15~0.25	80~140	0.22~0.45	80~150	0.32~0.52	90~160	0.35~0.62	90~200	0.38~0.60
Carbon steel (S45C)	80~140	0.15~0.30	80~140	0.16~0.40	80~150	0.20~0.40	80~150	0.22~0.48	80~160	0.25~0.54
Alloy steel (SCM440)	70~140	0.15~0.30	70~140	0.15~0.40	70~140	0.18~0.40	80~140	0.25~0.47	80~140	0.27~0.52
Hardened steel (SKD11)	40~50	0.10~0.20	40~50	0.12~0.28	40~50	0.16~0.35	40~60	0.20~0.38	40~60	0.22~0.42
Stainless steel (SUS)	30~40	0.10~0.20	35~50	0.10~0.22	35~50	0.15~0.28	40~55	0.18~0.30	40~55	0.22~0.32
Aluminum 130HB (AL)	120~200	0.20~0.30	120~200	0.25~0.40	120~200	0.30~0.45	120~200	0.30~0.45	120~200	0.30~0.50

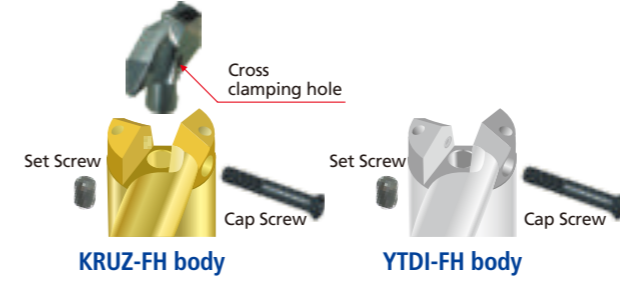
☞ This data is recommended for 3xDia. And should be reduced about 15~20% for 5xD, 7xD, 10xD drills.
 ☞ The data is normally suggested for oil-mist(MQL) coolant condition and also possible to run in other normal condition if machining environment like clamping etc. are secured in good.

KRUZ "H" series flange + higher helix body & carbide insert

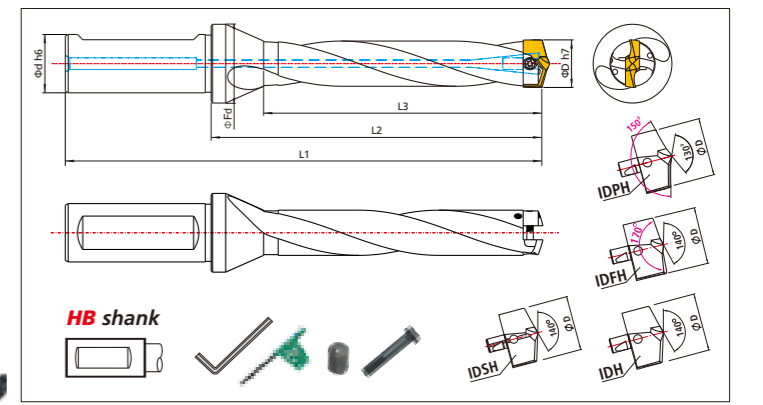
Caution >> "H" series insert should use only with "H" series body to avoid drilling failure.



- Insert selection**
- IDPH** Deep hole & general purpose
 - IDFH** Thin plate & shallow depth
 - IDH** General purpose
 - IDSH** Stainless, titanium or exotic material purpose



- ▶ Higher helix flute to reduce machine load and faster chip ejection
- ▶ Rugged flange type body to decrease vibration or chattering
- ▶ Interchangeable <IDPH>, <IDFH>, <IDH>, <IDSH> carbide "H" drill inserts
- ▶ Drill body consists of premium tool steel with heat treatment
- ▶ Increased tool life by less vibration
- ▶ Internal coolant fed design
- ▶ "H" series body and insert available upon request only



Please make required cutting depth in the □ like T, P, H, L

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body	Cap Screw	Torx driver	Set Screw	L-wrench
Φ12.0 ~Φ12.4	YTDI 120 □ FH	16.0	T(3xD)	109	61	48	21	IDPH 120, IDPH 121, IDPH 122, IDPH 123, IDPH 124	CS120 -135 SL			
	KRUZ 120 □ FH		P(5xD)	133	85	72		IDFH 120, IDFH 121, IDFH 122, IDFH 123, IDFH 124				
			H(7xD)	157	109	96		IDH 120, IDH 121, IDH 122, IDH 123, IDH 124				
			L(10xD)	193	145	132		IDSH 120, IDSH 121, IDSH 122, IDSH 123, IDSH 124				
Φ12.5 ~Φ12.9	YTDI 125 □ FH	16.0	T(3xD)	111	63	50	21	IDPH 125, IDPH 126, IDPH 127, IDPH 128, IDPH 129	CS120 -135 SL			
	KRUZ 125 □ FH		P(5xD)	136	88	75		IDFH 125, IDFH 126, IDFH 127, IDFH 128, IDFH 129				
			H(7xD)	161	113	100		IDH 125, IDH 126, IDH 127, IDH 128, IDH 129				
			L(10xD)	199	151	138		IDSH 125, IDSH 126, IDSH 127, IDSH 128, IDSH 129				
Φ13.0 ~Φ13.4	YTDI 130 □ FH	16.0	T(3xD)	114	66	52	21	IDPH 130, IDPH 131, IDPH 132, IDPH 133, IDPH 134	CS120 -135 SL			
	KRUZ 130 □ FH		P(5xD)	140	92	78		IDFH 130, IDFH 131, IDFH 132, IDFH 133, IDFH 134				
			H(7xD)	166	118	104		IDH 130, IDH 131, IDH 132, IDH 133, IDH 134				
			L(10xD)	205	157	143		IDSH 130, IDSH 131, IDSH 132, IDSH 133, IDSH 134				
Φ13.5 ~Φ13.9	YTDI 135 □ FH	16.0	T(3xD)	116	68	54	21	IDPH 135, IDPH 136, IDPH 137, IDPH 138, IDPH 139	CS120 -135 SL			
	KRUZ 135 □ FH		P(5xD)	143	95	81		IDFH 135, IDFH 136, IDFH 137, IDFH 138, IDFH 139				
			H(7xD)	170	122	108		IDH 135, IDH 136, IDH 137, IDH 138, IDH 139				
			L(10xD)	211	163	149		IDSH 135, IDSH 136, IDSH 137, IDSH 138, IDSH 139				
Φ14.0 ~Φ14.4	YTDI 140 □ FH	16.0	T(3xD)	119	71	56	21	IDPH 140, IDPH 141, IDPH 142, IDPH 143, IDPH 144	CS120 -135 SL			
	KRUZ 140 □ FH		P(5xD)	147	99	84		IDFH 140, IDFH 141, IDFH 142, IDFH 143, IDFH 144				
			H(7xD)	175	127	112		IDH 140, IDH 141, IDH 142, IDH 143, IDH 144				
			L(10xD)	217	169	154		IDSH 140, IDSH 141, IDSH 142, IDSH 143, IDSH 144				
Φ14.5 ~Φ14.9	YTDI 145 □ FH	16.0	T(3xD)	123	73	58	21	IDPH 145, IDPH 146, IDPH 147, IDPH 148, IDPH 149	CS140 -155 SL			
	KRUZ 145 □ FH		P(5xD)	152	102	87		IDFH 145, IDFH 146, IDFH 147, IDFH 148, IDFH 149				
			H(7xD)	181	131	116		IDH 145, IDH 146, IDH 147, IDH 148, IDH 149				
			L(10xD)	225	175	160		IDSH 145, IDSH 146, IDSH 147, IDSH 148, IDSH 149				
Φ15.0 ~Φ15.4	YTDI 150 □ FH	16.0	T(3xD)	127	77	60	21	IDPH 150, IDPH 151, IDPH 152, IDPH 153, IDPH 154	CS140 -155 SL			
	KRUZ 150 □ FH		P(5xD)	157	107	90		IDFH 150, IDFH 151, IDFH 152, IDFH 153, IDFH 154				
			H(7xD)	187	137	120		IDH 150, IDH 151, IDH 152, IDH 153, IDH 154				
			L(10xD)	232	182	165		IDSH 150, IDSH 151, IDSH 152, IDSH 153, IDSH 154				

KRUZ "H" series flange + higher helix body & carbide insert

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body	Cap Screw	Torx driver	Set Screw	L-wrench
Φ15.5 ~Φ15.9	YTDI 155 □ FH KRUZ 155 □ FH	20.0	T(3xD) 130 80 62 P(5xD) 161 111 93 H(7xD) 192 142 124 L(10xD) 239 189 171					IDPH 155, IDPH 156, IDPH 157, IDPH 158, IDPH 159 IDFH 155, IDFH 156, IDFH 157, IDFH 158, IDFH 159 IDH 155, IDH 156, IDH 157, IDH 158, IDH 159 IDSH 155, IDSH 156, IDSH 157, IDSH 158, IDSH 159	CS 140 -155 SL	T7 Torque 0.9Nm (Max)	M2.5x4	1.3mm
Φ16.0 ~Φ16.4	YTDI 160 □ FH KRUZ 160 □ FH		T(3xD) 132 82 64 P(5xD) 164 114 96 H(7xD) 196 146 128 L(10xD) 244 194 176					IDPH 160, IDPH 161, IDPH 162, IDPH 163, IDPH 164 IDFH 160, IDFH 161, IDFH 162, IDFH 163, IDFH 164 IDH 160, IDH 161, IDH 162, IDH 163, IDH 164 IDSH 160, IDSH 161, IDSH 162, IDSH 163, IDSH 164	CS 160 -175 SL			
Φ16.5 ~Φ16.9	YTDI 165 □ FH KRUZ 165 □ FH		T(3xD) 135 85 66 P(5xD) 168 118 99 H(7xD) 201 151 132 L(10xD) 251 201 182					IDPH 165, IDPH 166, IDPH 167, IDPH 168, IDPH 169 IDFH 165, IDFH 166, IDFH 167, IDFH 168, IDFH 169 IDH 165, IDH 166, IDH 167, IDH 168, IDH 169 IDSH 165, IDSH 166, IDSH 167, IDSH 168, IDSH 169				
Φ17.0 ~Φ17.4	YTDI 170 □ FH KRUZ 170 □ FH		T(3xD) 137 87 68 P(5xD) 171 121 102 H(7xD) 205 155 136 L(10xD) 256 206 187					IDPH 170, IDPH 171, IDPH 172, IDPH 173, IDPH 174 IDFH 170, IDFH 171, IDFH 172, IDFH 173, IDFH 174 IDH 170, IDH 171, IDH 172, IDH 173, IDH 174 IDSH 170, IDSH 171, IDSH 172, IDSH 173, IDSH 174				
Φ17.5 ~Φ17.9	YTDI 175 □ FH KRUZ 175 □ FH		T(3xD) 139 89 70 P(5xD) 174 124 105 H(7xD) 209 159 140 L(10xD) 262 212 193					IDPH 175, IDPH 176, IDPH 177, IDPH 178, IDPH 179 IDFH 175, IDFH 176, IDFH 177, IDFH 178, IDFH 179 IDH 175, IDH 176, IDH 177, IDH 178, IDH 179 IDSH 175, IDSH 176, IDSH 177, IDSH 178, IDSH 179				
Φ18.0 ~Φ18.4	YTDI 180 □ FH KRUZ 180 □ FH		T(3xD) 142 92 72 P(5xD) 178 128 108 H(7xD) 214 164 144 L(10xD) 268 218 198					IDPH 180, IDPH 181, IDPH 182, IDPH 183, IDPH 184 IDFH 180, IDFH 181, IDFH 182, IDFH 183, IDFH 184 IDH 180, IDH 181, IDH 182, IDH 183, IDH 184 IDSH 180, IDSH 181, IDSH 182, IDSH 183, IDSH 184				
Φ18.5 ~Φ18.9	YTDI 185 □ FH KRUZ 185 □ FH		T(3xD) 144 94 74 P(5xD) 181 131 111 H(7xD) 218 168 148 L(10xD) 274 224 204					IDPH 185, IDPH 186, IDPH 187, IDPH 188, IDPH 189 IDFH 185, IDFH 186, IDFH 187, IDFH 188, IDFH 189 IDH 185, IDH 186, IDH 187, IDH 188, IDH 189 IDSH 185, IDSH 186, IDSH 187, IDSH 188, IDSH 189				
Φ19.0 ~Φ19.4	YTDI 190 □ FH KRUZ 190 □ FH		T(3xD) 147 97 76 P(5xD) 185 135 114 H(7xD) 223 173 152 L(10xD) 280 230 209					IDPH 190, IDPH 191, IDPH 192, IDPH 193, IDPH 194 IDFH 190, IDFH 191, IDFH 192, IDFH 193, IDFH 194 IDH 190, IDH 191, IDH 192, IDH 193, IDH 194 IDSH 190, IDSH 191, IDSH 192, IDSH 193, IDSH 194				
Φ19.5 ~Φ19.9	YTDI 195 □ FH KRUZ 195 □ FH		T(3xD) 149 99 78 P(5xD) 188 138 117 H(7xD) 227 177 156 L(10xD) 286 236 215					IDPH 195, IDPH 196, IDPH 197, IDPH 198, IDPH 199 IDFH 195, IDFH 196, IDFH 197, IDFH 198, IDFH 199 IDH 195, IDH 196, IDH 197, IDH 198, IDH 199 IDSH 195, IDSH 196, IDSH 197, IDSH 198, IDSH 199				
Φ20.0 ~Φ20.4	YTDI 200 □ FH KRUZ 200 □ FH		T(3xD) 157 101 80 P(5xD) 197 141 120 H(7xD) 237 181 160 L(10xD) 297 241 220					IDPH 200, IDPH 201, IDPH 202, IDPH 203, IDPH 204 IDFH 200, IDFH 201, IDFH 202, IDFH 203, IDFH 204 IDH 200, IDH 201, IDH 202, IDH 203, IDH 204 IDSH 200, IDSH 201, IDSH 202, IDSH 203, IDSH 204				
Φ20.5 ~Φ20.9	YTDI 205 □ FH KRUZ 205 □ FH		T(3xD) 160 104 82 P(5xD) 201 145 123 H(7xD) 242 186 164 L(10xD) 304 248 226					IDPH 205, IDPH 206, IDPH 207, IDPH 208, IDPH 209 IDFH 205, IDFH 206, IDFH 207, IDFH 208, IDFH 209 IDH 205, IDH 206, IDH 207, IDH 208, IDH 209 IDSH 205, IDSH 206, IDSH 207, IDSH 208, IDSH 209				
Φ21.0 ~Φ21.4	YTDI 210 □ FH KRUZ 210 □ FH		T(3xD) 162 106 84 P(5xD) 204 148 126 H(7xD) 246 190 168 L(10xD) 309 253 231					IDPH 210, IDPH 211, IDPH 212, IDPH 213, IDPH 214 IDFH 210, IDFH 211, IDFH 212, IDFH 213, IDFH 214 IDH 210, IDH 211, IDH 212, IDH 213, IDH 214 IDSH 210, IDSH 211, IDSH 212, IDSH 213, IDSH 214				
Φ21.5 ~Φ21.9	YTDI 215 □ FH KRUZ 215 □ FH		T(3xD) 165 109 86 P(5xD) 208 152 129 H(7xD) 251 195 172 L(10xD) 316 260 237					IDPH 215, IDPH 216, IDPH 217, IDPH 218, IDPH 219 IDFH 215, IDFH 216, IDFH 217, IDFH 218, IDFH 219 IDH 215, IDH 216, IDH 217, IDH 218, IDH 219 IDSH 215, IDSH 216, IDSH 217, IDSH 218, IDSH 219				
Φ22.0 ~Φ22.4	YTDI 220 □ FH KRUZ 220 □ FH		T(3xD) 167 111 88 P(5xD) 211 155 132 H(7xD) 255 199 176 L(10xD) 321 265 242					IDPH 220, IDPH 221, IDPH 222, IDPH 223, IDPH 224 IDFH 220, IDFH 221, IDFH 222, IDFH 223, IDFH 224 IDH 220, IDH 221, IDH 222, IDH 223, IDH 224 IDSH 220, IDSH 221, IDSH 222, IDSH 223, IDSH 224				
Φ22.5 ~Φ22.9	YTDI 225 □ FH KRUZ 225 □ FH		T(3xD) 169 113 90 P(5xD) 214 158 135 H(7xD) 259 203 180 L(10xD) 327 271 248					IDPH 225, IDPH 226, IDPH 227, IDPH 228, IDPH 229 IDFH 225, IDFH 226, IDFH 227, IDFH 228, IDFH 229 IDH 225, IDH 226, IDH 227, IDH 228, IDH 229 IDSH 225, IDSH 226, IDSH 227, IDSH 228, IDSH 229				

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body	Cap Screw	Torx driver	Set Screw	L-wrench
Φ23.0 ~Φ23.4	YTDI 230 □ FH KRUZ 230 □ FH	25.0	T(3xD) 172 116 92 P(5xD) 218 162 138 H(7xD) 264 208 184 L(10xD) 333 277 253					IDPH 230, IDPH 231, IDPH 232, IDPH 233, IDPH 234 IDFH 230, IDFH 231, IDFH 232, IDFH 233, IDFH 234 IDH 230, IDH 231, IDH 232, IDH 233, IDH 234 IDSH 230, IDSH 231, IDSH 232, IDSH 233, IDSH 234	CS 220 -235 SL	T8 Torque 1.5Nm (Max)	M3x6	1.5mm
Φ23.5 ~Φ23.9	YTDI 235 □ FH KRUZ 235 □ FH		T(3xD) 174 118 94 P(5xD) 221 165 141 H(7xD) 268 212 188 L(10xD) 339 283 259					IDPH 235, IDPH 236, IDPH 237, IDPH 238, IDPH 239 IDFH 235, IDFH 236, IDFH 237, IDFH 238, IDFH 239 IDH 235, IDH 236, IDH 237, IDH 238, IDH 239 IDSH 235, IDSH 236, IDSH 237, IDSH 238, IDSH 239				
Φ24.0 ~Φ24.4	YTDI 240 □ FH KRUZ 240 □ FH		T(3xD) 181 121 96 P(5xD) 229 169 144 H(7xD) 277 217 192 L(10xD) 349 289 264					IDPH 240, IDPH 241, IDPH 242, IDPH 243, IDPH 244 IDFH 240, IDFH 241, IDFH 242, IDFH 243, IDFH 244 IDH 240, IDH 241, IDH 242, IDH 243, IDH 244 IDSH 240, IDSH 241, IDSH 242, IDSH 243, IDSH 244				
Φ24.5 ~Φ24.9	YTDI 245 □ FH KRUZ 245 □ FH		T(3xD) 183 123 98 P(5xD) 232 172 147 H(7xD) 281 221 196 L(10xD) 355 295 270					IDPH 245, IDPH 246, IDPH 247, IDPH 248, IDPH 249 IDFH 245, IDFH 246, IDFH 247, IDFH 248, IDFH 249 IDH 245, IDH 246, IDH 247, IDH 248, IDH 249 IDSH 245, IDSH 246, IDSH 247, IDSH 248, IDSH 249				
Φ25.0 ~Φ25.4	YTDI 250 □ FH KRUZ 250 □ FH		T(3xD) 185 125 100 P(5xD) 235 175 150 H(7xD) 285 225 200 L(10xD) 360 300 275					IDPH 250, IDPH 251, IDPH 252, IDPH 253, IDPH 254 IDFH 250, IDFH 251, IDFH 252, IDFH 253, IDFH 254 IDH 250, IDH 251, IDH 252, IDH 253, IDH 254 IDSH 250, IDSH 251, IDSH 252, IDSH 253, IDSH 254				
Φ25.5 ~Φ25.9	YTDI 255 □ FH KRUZ 255 □ FH		T(3xD) 188 128 102 P(5xD) 239 179 153 H(7xD) 290 230 204 L(10xD) 367 307 281					IDPH 255, IDPH 256, IDPH 257, IDPH 258, IDPH 259 IDFH 255, IDFH 256, IDFH 257, IDFH 258, IDFH 259 IDH 255, IDH 256, IDH 257, IDH 258, IDH 259 IDSH 255, IDSH 256, IDSH 257, IDSH 258, IDSH 259				
Φ26.0 ~Φ26.4	YTDI 260 □ FH KRUZ 260 □ FH		T(3xD) 190 130 104 P(5xD) 242 182 156 H(7xD) 294 234 208 L(10xD) 372 312 286					IDPH 260, IDPH 261, IDPH 262, IDPH 263, IDPH 264 IDFH 260, IDFH 261, IDFH 262, IDFH 263, IDFH 264 IDH 260, IDH 261, IDH 262, IDH 263, IDH 264 IDSH 260, IDSH 261, IDSH 262, IDSH 263, IDSH 264				
Φ26.5 ~Φ26.9	YTDI 265 □ FH KRUZ 265 □ FH		T(3xD) 193 133 106 P(5xD) 246 186 159 H(7xD) 299 239 212 L(10xD) 379 319 292					IDPH 265, IDPH 266, IDPH 267, IDPH 268, IDPH 269 IDFH 265, IDFH 266, IDFH 267, IDFH 268, IDFH 269 IDH 265, IDH 266, IDH 267, IDH 268, IDH 269 IDSH 265, IDSH 266, IDSH 267, IDSH 268, IDSH 269				
Φ27.0 ~Φ27.4	YTDI 270 □ FH KRUZ 270 □ FH		T(3xD) 195 135 108 P(5xD) 249 189 162 H(7xD) 303 243 216 L(10xD) 384 324 297					IDPH 270, IDPH 271, IDPH 272, IDPH 273, IDPH 274 IDFH 270, IDFH 271, IDFH 272, IDFH 273, IDFH 274 IDH 270, IDH 271, IDH 272, IDH 273, IDH 274 IDSH 270, IDSH 271, IDSH 272, IDSH 273, IDSH 274				
Φ27.5 ~Φ27.9	YTDI 275 □ FH KRUZ 275 □ FH		T(3xD) 197 137 110 P(5xD) 252 192 165 H(7xD) 307 247 220 L(10xD) 390 330 303					IDPH 275, IDPH 276, IDPH 277, IDPH 278, IDPH 279 IDFH 275, IDFH 276, IDFH 277, IDFH 278, IDFH 279 IDH 275, IDH 276, IDH 277, IDH 278, IDH 279 IDSH 275, IDSH 276, IDSH 277, IDSH 278, IDSH 279				
Φ28.0 ~Φ28.4	YTDI 280 □ FH KRUZ 280 □ FH		T(3xD) 200 140 112 P(5xD) 256 196 168 H(7xD) 312 252 224 L(10xD) 396 336 308					IDPH 280, IDPH 281, IDPH 282, IDPH 283, IDPH 284 IDFH 280, IDFH 281, IDFH 282, IDFH 283, IDFH 284 IDH 280, IDH 281, IDH 282, IDH 283, IDH 284 IDSH 280, IDSH 281, IDSH 282, IDSH 283, IDSH 284				
Φ28.5 ~Φ28.9	YTDI 285 □ FH KRUZ 285 □ FH		T(3xD) 202 142 114 P(5xD) 259 199 171 H(7xD) 316 256 228 L(10xD) 402 342 314					IDPH 285, IDPH 286, IDPH 287, IDPH 288, IDPH 289 IDFH 285, IDFH 286, IDFH 287, IDFH 288, IDFH 289 IDH 285, IDH 286, IDH 287, IDH 288, IDH 289 IDSH 285, IDSH 286, IDSH 287, IDSH 288, IDSH 289				
Φ29.0 ~Φ29.4	YTDI 290 □ FH KRUZ 290 □ FH		T(3xD) 205 145 116 P(5xD) 263 203 174 H(7xD) 321 261 232 L(10xD) 408 348 319					IDPH 290, IDPH 291, IDPH 292, IDPH 293, IDPH 294 IDFH 290, IDFH 291, IDFH 292, IDFH 293, IDFH 294 IDH 290, IDH 291, IDH 292, IDH 293, IDH 294 IDSH 290, IDSH 291, IDSH 292, IDSH 293, IDSH 294				
Φ29.5 ~Φ29.9	YTDI 295 □ FH KRUZ 295 □ FH		T(3xD) 207 147 118 P(5xD) 266 206 177 H(7xD) 325 265 236 L(10xD) 414 354 325					IDPH 295, IDPH 296, IDPH 297, IDPH 298, IDPH 299 IDFH 295, IDFH 296, IDFH 297, IDFH 298, IDFH 299 IDH 295, IDH 296, IDH 297, IDH 298, IDH 299 IDSH 295, IDSH 296, IDSH 297, IDSH 298, IDSH 299				
Φ30.0 ~Φ30.4	YTDI 300 □ FH KRUZ 300 □ FH		T(3xD) 209 149 120 P(5xD) 269 209 180 H(7xD) 329 269 240 L(10xD) 419 359 330					IDPH 300, IDPH 301, IDPH 302, IDPH 303, IDPH 304 IDFH 300, IDFH 301, IDFH 302, IDFH 303, IDFH 304 IDH 300, IDH 301, IDH 302, IDH 303, IDH 304 IDSH 300, IDSH 301, IDSH 302, IDSH 303, IDSH 304				



KRUZ "H" series flange + higher helix body & carbide insert

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body	Cap Screw	Torx driver	Set Screw	L-wrench
Φ30.5 ~Φ30.9	YTDI 305 □ FH KRUZ 305 □ FH	32.0	T(3xD) 212 152 122 P(5xD) 273 213 183 H(7xD) 334 274 244 L(10xD) 426 366 336					IDPH 305, IDPH 306, IDPH 307, IDPH 308, IDPH 309 IDFH 305, IDFH 306, IDFH 307, IDFH 308, IDFH 309 IDH 305, IDH 306, IDH 307, IDH 308, IDH 309 IDSH 305, IDSH 306, IDSH 307, IDSH 308, IDSH 309	CS 300 -315 SL	M4x8	2.0mm	
Φ31.0 ~Φ31.4	YTDI 310 □ FH KRUZ 310 □ FH		T(3xD) 214 154 124 P(5xD) 276 216 186 H(7xD) 338 278 248 L(10xD) 431 371 341					IDPH 310, IDPH 311, IDPH 312, IDPH 313, IDPH 314 IDFH 310, IDFH 311, IDFH 312, IDFH 313, IDFH 314 IDH 310, IDH 311, IDH 312, IDH 313, IDH 314 IDSH 310, IDSH 311, IDSH 312, IDSH 313, IDSH 314				
Φ31.5 ~Φ31.9	YTDI 315 □ FH KRUZ 315 □ FH		T(3xD) 217 157 126 P(5xD) 280 220 189 H(7xD) 343 283 252 L(10xD) 438 378 347					IDPH 315, IDPH 316, IDPH 317, IDPH 318, IDPH 319 IDFH 315, IDFH 316, IDFH 317, IDFH 318, IDFH 319 IDH 315, IDH 316, IDH 317, IDH 318, IDH 319 IDSH 315, IDSH 316, IDSH 317, IDSH 318, IDSH 319				
Φ32.0 ~Φ32.4	YTDI 320 □ FH KRUZ 320 □ FH		T(3xD) 219 159 128 P(5xD) 283 223 192 H(7xD) 347 287 256 L(10xD) 443 383 352					IDPH 320, IDPH 321, IDPH 322, IDPH 323, IDPH 324 IDFH 320, IDFH 321, IDFH 322, IDFH 323, IDFH 324 IDH 320, IDH 321, IDH 322, IDH 323, IDH 324 IDSH 320, IDSH 321, IDSH 322, IDSH 323, IDSH 324				
Φ32.5 ~Φ32.9	YTDI 325 □ FH KRUZ 325 □ FH		T(3xD) 221 161 130 P(5xD) 286 226 195 H(7xD) 351 291 260 L(10xD) 449 389 358					IDPH 325, IDPH 326, IDPH 327, IDPH 328, IDPH 329 IDFH 325, IDFH 326, IDFH 327, IDFH 328, IDFH 329 IDH 325, IDH 326, IDH 327, IDH 328, IDH 329 IDSH 325, IDSH 326, IDSH 327, IDSH 328, IDSH 329				
Φ33.0 ~Φ33.4	YTDI 330 □ FH KRUZ 330 □ FH		T(3xD) 224 164 132 P(5xD) 290 230 198 H(7xD) 356 296 264 L(10xD) 455 395 363					IDPH 330, IDPH 331, IDPH 332, IDPH 333, IDPH 334 IDFH 330, IDFH 331, IDFH 332, IDFH 333, IDFH 334 IDH 330, IDH 331, IDH 332, IDH 333, IDH 334 IDSH 330, IDSH 331, IDSH 332, IDSH 333, IDSH 334				
Φ33.5 ~Φ33.9	YTDI 335 □ FH KRUZ 335 □ FH		T(3xD) 226 166 134 P(5xD) 293 233 201 H(7xD) 360 300 268 L(10xD) 461 401 369					IDPH 335, IDPH 336, IDPH 337, IDPH 338, IDPH 339 IDFH 335, IDFH 336, IDFH 337, IDFH 338, IDFH 339 IDH 335, IDH 336, IDH 337, IDH 338, IDH 339 IDSH 335, IDSH 336, IDSH 337, IDSH 338, IDSH 339				
Φ34.0 ~Φ34.4	YTDI 340 □ FH KRUZ 340 □ FH		T(3xD) 239 169 136 P(5xD) 307 237 204 H(7xD) 375 305 272 L(10xD) 477 407 374					IDPH 340, IDPH 341, IDPH 342, IDPH 343, IDPH 344 IDFH 340, IDFH 341, IDFH 342, IDFH 343, IDFH 344 IDH 340, IDH 341, IDH 342, IDH 343, IDH 344 IDSH 340, IDSH 341, IDSH 342, IDSH 343, IDSH 344				
Φ34.5 ~Φ34.9	YTDI 345 □ FH KRUZ 345 □ FH		T(3xD) 241 171 138 P(5xD) 310 240 207 H(7xD) 379 309 276 L(10xD) 483 413 380					IDPH 345, IDPH 346, IDPH 347, IDPH 348, IDPH 349 IDFH 345, IDFH 346, IDFH 347, IDFH 348, IDFH 349 IDH 345, IDH 346, IDH 347, IDH 348, IDH 349 IDSH 345, IDSH 346, IDSH 347, IDSH 348, IDSH 349				
Φ35.0 ~Φ35.4	YTDI 350 □ FH KRUZ 350 □ FH		T(3xD) 243 173 140 P(5xD) 313 243 210 H(7xD) 383 313 280 L(10xD) 488 418 385					IDPH 350, IDPH 351, IDPH 352, IDPH 353, IDPH 354 IDFH 350, IDFH 351, IDFH 352, IDFH 353, IDFH 354 IDH 350, IDH 351, IDH 352, IDH 353, IDH 354 IDSH 350, IDSH 351, IDSH 352, IDSH 353, IDSH 354				
Φ35.5 ~Φ35.9	YTDI 355 □ FH KRUZ 355 □ FH		T(3xD) 246 176 142 P(5xD) 317 247 213 H(7xD) 388 317 284 L(10xD) 495 425 391					IDPH 355, IDPH 356, IDPH 357, IDPH 358, IDPH 359 IDFH 355, IDFH 356, IDFH 357, IDFH 358, IDFH 359 IDH 355, IDH 356, IDH 357, IDH 358, IDH 359 IDSH 355, IDSH 356, IDSH 357, IDSH 358, IDSH 359				
Φ36.0 ~Φ36.4	YTDI 360 □ FH KRUZ 360 □ FH		40.0	T(3xD) 248 178 144 P(5xD) 320 250 216 H(7xD) 392 322 288 L(10xD) 500 430 396								
Φ36.5 ~Φ36.9	YTDI 365 □ FH KRUZ 365 □ FH	T(3xD) 251 181 146 P(5xD) 324 254 219 H(7xD) 397 327 292 L(10xD) 507 437 402						IDPH 365, IDPH 366, IDPH 367, IDPH 368, IDPH 369 IDFH 365, IDFH 366, IDFH 367, IDFH 368, IDFH 369 IDH 365, IDH 366, IDH 367, IDH 368, IDH 369 IDSH 365, IDSH 366, IDSH 367, IDSH 368, IDSH 369				
Φ37.0 ~Φ37.4	YTDI 370 □ FH KRUZ 370 □ FH	T(3xD) 253 183 148 P(5xD) 327 257 222 H(7xD) 401 331 296 L(10xD) 512 442 407						IDPH 370, IDPH 371, IDPH 372, IDPH 373, IDPH 374 IDFH 370, IDFH 371, IDFH 372, IDFH 373, IDFH 374 IDH 370, IDH 371, IDH 372, IDH 373, IDH 374 IDSH 370, IDSH 371, IDSH 372, IDSH 373, IDSH 374				
Φ37.5 ~Φ37.9	YTDI 375 □ FH KRUZ 375 □ FH	T(3xD) 255 185 150 P(5xD) 330 260 225 H(7xD) 405 335 300 L(10xD) 518 448 413						IDPH 375, IDPH 376, IDPH 377, IDPH 378, IDPH 379 IDFH 375, IDFH 376, IDFH 377, IDFH 378, IDFH 379 IDH 375, IDH 376, IDH 377, IDH 378, IDH 379 IDSH 375, IDSH 376, IDSH 377, IDSH 378, IDSH 379				

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body	Cap Screw	Torx driver	Set Screw	L-wrench
Φ38.0 ~Φ38.4	YTDI 380 □ FH KRUZ 380 □ FH	40.0	T(3xD) 258 188 152 P(5xD) 334 264 228 H(7xD) 410 340 304 L(10xD) 524 454 418					IDPH 380, IDPH 381, IDPH 382, IDPH 383, IDPH 384 IDFH 380, IDFH 381, IDFH 382, IDFH 383, IDFH 384 IDH 380, IDH 381, IDH 382, IDH 383, IDH 384 IDSH 380, IDSH 381, IDSH 382, IDSH 383, IDSH 384	CS 360 -395 SL	M5x10	2.5mm	Torque 4.0Nm (Max)
Φ38.5 ~Φ38.9	YTDI 385 □ FH KRUZ 385 □ FH		T(3xD) 260 196 154 P(5xD) 337 267 231 H(7xD) 414 344 308 L(10xD) 530 460 424					IDPH 385, IDPH 386, IDPH 387, IDPH 388, IDPH 389 IDFH 385, IDFH 386, IDFH 387, IDFH 388, IDFH 389 IDH 385, IDH 386, IDH 387, IDH 388, IDH 389 IDSH 385, IDSH 386, IDSH 387, IDSH 388, IDSH 389				
Φ39.0 ~Φ39.4	YTDI 390 □ FH KRUZ 390 □ FH		T(3xD) 263 193 156 P(5xD) 341 271 234 H(7xD) 419 349 312 L(10xD) 536 466 429					IDPH 390, IDPH 391, IDPH 392, IDPH 393, IDPH 394 IDFH 390, IDFH 391, IDFH 392, IDFH 393, IDFH 394 IDH 390, IDH 391, IDH 392, IDH 393, IDH 394 IDSH 390, IDSH 391, IDSH 392, IDSH 393, IDSH 394				
Φ39.5 ~Φ39.9	YTDI 395 □ FH KRUZ 395 □ FH		T(3xD) 265 195 158 P(5xD) 344 274 237 H(7xD) 423 353 316 L(10xD) 542 472 435					IDPH 395, IDPH 396, IDPH 397, IDPH 398, IDPH 399 IDFH 395, IDFH 396, IDFH 397, IDFH 398, IDFH 399 IDH 395, IDH 396, IDH 397, IDH 398, IDH 399 IDSH 395, IDSH 396, IDSH 397, IDSH 398, IDSH 399				
Φ40.0 ~Φ40.4	YTDI 400 □ FH KRUZ 400 □ FH		T(3xD) 267 197 160 P(5xD) 347 277 240 H(7xD) 427 357 320 L(10xD) 547 477 440					IDPH 400, IDPH 401, IDPH 402, IDPH 403, IDPH 404 IDFH 400, IDFH 401, IDFH 402, IDFH 403, IDFH 404 IDH 400, IDH 401, IDH 402, IDH 403, IDH 404 IDSH 400, IDSH 401, IDSH 402, IDSH 403, IDSH 404				
Φ40.5 ~Φ40.9	YTDI 405 □ FH KRUZ 405 □ FH		T(3xD) 270 200 162 P(5xD) 351 281 243 H(7xD) 432 362 324 L(10xD) 554 484 446					IDPH 405, IDPH 406, IDPH 407, IDPH 408, IDPH 409 IDFH 405, IDFH 406, IDFH 407, IDFH 408, IDFH 409 IDH 405, IDH 406, IDH 407, IDH 408, IDH 409 IDSH 405, IDSH 406, IDSH 407, IDSH 408, IDSH 409				
Φ41.0 ~Φ41.4	YTDI 410 □ FH KRUZ 410 □ FH		T(3xD) 272 202 164 P(5xD) 354 284 246 H(7xD) 436 366 328 L(10xD) 559 489 451					IDPH 410, IDPH 411, IDPH 412, IDPH 413, IDPH 414 IDFH 410, IDFH 411, IDFH 412, IDFH 413, IDFH 414 IDH 410, IDH 411, IDH 412, IDH 413, IDH 414 IDSH 410, IDSH 411, IDSH 412, IDSH 413, IDSH 414				
Φ41.5 ~Φ41.9	YTDI 415 □ FH KRUZ 415 □ FH		T(3xD) 275 205 166 P(5xD) 358 288 249 H(7xD) 441 371 332 L(10xD) 566 496 457					IDPH 415, IDPH 416, IDPH 417, IDPH 418, IDPH 419 IDFH 415, IDFH 416, IDFH 417, IDFH 418, IDFH 419 IDH 415, IDH 416, IDH 417, IDH 418, IDH 419 IDSH 415, IDSH 416, IDSH 417, IDSH 418, IDSH 419				
Φ42.0 ~Φ42.4	YTDI 420 □ FH KRUZ 420 □ FH		T(3xD) 277 207 168 P(5xD) 361 291 252 H(7xD) 445 375 336 L(10xD) 571 501 462					IDPH 420, IDPH 421, IDPH 422, IDPH 423, IDPH 424 IDFH 420, IDFH 421, IDFH 422, IDFH 423, IDFH 424 IDH 420, IDH 421, IDH 422, IDH 423, IDH 424 IDSH 420, IDSH 421, IDSH 422, IDSH 423, IDSH 424				
Φ42.5 ~Φ42.9	YTDI 425 □ FH KRUZ 425 □ FH		T(3xD) 279 209 170 P(5xD) 364 294 255 H(7xD) 449 379 340 L(10xD) 577 507 468					IDPH 425, IDPH 426, IDPH 427, IDPH 428, IDPH 429 IDFH 425, IDFH 426, IDFH 427, IDFH 428, IDFH 429 IDH 425, IDH 426, IDH 427, IDH 428, IDH 429 IDSH 425, IDSH 426, IDSH 427, IDSH 428, IDSH 429				
Φ43.0 ~Φ43.4	YTDI 430 □ FH KRUZ 430 □ FH		T(3xD) 282 212 172 P(5xD) 368 298 258 H(7xD) 454 384 344 L(10xD) 583 513 473					IDPH 430, IDPH 431, IDPH 432, IDPH 433, IDPH 434 IDFH 430, IDFH 431, IDFH 432, IDFH 433, IDFH 434 IDH 430, IDH 431, IDH 432, IDH 433, IDH 434 IDSH 430, IDSH 431, IDSH 432, IDSH 433, IDSH 434				
Φ43.5 ~Φ43.9	YTDI 435 □ FH KRUZ 435 □ FH		T(3xD) 284 214 174 P(5xD) 371 301 261 H(7xD) 458 388 348 L(10xD) 589 519 479					IDPH 435, IDPH 436, IDPH 437, IDPH 438, IDPH 439 IDFH 435, IDFH 436, IDFH 437, IDFH 438, IDFH 439 IDH 435, IDH 436, IDH 437, IDH 438, IDH 439 IDSH 435, IDSH 436, IDSH 437, IDSH 438, IDSH 439				
Φ44.0 ~Φ44.4	YTDI 440 □ FH KRUZ 440 □ FH	T(3xD) 287 217 176 P(5xD) 375 305 264 H(7xD) 463 393 352 L(10xD) 595 525 484					IDPH 440, IDPH 441, IDPH 442, IDPH 443, IDPH 444 IDFH 440, IDFH 441, IDFH 442, IDFH 443, IDFH 444 IDH 440, IDH 441, IDH 442, IDH 443, IDH 444 IDSH 440, IDSH 441, IDSH 442, IDSH 443, IDSH 444					
Φ44.5 ~Φ44.9	YTDI 445 □ FH KRUZ 445 □ FH	T(3xD) 289 219 178 P(5xD) 378 308 267 H(7xD) 467 397 356 L(10xD) 601 531 490					IDPH 445, IDPH 446, IDPH 447, IDPH 448, IDPH 449 IDFH 445, IDFH 446, IDFH 447, IDFH 448, IDFH 449 IDH 445, IDH 446, IDH 447, IDH 448, IDH 449 IDSH 445, IDSH 446, IDSH 447, IDSH 448, IDSH 449					
Φ45.0 ~Φ45.4	YTDI 450 □ FH KRUZ 450 □ FH	T(3xD) 291 221 180 P(5xD) 381 311 270 H(7xD) 471 401 360 L(10xD) 606 536 495					IDPH 450, IDPH 451, IDPH 452, IDPH 453, IDPH 454 IDFH 450, IDFH 451, IDFH 452, IDFH 453, IDFH 454 IDH 450, IDH 451, IDH 452, IDH 453, IDH 454 IDSH 450, IDSH 451, IDSH 452, IDSH 453, IDSH 454					

KRUZ "H" series flange + higher helix body & carbide insert

Hole size range	Body Code No.	Shank Size(Φd)	Cutting depth (Length x ΦD)	L1	L2	L3	Flanged dia.(ΦFd)	Insert Code No. to fit in body	Cap Screw	Torx driver	Set Screw	L-wrench
Φ45.5 ~Φ45.9	YTDI 455 □ FH KRUZ 455 □ FH	40.0	T(3xD)	294	224	182	55	IDPH 455, IDPH 456, IDPH 457, IDPH 458, IDPH 459 IDFH 455, IDFH 456, IDFH 457, IDFH 458, IDFH 459 IDH 455, IDH 456, IDH 457, IDH 458, IDH 459 IDSH 455, IDSH 456, IDSH 457, IDSH 458, IDSH 459	CS 450 -500 SL	T20 Torque 4.0Nm (Max)	M6x12	3.0mm
			P(5xD)	385	315	273						
			H(7xD)	476	406	364						
			L(10xD)	613	543	501						
Φ46.0 ~Φ46.4	YTDI 460 □ FH KRUZ 460 □ FH	40.0	T(3xD)	296	226	184	55	IDPH 460, IDPH 461, IDPH 462, IDPH 463, IDPH 464 IDFH 460, IDFH 461, IDFH 462, IDFH 463, IDFH 464 IDH 460, IDH 461, IDH 462, IDH 463, IDH 464 IDSH 460, IDSH 461, IDSH 462, IDSH 463, IDSH 464	CS 450 -500 SL	T20 Torque 4.0Nm (Max)	M6x12	3.0mm
			P(5xD)	388	318	276						
			H(7xD)	480	410	368						
			L(10xD)	618	548	506						
Φ46.5 ~Φ46.9	YTDI 465 □ FH KRUZ 465 □ FH	40.0	T(3xD)	299	229	186	55	IDPH 465, IDPH 466, IDPH 467, IDPH 468, IDPH 469 IDFH 465, IDFH 466, IDFH 467, IDFH 468, IDFH 469 IDH 465, IDH 466, IDH 467, IDH 468, IDH 469 IDSH 465, IDSH 466, IDSH 467, IDSH 468, IDSH 469	CS 450 -500 SL	T20 Torque 4.0Nm (Max)	M6x12	3.0mm
			P(5xD)	392	322	279						
			H(7xD)	485	415	372						
			L(10xD)	625	555	512						
Φ47.0 ~Φ47.4	YTDI 470 □ FH KRUZ 470 □ FH	40.0	T(3xD)	301	231	188	55	IDPH 470, IDPH 471, IDPH 472, IDPH 473, IDPH 474 IDFH 470, IDFH 471, IDFH 472, IDFH 473, IDFH 474 IDH 470, IDH 471, IDH 472, IDH 473, IDH 474 IDSH 470, IDSH 471, IDSH 472, IDSH 473, IDSH 474	CS 450 -500 SL	T20 Torque 4.0Nm (Max)	M6x12	3.0mm
			P(5xD)	395	325	282						
			H(7xD)	489	419	376						
			L(10xD)	630	560	517						
Φ47.5 ~Φ47.9	YTDI 475 □ FH KRUZ 475 □ FH	40.0	T(3xD)	303	233	190	55	IDPH 475, IDPH 476, IDPH 477, IDPH 478, IDPH 479 IDFH 475, IDFH 476, IDFH 477, IDFH 478, IDFH 479 IDH 475, IDH 476, IDH 477, IDH 478, IDH 479 IDSH 475, IDSH 476, IDSH 477, IDSH 478, IDSH 479	CS 450 -500 SL	T20 Torque 4.0Nm (Max)	M6x12	3.0mm
			P(5xD)	398	328	285						
			H(7xD)	493	423	380						
			L(10xD)	636	566	523						
Φ48.0 ~Φ48.4	YTDI 480 □ FH KRUZ 480 □ FH	40.0	T(3xD)	306	236	192	55	IDPH 480, IDPH 481, IDPH 482, IDPH 483, IDPH 484 IDFH 480, IDFH 481, IDFH 482, IDFH 483, IDFH 484 IDH 480, IDH 481, IDH 482, IDH 483, IDH 484 IDSH 480, IDSH 481, IDSH 482, IDSH 483, IDSH 484	CS 450 -500 SL	T20 Torque 4.0Nm (Max)	M6x12	3.0mm
			P(5xD)	402	332	288						
			H(7xD)	498	428	384						
			L(10xD)	642	572	528						
Φ48.5 ~Φ48.9	YTDI 485 □ FH KRUZ 485 □ FH	40.0	T(3xD)	308	238	194	55	IDPH 485, IDPH 486, IDPH 487, IDPH 488, IDPH 489 IDFH 485, IDFH 486, IDFH 487, IDFH 488, IDFH 489 IDH 485, IDH 486, IDH 487, IDH 488, IDH 489 IDSH 485, IDSH 486, IDSH 487, IDSH 488, IDSH 489	CS 450 -500 SL	T20 Torque 4.0Nm (Max)	M6x12	3.0mm
			P(5xD)	405	335	291						
			H(7xD)	502	432	388						
			L(10xD)	648	578	534						
Φ49.0 ~Φ49.4	YTDI 490 □ FH KRUZ 490 □ FH	40.0	T(3xD)	311	241	196	55	IDPH 490, IDPH 491, IDPH 492, IDPH 493, IDPH 494 IDFH 490, IDFH 491, IDFH 492, IDFH 493, IDFH 494 IDH 490, IDH 491, IDH 492, IDH 493, IDH 494 IDSH 490, IDSH 491, IDSH 492, IDSH 493, IDSH 494	CS 450 -500 SL	T20 Torque 4.0Nm (Max)	M6x12	3.0mm
			P(5xD)	409	339	294						
			H(7xD)	507	437	392						
			L(10xD)	654	584	539						
Φ49.5 ~Φ49.9	YTDI 495 □ FH KRUZ 495 □ FH	40.0	T(3xD)	313	243	198	55	IDPH 495, IDPH 496, IDPH 497, IDPH 498, IDPH 499 IDFH 495, IDFH 496, IDFH 497, IDFH 498, IDFH 499 IDH 495, IDH 496, IDH 497, IDH 498, IDH 499 IDSH 495, IDSH 496, IDSH 497, IDSH 498, IDSH 499	CS 450 -500 SL	T20 Torque 4.0Nm (Max)	M6x12	3.0mm
			P(5xD)	412	342	297						
			H(7xD)	511	441	396						
			L(10xD)	660	590	545						
Φ50.0 ~Φ50.4	YTDI 500 □ FH KRUZ 500 □ FH	40.0	T(3xD)	315	245	200	55	IDPH 500, IDPH 501, IDPH 502, IDPH 503, IDPH 504 IDFH 500, IDFH 501, IDFH 502, IDFH 503, IDFH 504 IDH 500, IDH 501, IDH 502, IDH 503, IDH 504 IDSH 500, IDSH 501, IDSH 502, IDSH 503, IDSH 504	CS 450 -500 SL	T20 Torque 4.0Nm (Max)	M6x12	3.0mm
			P(5xD)	415	345	300						
			H(7xD)	515	445	400						
			L(10xD)	665	595	550						

KRUZ "K" series drill body & insert

Caution !!!

"K" series inserts(IDFK or IDPK) should use only with "K" series body(KRUZ-SLK or FSLK) to avoid drilling failure.

IDFK Carbide insert

- Carbide insert completely grinded by CNC program
- Patented 140°+170° dual angle flat bottom point
- TiAlN coated insert offers wear resistance and higher feed rate
- Designed exclusively for structural beam, angle or single plate drilling



IDPK Carbide insert

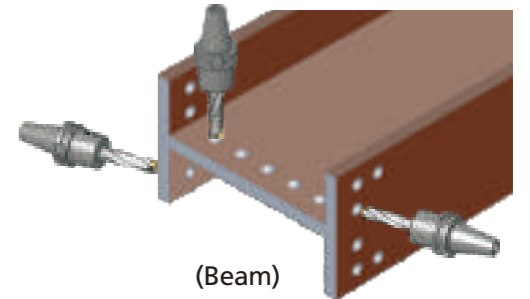
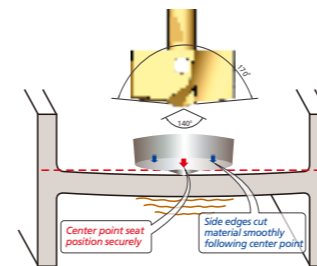
- Carbide insert completely grinded by CNC program
- Patented 130°+150° dual point angle
- TiAlN coated insert offers wear resistance and higher feed rate
- Appropriate insert design for stack plates drilling



(for stacked plates)

KRUZ-SLK Drill body

- Rigid drill body made of special premium steel and heat treated
- TiN coated body to enable longer tool life and higher lubricity
- Special flute design to increase faster chip's ejection rate
- Enabling to mount 0.5mm inclusive both IDFK & IDPK inserts
- Stubby length to perform maximum drilling ability of structural machining
- Internal coolant fed



(Plate)

(Angle)

(Beam)

KRUZ-FH Drills, Cutting Speed Recommendation

Drill Dia.	Φ8~16mm		Φ16~25mm		Φ25~32mm		Φ32~40mm		Φ40~50mm	
	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)	Speed (m/min)	Feed (mm/rev)
Grey cast iron (FC)	80~150	0.20~0.30	80~150	0.25~0.45	80~160	0.35~0.55	90~200	0.34~0.58	90~200	0.38~0.60
Nodular cast iron (FCD)	80~140	0.15~0.25	80~140	0.22~0.45	80~150	0.32~0.52	90~160	0.35~0.62	90~200	0.38~0.60
Carbon steel (S45C)	80~140	0.15~0.30	80~140	0.16~0.40	80~150	0.20~0.40	80~150	0.22~0.48	80~160	0.25~0.54
Alloy steel (SCM440)	70~140	0.15~0.30	70~140	0.15~0.40	70~140	0.18~0.40	80~140	0.25~0.47	80~140	0.27~0.52
Hardened steel (SKD11)	40~50	0.10~0.20	40~50	0.12~0.28	40~50	0.16~0.35	40~60	0.20~0.38	40~60	0.22~0.42
Stainless steel (SUS)	30~40	0.10~0.20	35~50	0.10~0.22	35~50	0.15~0.28	40~55	0.18~0.30	40~55	0.22~0.32
Aluminum 130HB (AL)	120~200	0.20~0.30	120~200	0.25~0.40	120~200	0.30~0.45	120~200	0.30~0.45	120~200	0.30~0.50


This data is recommended for 3xDia. And should be reduced about 15~20% for 5xD, 7xD, 10xD drills.
The data is normally suggested for oil-mist(MQL) coolant condition and also possible to run in other normal condition if machining environment like clamping etc. are secured in good.



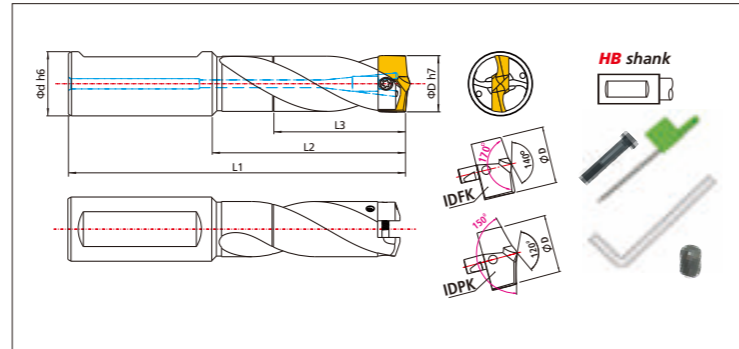
KRUZ "K" series drill body & insert, Metric



KRUZ-SLK

IDFK  for beam, angle, single plate

IDPK  for stacked plate



Exclusively designed for Structural machining

Hole (Φ) mm	Body Code	Shank (Φd)	Dimension			Insert IDFK	Insert IDPK	Cap Screw	Torx driver	Set Screw	L-wrench
			L1	L2	L3						
14.0~14.4	KRUZ 140 L3=50 SLK	16	110	62	IDFK 140, IDFK 141, IDFK 142, IDFK 143, IDFK 144 IDPK 140, IDPK 141, IDPK 142, IDPK 143, IDPK 144	IDFK 145, IDFK 146, IDFK 147, IDFK 148, IDFK 149 IDPK 145, IDPK 146, IDPK 147, IDPK 148, IDPK 149	CS 140 -155 SL	T7	Torque 0.9Nm (Max)	M2.5x4	1.3mm
14.5~14.9	KRUZ 145 L3=50 SLK										
15.0~15.4	KRUZ 150 L3=50 SLK	16	115	65	IDFK 150, IDFK 151, IDFK 152, IDFK 153, IDFK 154 IDPK 150, IDPK 151, IDPK 152, IDPK 153, IDPK 154	IDFK 155, IDFK 156, IDFK 157, IDFK 158, IDFK 159 IDPK 155, IDPK 156, IDPK 157, IDPK 158, IDPK 159	CS 160 -175 SL	T7	Torque 0.9Nm (Max)	M2.5x4	1.3mm
15.5~15.9	KRUZ 155 L3=50 SLK										
16.0~16.4	KRUZ 160 L3=50 SLK	16	115	65	IDFK 160, IDFK 161, IDFK 162, IDFK 163, IDFK 164 IDPK 160, IDPK 161, IDPK 162, IDPK 163, IDPK 164	IDFK 165, IDFK 166, IDFK 167, IDFK 168, IDFK 169 IDPK 165, IDPK 166, IDPK 167, IDPK 168, IDPK 169	CS 160 -175 SL	T7	Torque 0.9Nm (Max)	M2.5x4	1.3mm
16.5~16.9	KRUZ 165 L3=50 SLK										
17.0~17.4	KRUZ 170 L3=50 SLK	20	118	68	IDFK 170, IDFK 171, IDFK 172, IDFK 173, IDFK 174 IDPK 170, IDPK 171, IDPK 172, IDPK 173, IDPK 174	IDFK 175, IDFK 176, IDFK 177, IDFK 178, IDFK 179 IDPK 175, IDPK 176, IDPK 177, IDPK 178, IDPK 179	CS 180 -195 SL	T7	Torque 0.9Nm (Max)	M2.5x4	1.3mm
17.5~17.9	KRUZ 175 L3=50 SLK										
18.0~18.4	KRUZ 180 L3=50 SLK	20	118	68	IDFK 180, IDFK 181, IDFK 182, IDFK 183, IDFK 184 IDPK 180, IDPK 181, IDPK 182, IDPK 183, IDPK 184	IDFK 185, IDFK 186, IDFK 187, IDFK 188, IDFK 189 IDPK 185, IDPK 186, IDPK 187, IDPK 188, IDPK 189	CS 180 -195 SL	T7	Torque 0.9Nm (Max)	M2.5x4	1.3mm
18.5~18.9	KRUZ 185 L3=50 SLK										
19.0~19.4	KRUZ 190 L3=50 SLK	20	118	68	IDFK 190, IDFK 191, IDFK 192, IDFK 193, IDFK 194 IDPK 190, IDPK 191, IDPK 192, IDPK 193, IDPK 194	IDFK 195, IDFK 196, IDFK 197, IDFK 198, IDFK 199 IDPK 195, IDPK 196, IDPK 197, IDPK 198, IDPK 199	CS 180 -195 SL	T7	Torque 0.9Nm (Max)	M2.5x4	1.3mm
19.5~19.9	KRUZ 195 L3=50 SLK										
20.0~20.4	KRUZ 200 L3=50 SLK	25	130	74	IDFK 200, IDFK 201, IDFK 202, IDFK 203, IDFK 204 IDPK 200, IDPK 201, IDPK 202, IDPK 203, IDPK 204	IDFK 205, IDFK 206, IDFK 207, IDFK 208, IDFK 209 IDPK 205, IDPK 206, IDPK 207, IDPK 208, IDPK 209	CS 200 -215 SL	T8	Torque 1.5Nm (Max)	M3x6	1.5mm
20.5~20.9	KRUZ 205 L3=50 SLK										
21.0~21.4	KRUZ 210 L3=50 SLK	25	130	74	IDFK 210, IDFK 211, IDFK 212, IDFK 213, IDFK 214 IDPK 210, IDPK 211, IDPK 212, IDPK 213, IDPK 214	IDFK 215, IDFK 216, IDFK 217, IDFK 218, IDFK 219 IDPK 215, IDPK 216, IDPK 217, IDPK 218, IDPK 219	CS 200 -215 SL	T8	Torque 1.5Nm (Max)	M3x6	1.5mm
21.5~21.9	KRUZ 215 L3=50 SLK										
22.0~22.4	KRUZ 220 L3=50 SLK	25	130	74	IDFK 220, IDFK 221, IDFK 222, IDFK 223, IDFK 224 IDPK 220, IDPK 221, IDPK 222, IDPK 223, IDPK 224	IDFK 225, IDFK 226, IDFK 227, IDFK 228, IDFK 229 IDPK 225, IDPK 226, IDPK 227, IDPK 228, IDPK 229	CS 220 -235 SL	T8	Torque 1.5Nm (Max)	M3x6	1.5mm
22.5~22.9	KRUZ 225 L3=50 SLK										
23.0~23.4	KRUZ 230 L3=50 SLK	25	130	74	IDFK 230, IDFK 231, IDFK 232, IDFK 233, IDFK 234 IDPK 230, IDPK 231, IDPK 232, IDPK 233, IDPK 234	IDFK 235, IDFK 236, IDFK 237, IDFK 238, IDFK 239 IDPK 235, IDPK 236, IDPK 237, IDPK 238, IDPK 239	CS 220 -235 SL	T8	Torque 1.5Nm (Max)	M3x6	1.5mm
23.5~23.9	KRUZ 235 L3=50 SLK										
24.0~24.4	KRUZ 240 L3=50 SLK	32	136	76	IDFK 240, IDFK 241, IDFK 242, IDFK 243, IDFK 244 IDPK 240, IDPK 241, IDPK 242, IDPK 243, IDPK 244	IDFK 245, IDFK 246, IDFK 247, IDFK 248, IDFK 249 IDPK 245, IDPK 246, IDPK 247, IDPK 248, IDPK 249	CS 240 -255 SL	T15	Torque 3.5Nm (Max)	M4x8	2.0mm
24.5~24.9	KRUZ 245 L3=50 SLK										
25.0~25.4	KRUZ 250 L3=50 SLK	32	136	76	IDFK 250, IDFK 251, IDFK 252, IDFK 253, IDFK 254 IDPK 250, IDPK 251, IDPK 252, IDPK 253, IDPK 254	IDFK 255, IDFK 256, IDFK 257, IDFK 258, IDFK 259 IDPK 255, IDPK 256, IDPK 257, IDPK 258, IDPK 259	CS 260 -275 SL	T15	Torque 3.5Nm (Max)	M4x8	2.0mm
25.5~25.9	KRUZ 255 L3=50 SLK										
26.0~26.4	KRUZ 260 L3=50 SLK	32	140	80	IDFK 260, IDFK 261, IDFK 262, IDFK 263, IDFK 264 IDPK 260, IDPK 261, IDPK 262, IDPK 263, IDPK 264	IDFK 265, IDFK 266, IDFK 267, IDFK 268, IDFK 269 IDPK 265, IDPK 266, IDPK 267, IDPK 268, IDPK 269	CS 260 -275 SL	T15	Torque 3.5Nm (Max)	M4x8	2.0mm
26.5~26.9	KRUZ 265 L3=50 SLK										
27.0~27.4	KRUZ 270 L3=50 SLK	32	140	80	IDFK 270, IDFK 271, IDFK 272, IDFK 273, IDFK 274 IDPK 270, IDPK 271, IDPK 272, IDPK 273, IDPK 274	IDFK 275, IDFK 276, IDFK 277, IDFK 278, IDFK 279 IDPK 275, IDPK 276, IDPK 277, IDPK 278, IDPK 279	CS 280 -295 SL	T15	Torque 3.5Nm (Max)	M4x8	2.0mm
27.5~27.9	KRUZ 275 L3=50 SLK										
28.0~28.4	KRUZ 280 L3=50 SLK	32	140	80	IDFK 280, IDFK 281, IDFK 282, IDFK 283, IDFK 284 IDPK 280, IDPK 281, IDPK 282, IDPK 283, IDPK 284	IDFK 285, IDFK 286, IDFK 287, IDFK 288, IDFK 289 IDPK 285, IDPK 286, IDPK 287, IDPK 288, IDPK 289	CS 280 -295 SL	T15	Torque 3.5Nm (Max)	M4x8	2.0mm
28.5~28.9	KRUZ 285 L3=50 SLK										
29.0~29.4	KRUZ 290 L3=50 SLK	32	140	80	IDFK 290, IDFK 291, IDFK 292, IDFK 293, IDFK 294 IDPK 290, IDPK 291, IDPK 292, IDPK 293, IDPK 294	IDFK 295, IDFK 296, IDFK 297, IDFK 298, IDFK 299 IDPK 295, IDPK 296, IDPK 297, IDPK 298, IDPK 299	CS 280 -295 SL	T15	Torque 3.5Nm (Max)	M4x8	2.0mm
29.5~29.9	KRUZ 295 L3=50 SLK										


Exclusively designed for Structural machining

Hole (Φ) mm	Body Code	Shank (Φd)	Dimension			Insert IDFK	Insert IDPK	Cap Screw	Torx driver	Set Screw	L-wrench
			L1	L2	L3						
30.0~30.4	KRUZ 300 L3=70 SLK	32	155	95	IDFK 300, IDFK 301, IDFK 302, IDFK 303, IDFK 304 IDPK 300, IDPK 301, IDPK 302, IDPK 303, IDPK 304	IDFK 305, IDFK 306, IDFK 307, IDFK 308, IDFK 309 IDPK 305, IDPK 306, IDPK 307, IDPK 308, IDPK 309	CS 300 -315 SL	T20	Torque 4.0Nm (Max)	M4x8	2.0mm
30.5~30.9	KRUZ 305 L3=70 SLK										
31.0~31.4	KRUZ 310 L3=70 SLK	32	155	95	IDFK 310, IDFK 311, IDFK 312, IDFK 313, IDFK 314 IDPK 310, IDPK 311, IDPK 312, IDPK 313, IDPK 314	IDFK 315, IDFK 316, IDFK 317, IDFK 318, IDFK 319 IDPK 315, IDPK 316, IDPK 317, IDPK 318, IDPK 319	CS 300 -315 SL	T20	Torque 4.0Nm (Max)	M4x8	2.0mm
31.5~31.9	KRUZ 315 L3=70 SLK										
32.0~32.4	KRUZ 320 L3=70 SLK	32	155	95	IDFK 320, IDFK 321, IDFK 322, IDFK 323, IDFK 324 IDPK 320, IDPK 321, IDPK 322, IDPK 323, IDPK 324	IDFK 325, IDFK 326, IDFK 327, IDFK 328, IDFK 329 IDPK 325, IDPK 326, IDPK 327, IDPK 328, IDPK 329	CS 320 -355 SL	T20	Torque 4.0Nm (Max)	M5x10	2.5mm
32.5~32.9	KRUZ 325 L3=70 SLK										
33.0~33.4	KRUZ 330 L3=70 SLK	32	155	95	IDFK 330, IDFK 331, IDFK 332, IDFK 333, IDFK 334 IDPK 330, IDPK 331, IDPK 332, IDPK 333, IDPK 334	IDFK 335, IDFK 336, IDFK 337, IDFK 338, IDFK 339 IDPK 335, IDPK 336, IDPK 337, IDPK 338, IDPK 339	CS 320 -355 SL	T20	Torque 4.0Nm (Max)	M5x10	2.5mm
33.5~33.9	KRUZ 335 L3=70 SLK										
34.0~34.4	KRUZ 340 L3=80 SLK	40	180	110	IDFK 340, IDFK 341, IDFK 342, IDFK 343, IDFK 344 IDPK 340, IDPK 341, IDPK 342, IDPK 343, IDPK 344	IDFK 345, IDFK 346, IDFK 347, IDFK 348, IDFK 349 IDPK 345, IDPK 346, IDPK 347, IDPK 348, IDPK 349	CS 360 -395 SL	T20	Torque 4.0Nm (Max)	M5x10	2.5mm
34.5~34.9	KRUZ 345 L3=80 SLK										
35.0~35.4	KRUZ 350 L3=80 SLK	40	180	110	IDFK 350, IDFK 351, IDFK 352, IDFK 353, IDFK 354 IDPK 350, IDPK 351, IDPK 352, IDPK 353, IDPK 354	IDFK 355, IDFK 356, IDFK 357, IDFK 358, IDFK 359 IDPK 355, IDPK 356, IDPK 357, IDPK 358, IDPK 359	CS 360 -395 SL	T20	Torque 4.0Nm (Max)	M5x10	2.5mm
35.5~35.9	KRUZ 355 L3=80 SLK										
36.0~36.4	KRUZ 360 L3=80 SLK	40	180	110	IDFK 360, IDFK 361, IDFK 362, IDFK 363, IDFK 364 IDPK 360, IDPK 361, IDPK 362, IDPK 363, IDPK 364	IDFK 365, IDFK 366, IDFK 367, IDFK 368, IDFK 369 IDPK 365, IDPK 366, IDPK 367, IDPK 368, IDPK 369	CS 360 -395 SL	T20	Torque 4.0Nm (Max)	M5x10	2.5mm
36.5~36.9	KRUZ 365 L3=80 SLK										
37.0~37.4	KRUZ 370 L3=80 SLK	40	180	110	IDFK 370, IDFK 371, IDFK 372, IDFK 373, IDFK 374 IDPK 370, IDPK 371, IDPK 372, IDPK 373, IDPK 374	IDFK 375, IDFK 376, IDFK 377, IDFK 378, IDFK 379 IDPK 375, IDPK 376, IDPK 377, IDPK 378, IDPK 379	CS 360 -395 SL	T20	Torque 4.0Nm (Max)	M5x10	2.5mm
37.5~37.9	KRUZ 375 L3=80 SLK										
38.0~38.4	KRUZ 380 L3=80 SLK	40	180	110	IDFK 380, IDFK 381, IDFK 382, IDFK 383, IDFK 384 IDPK 380, IDPK 381, IDPK 382, IDPK 383, IDPK 384	IDFK 385, IDFK 386, IDFK 387, IDFK 388, IDFK 389 IDPK 385, IDPK 386, IDPK 387, IDPK 388, IDPK 389	CS 360 -395 SL	T20	Torque 4.0Nm (Max)	M5x10	2.5mm
38.5~38.9	KRUZ 385 L3=80 SLK										
39.0~39.4	KRUZ 390 L3=80 SLK	40	180	110	IDFK 390, IDFK 391, IDFK 392, IDFK 393, IDFK 394 IDPK 390, IDPK 391, IDPK 392, IDPK 393, IDPK 394	IDFK 395, IDFK 396, IDFK 397, IDFK 398, IDFK 399 IDPK 395, IDPK 396, IDPK 397, IDPK 398, IDPK 399	CS 360 -395 SL	T20	Torque 4.0Nm (Max)	M5x10	2.5mm
39.5~39.9	KRUZ 395 L3=80 SLK										
40.0~40.4	KRUZ 400 L3=80 SLK	40	180	110	IDFK 400, IDFK 401, IDFK 402, IDFK 403, IDFK 404 IDPK 400, IDPK 401, IDPK 402, IDPK 403, IDPK 404	IDFK 405, IDFK 406, IDFK 407, IDFK 408, IDFK 409 IDPK 405, IDPK 406, IDPK 407, IDPK 408, IDPK 409	CS 400 -445 SL	T20	Torque 4.0Nm (Max)	M6x12	3.0mm
40.5~40.9	KRUZ 405 L3=80 SLK										
41.0~41.4	KRUZ 410 L3=80 SLK	40	185	115	IDFK 410, IDFK 411, IDFK 412, IDFK 413, IDFK 414 IDPK 410, IDPK 411, IDPK 412, IDPK 413, IDPK 414	IDFK 415, IDFK 416, IDFK 417, IDFK 418, IDFK 419 IDPK 415, IDPK 416, IDPK 417, IDPK 418, IDPK 419	CS 400 -445 SL	T20	Torque 4.0Nm (Max)	M6x12	3.0mm
41.5~41.9	KRUZ 415 L3=80 SLK										
42.0~42.4	KRUZ 420 L3=80 SLK	40	185	115	IDFK 420, IDFK 421, IDFK 422, IDFK 423, IDFK 424 IDPK 420, IDPK 421, IDPK 422, IDPK 423, IDPK 424	IDFK 425, IDFK 426, IDFK 427, IDFK 428, IDFK 429 IDPK 425, IDPK 426, IDPK 427, IDPK 428, IDPK 429	CS 400 -445 SL	T20	Torque 4.0Nm (Max)	M6x12	3.0mm
42.5~42.9	KRUZ 425 L3=80 SLK										
43.0~43.4	KRUZ 430 L3=80 SLK	40	185	115	IDFK 430, IDFK 431, IDFK 432, IDFK 433, IDFK 434 IDPK 430, IDPK 431, IDPK 432, IDPK 433, IDPK 434	IDFK 435, IDFK 436, IDFK 437, IDFK 438, IDFK 439 IDPK 435, IDPK 436, IDPK 437, IDPK 438, IDPK 439	CS 400 -445 SL	T20	Torque 4.0Nm (Max)	M6x12	3.0mm
43.5~43.9	KRUZ 435 L3=80 SLK										
44.0~44.4	KRUZ 440 L3=80 SLK	40	185	115	IDFK 440, IDFK 441, IDFK 442, IDFK 443, IDFK 444 IDPK 440, IDPK 441, IDPK 442, IDPK 443, IDPK 444	IDFK 445, IDFK 446, IDFK 447, IDFK 448, IDFK 449 IDPK 445, IDPK 446, IDPK 447, IDPK 448, IDPK 449	CS 450 -500 SL	T20	Torque 4.0Nm (Max)	M6x12	3.0mm
44.5~44.9	KRUZ 445 L3=80 SLK										
45.0~45.4	KRUZ 450 L3=80 SLK	40	185	115	IDFK 450, IDFK 451, IDFK 452, IDFK 453, IDFK 454 IDPK 450, IDPK 451, IDPK 452, IDPK 453, IDPK 454	IDFK 455, IDFK 456, IDFK 457, IDFK 458, IDFK 459 IDPK 455, IDPK 456, IDPK 457, IDPK 458, IDPK 459	CS 450 -500 SL	T20	Torque 4.0Nm (Max)	M6x12	3.0mm
45.5~45.9	KRUZ 455 L3=80 SLK										
46.0~46.4	KRUZ 460 L3=80 SLK	40	185	115	IDFK 460, IDFK 461, IDFK 462, IDFK 463, IDFK 464 IDPK 460, IDPK 461, IDPK 462, IDPK 463, IDPK 464						

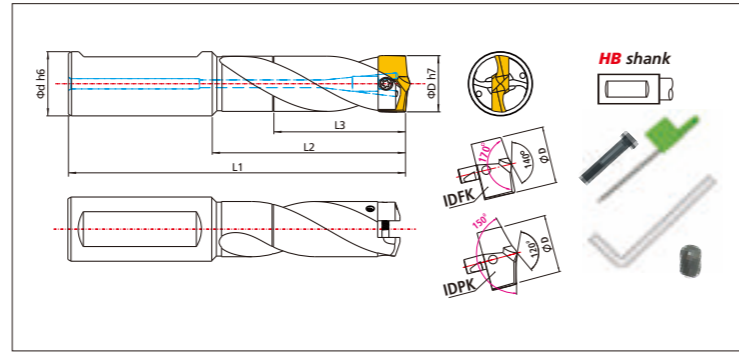
KRUZ "K" series drill body & insert, Inch




KRUZ-SLK



IDFK  for beam, angle, single plate

IDPK  for stacked plate



Exclusively designed for Structural machining


Hole (Φ) decimal	Body Code	Shank (Φd)	Dimension			Insert IDFK 	Insert IDPK 	Alternative Metric body
			L1	L2	L3			
.5512~.5705	KRUZ .5512 SLK	5/8 (15.875mm)	4.3307 (70mm)	2.4409 (62mm)	1.9685 (50mm)	IDFK 9/16" (14.29mm)	IDPK 9/16" (14.29mm)	KRUZ 140 L3=50 SLK
.5709~.5902	KRUZ .5709 SLK	3/4 (19.05mm)	4.5276 (115mm)	2.5591 (65mm)		IDFK 37/64" (14.68mm)	IDPK 37/64" (14.68mm)	KRUZ 145 L3=50 SLK
.5906~.6098	KRUZ .5906 SLK					IDFK 19/32" (15.08mm), IDFK 39/64" (15.48mm)	IDPK 19/32" (15.08mm), IDPK 39/64" (15.48mm)	KRUZ 150 L3=50 SLK
.6102~.6295	KRUZ .6102 SLK					IDFK 5/8" (15.88mm)	IDPK 5/8" (15.88mm)	KRUZ 155 L3=50 SLK
.6299~.6492	KRUZ .6299 SLK					IDFK 41/64" (16.27mm)	IDPK 41/64" (16.27mm)	KRUZ 160 L3=50 SLK
.6496~.6689	KRUZ .6496 SLK					IDFK 21/32" (16.67mm)	IDPK 21/32" (16.67mm)	KRUZ 165 L3=50 SLK
.6693~.6886	KRUZ .6693 SLK					IDFK 43/64" (17.07mm), IDFK 11/16" (17.46mm)	IDPK 43/64" (17.07mm), IDPK 11/16" (17.46mm)	KRUZ 170 L3=50 SLK
.6890~.7083	KRUZ .6890 SLK					IDFK 45/64" (17.86mm)	IDPK 45/64" (17.86mm)	KRUZ 175 L3=50 SLK
.7087~.7280	KRUZ .7087 SLK					IDFK 23/32" (18.26mm)	IDPK 23/32" (18.26mm)	KRUZ 180 L3=50 SLK
.7283~.7476	KRUZ .7283 SLK					IDFK 47/64" (18.65mm)	IDPK 47/64" (18.65mm)	KRUZ 185 L3=50 SLK
.7480~.7673	KRUZ .7480 SLK					IDFK 3/4" (19.05mm), IDFK 49/64" (19.45mm)	IDPK 3/4" (19.05mm), IDPK 49/64" (19.45mm)	KRUZ 190 L3=50 SLK
.7677~.7870	KRUZ .7677 SLK					IDFK 25/32" (19.84mm)	IDPK 25/32" (19.84mm)	KRUZ 195 L3=50 SLK
.7874~.8067	KRUZ .7874 SLK					IDFK 51/64" (20.24mm)	IDPK 51/64" (20.24mm)	KRUZ 200 L3=50 SLK
.8071~.8264	KRUZ .8071 SLK					IDFK 13/16" (20.64mm)	IDPK 13/16" (20.64mm)	KRUZ 205 L3=50 SLK
.8268~.8461	KRUZ .8268 SLK					IDFK 27/32" (21.43mm)	IDPK 27/32" (21.43mm)	KRUZ 210 L3=50 SLK
.8465~.8657	KRUZ .8465 SLK				IDFK 55/64" (21.83mm)	IDPK 55/64" (21.83mm)	KRUZ 215 L3=50 SLK	
.8661~.8854	KRUZ .8661 SLK	IDFK 7/8" (22.23mm)	IDPK 7/8" (22.23mm)	KRUZ 220 L3=50 SLK				
.8858~.9051	KRUZ .8858 SLK	IDFK 57/64" (22.62mm)	IDPK 57/64" (22.62mm)	KRUZ 225 L3=50 SLK				
.9055~.9248	KRUZ .9055 SLK	IDFK 29/32" (23.02mm), IDFK 59/64" (23.42mm)	IDPK 29/32" (23.02mm), IDPK 59/64" (23.42mm)	KRUZ 230 L3=50 SLK				
.9252~.9445	KRUZ .9252 SLK	IDFK 15/16" (23.81mm)	IDPK 15/16" (23.81mm)	KRUZ 235 L3=50 SLK				
.9646~.9839	KRUZ .9646 SLK	1" (25.4mm)	5.3543 (136mm)	2.9921 (76mm)	IDFK 31/32" (24.61mm)	IDPK 31/32" (24.61mm)	KRUZ 245 L3=50 SLK	
.9843~1.0035	KRUZ .9843 SLK				IDFK 63/64" (25.00mm), IDFK 1" (25.4mm)	IDPK 63/64" (25.00mm), IDPK 1" (25.4mm)	KRUZ 250 L3=50 SLK	
1.0039~1.0232	KRUZ 1.0039 SLK				IDFK 1-1/64" (25.80mm)	IDPK 1-1/64" (25.80mm)	KRUZ 255 L3=50 SLK	
1.0236~1.0429	KRUZ 1.0236 SLK				IDFK 1-1/32" (26.19mm)	IDPK 1-1/32" (26.19mm)	KRUZ 260 L3=50 SLK	
1.0433~1.0626	KRUZ 1.0433 SLK				IDFK 1-3/64" (26.59mm), IDFK 1-1/16" (26.99mm)	IDPK 1-3/64" (26.59mm), IDPK 1-1/16" (26.99mm)	KRUZ 265 L3=50 SLK	
1.0827~1.1020	KRUZ 1.0827 SLK				IDFK 1-3/32" (27.78mm)	IDPK 1-3/32" (27.78mm)	KRUZ 275 L3=50 SLK	
1.1024~1.1217	KRUZ 1.1024 SLK				IDFK 1-7/64" (28.18mm)	IDPK 1-7/64" (28.18mm)	KRUZ 280 L3=50 SLK	
1.1220~1.1413	KRUZ 1.1220 SLK				IDFK 1-1/8" (28.58mm)	IDPK 1-1/8" (28.58mm)	KRUZ 285 L3=50 SLK	
1.1417~1.1610	KRUZ 1.1417 SLK				IDFK 1-5/32" (29.37mm)	IDPK 1-5/32" (29.37mm)	KRUZ 290 L3=50 SLK	
1.1811~1.2004	KRUZ 1.1811 SLK				IDFK 1-3/16" (30.16mm)	IDPK 1-3/16" (30.16mm)	KRUZ 300 L3=70 SLK	
1.2008~1.2201	KRUZ 1.2008 SLK				IDFK 1-7/32" (30.96mm)	IDPK 1-7/32" (30.96mm)	KRUZ 305 L3=70 SLK	
1.2402~1.2594	KRUZ 1.2402 SLK				IDFK 1-1/4" (31.75mm)	IDPK 1-1/4" (31.75mm)	KRUZ 315 L3=70 SLK	
1.2795~1.2988	KRUZ 1.2795 SLK				IDFK 1-9/32" (32.54mm)	IDPK 1-9/32" (32.54mm)	KRUZ 325 L3=70 SLK	
1.2992~1.3185	KRUZ 1.2992 SLK				IDFK 1-5/16" (33.34mm)	IDPK 1-5/16" (33.34mm)	KRUZ 330 L3=70 SLK	
1.3386~1.3579	KRUZ 1.3386 SLK				1 1/4 (31.75mm)	6.1024 (155mm)	3.7402 (95mm)	IDFK 1-11/32" (34.13mm)
1.3583~1.3776	KRUZ 1.3583 SLK	IDFK 1-3/8" (34.93mm)	IDPK 1-3/8" (34.93mm)	KRUZ 345 L3=80 SLK				

18  See to alternative metric body on right if it is suitable to fit in tool holder.
 If requires inch holder to convert with metric drill body, see proper inch RSL(reduction sleeve) with metric size.

KRUZ-FSLK Flanged body (7xD), IDFK & IDPK insert

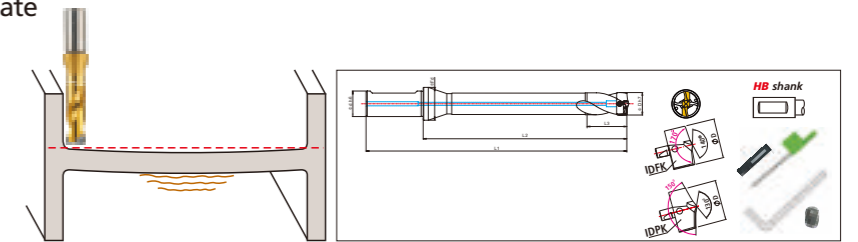


KRUZ-FSLK






IDFK  for beam, angle, single plate

IDPK  for stacked plate

- ▶ When requires longer drill length, select this ideal drill body
- ▶ Drilling closer to flange part
- ▶ Minimized flute design with longer cylindrical neck
- ▶ Increased drill's rigidity than ordinary 7xDia drill length
- ▶ Internal coolant fed design
- ▶ Flanged shank to reduce chattering or vibrating



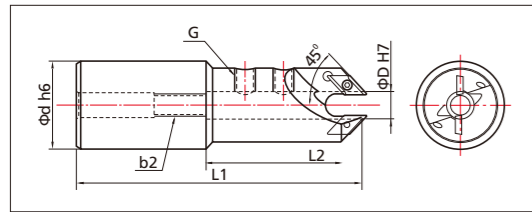
Exclusively designed for Structural machining

Hole (Φ) mm	Body Code	Shank (Φd)	Dimension			Flanged dia.(ΦFd)	Insert IDFK 	Insert IDPK 	Cap Screw	Torx driver	Set Screw	L-wrench
			L1	L2	L3							
14.0~14.4	KRUZ 140H FL50 FSLK	16	175	127	21	IDFK 140, IDFK 141, IDFK 142, IDFK 143, IDFK 144, IDPK 140, IDPK 141, IDPK 142, IDPK 143, IDPK 144		CS 140 -155 SL				
14.5~14.9	KRUZ 145H FL50 FSLK	181	131	IDFK 145, IDFK 146, IDFK 147, IDFK 148, IDFK 149, IDPK 145, IDPK 146, IDPK 147, IDPK 148, IDPK 149								
15.0~15.4	KRUZ 150H FL50 FSLK	187	137	IDFK 150, IDFK 151, IDFK 152, IDFK 153, IDFK 154, IDPK 150, IDPK 151, IDPK 152, IDPK 153, IDPK 154								
15.5~15.9	KRUZ 155H FL50 FSLK	192	142	IDFK 155, IDFK 156, IDFK 157, IDFK 158, IDFK 159, IDPK 155, IDPK 156, IDPK 157, IDPK 158, IDPK 159								
16.0~16.4	KRUZ 160H FL50 FSLK	196	146	IDFK 160, IDFK 161, IDFK 162, IDFK 163, IDFK 164, IDPK 160, IDPK 161, IDPK 162, IDPK 163, IDPK 164								
16.5~16.9	KRUZ 165H FL50 FSLK	201	151	IDFK 165, IDFK 166, IDFK 167, IDFK 168, IDFK 169, IDPK 165, IDPK 166, IDPK 167, IDPK 168, IDPK 169								
17.0~17.4	KRUZ 170H FL50 FSLK	205	155	IDFK 170, IDFK 171, IDFK 172, IDFK 173, IDFK 174, IDPK 170, IDPK 171, IDPK 172, IDPK 173, IDPK 174								
17.5~17.9	KRUZ 175H FL50 FSLK	209	159	IDFK 175, IDFK 176, IDFK 177, IDFK 178, IDFK 179, IDPK 175, IDPK 176, IDPK 177, IDPK 178, IDPK 179								
18.0~18.4	KRUZ 180H FL50 FSLK	214	164	IDFK 180, IDFK 181, IDFK 182, IDFK 183, IDFK 184, IDPK 180, IDPK 181, IDPK 182, IDPK 183, IDPK 184								
18.5~18.9	KRUZ 185H FL50 FSLK	218	168	IDFK 185, IDFK 186, IDFK 187, IDFK 188, IDFK 189, IDPK 185, IDPK 186, IDPK 187, IDPK 188, IDPK 189								
19.0~19.4	KRUZ 190H FL50 FSLK	223	173	IDFK 190, IDFK 191, IDFK 192, IDFK 193, IDFK 194, IDPK 190, IDPK 191, IDPK 192, IDPK 193, IDPK 194								
19.5~19.9	KRUZ 195H FL50 FSLK	227	177	IDFK 195, IDFK 196, IDFK 197, IDFK 198, IDFK 199, IDPK 195, IDPK 196, IDPK 197, IDPK 198, IDPK 199								
20.0~20.4	KRUZ 200H FL50 FSLK	237	181	IDFK 200, IDFK 201, IDFK 202, IDFK 203, IDFK 204, IDPK 200, IDPK 201, IDPK 202, IDPK 203, IDPK 204								
20.5~20.9	KRUZ 205H FL50 FSLK	242	186	IDFK 205, IDFK 206, IDFK 207, IDFK 208, IDFK 209, IDPK 205, IDPK 206, IDPK 207, IDPK 208, IDPK 209								
21.0~21.4	KRUZ 210H FL50 FSLK	246	190	IDFK 210, IDFK 211, IDFK 212, IDFK 213, IDFK 214, IDPK 210, IDPK 211, IDPK 212, IDPK 213, IDPK 214								
21.5~21.9	KRUZ 215H FL50 FSLK	251	195	IDFK 215, IDFK 216, IDFK 217, IDFK 218, IDFK 219, IDPK 215, IDPK 216, IDPK 217, IDPK 218, IDPK 219								
22.0~22.4	KRUZ 220H FL50 FSLK	255	199	IDFK 220, IDFK 221, IDFK 222, IDFK 223, IDFK 224, IDPK 220, IDPK 221, IDPK 222, IDPK 223, IDPK 224								
22.5~22.9	KRUZ 225H FL50 FSLK	259	203	IDFK 225, IDFK 226, IDFK 227, IDFK 228, IDFK 229, IDPK 225, IDPK 226, IDPK 227, IDPK 228, IDPK 229								
23.0~23.4	KRUZ 230H FL50 FSLK	264	208	IDFK 230, IDFK 231, IDFK 232, IDFK 233, IDFK 234, IDPK 230, IDPK 231, IDPK 232, IDPK 233, IDPK 234								
23.5~23.9	KRUZ 235H FL50 FSLK	268	212	IDFK 235, IDFK 236, IDFK 237, IDFK 238, IDFK 239, IDPK 235, IDPK 236, IDPK 237, IDPK 238, IDPK 239								
24.0~24.4	KRUZ 240H FL50 FSLK	277	217	IDFK 240, IDFK 241, IDFK 242, IDFK 243, IDFK 244, IDPK 240, IDPK 241, IDPK 242, IDPK 243, IDPK 244								
24.5~24.9	KRUZ 245H FL50 FSLK	281	221	IDFK 245, IDFK 246, IDFK 247, IDFK 248, IDFK 249, IDPK 245, IDPK 246, IDPK 247, IDPK 248, IDPK 249								
25.0~25.4	KRUZ 250H FL50 FSLK	285	225	IDFK 250, IDFK 251, IDFK 252, IDFK 253, IDFK 254, IDPK 250, IDPK 251, IDPK 252, IDPK 253, IDPK 254								
25.5~25.9	KRUZ 255H FL50 FSLK	290	230	IDFK 255, IDFK 256, IDFK 257, IDFK 258, IDFK 259, IDPK 255, IDPK 256, IDPK 257, IDPK 258, IDPK 259								
26.0~26.4	KRUZ 260H FL50 FSLK	294	234	IDFK 260, IDFK 261, IDFK 262, IDFK 263, IDFK 264, IDPK 260, IDPK 261, IDPK 262, IDPK 263, IDPK 264								
26.5~26.9	KRUZ 265H FL50 FSLK	299	239	IDFK 265, IDFK 266, IDFK 267, IDFK 268, IDFK 269, IDPK 265, IDPK 266, IDPK 267, IDPK 268, IDPK 269								
27.0~27.4	KRUZ 270H FL50 FSLK	303	243	IDFK 270, IDFK 271, IDFK 272, IDFK 273, IDFK 274, IDPK 270, IDPK 271, IDPK 272, IDPK 273, IDPK 274								
27.5~27.9	KRUZ 275H FL50 FSLK	307	247	IDFK 275, IDFK 276, IDFK 277, IDFK 278, IDFK 279, IDPK 275, IDPK 276, IDPK 277, IDPK 278, IDPK 279								
28.0~28.4	KRUZ 280H FL50 FSLK	312	252	IDFK 280, IDFK 281, IDFK 282, IDFK 283, IDFK 284, IDPK 280, IDPK 281, IDPK 282, IDPK 283, IDPK 284								
28.5~28.9	KRUZ 285H FL50 FSLK	316	256	IDFK 285, IDFK 286, IDFK 287, IDFK 288, IDFK 289, IDPK 285, IDPK 286, IDPK 287, IDPK 288, IDPK 289								
29.0~29.4	KRUZ 290H FL50 FSLK	321	261	IDFK 290, IDFK 291, IDFK 292, IDFK 293, IDFK 294, IDPK 290, IDPK 291, IDPK 292, IDPK 293, IDPK 294								
29.5~29.9	KRUZ 295H FL50 FSLK	325	265	IDFK 295, IDFK 296, IDFK 297, IDFK 298, IDFK 299, IDPK 295, IDPK 296, IDPK 297, IDPK 298, IDPK 299								
30.0~30.4	KRUZ 300H FL70 FSLK	329	269	IDFK 300, IDFK 301, IDFK 302, IDFK 303, IDFK 304, IDPK 300, IDPK 301, IDPK 302, IDPK 303, IDPK 304								
30.5~30.9	KRUZ 305H FL70 FSLK	334	274	IDFK 305, IDFK 306, IDFK 307, IDFK 308, IDFK 309, IDPK 305, IDPK 306, IDPK 307, IDPK 308, IDPK 309								
31.0~31.4	KRUZ 310H FL70 FSLK	338	278	IDFK 310, IDFK 311, IDFK 312, IDFK 313, IDFK 314, IDPK 310, IDPK 311, IDPK 312, IDPK 313, IDPK 314								
31.5~31.9	KRUZ 315H FL70 FSLK	343	283	IDFK 315, IDFK 316, IDFK 317, IDFK 318, IDFK 319, IDPK 315, IDPK 316, IDPK 317, IDPK 318, IDPK 319								
32.0~32.4	KRUZ 320H FL70 FSLK	347	287	IDFK 320, IDFK 321, IDFK 322, IDFK 323, IDFK 324, IDPK 320, IDPK 321, IDPK 322, IDPK 323, IDPK 324								

19  Size not shown on above is available upon request.

New Drilling & Milling tool

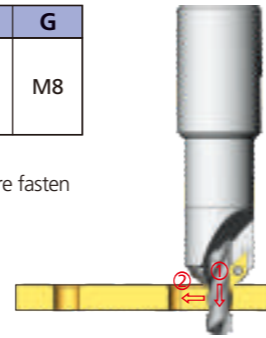
DMH



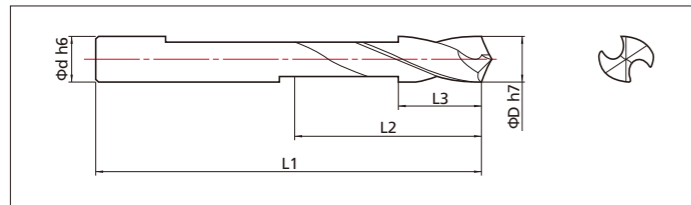
- ▶ Interchangeable carbide drillmill & XCGX insert mounted in the holder
- ▶ Specially designed carbide drillmill(TiAlN) with milling functioned flute
- ▶ Carbide chamfer insert XCGX 1102 with two corner edges
- ▶ Rigid heat-treated tool steel holder with side locking system
- ▶ Drilling, milling and chamfering in one tool economically
- ▶ Added chamfer milling for hole edge

CODE No.	D(mm)	d(mm)	L1	L2	G
DMH 32-8	8	32	110	40	M8
DMH 32-10	10				
DMH 32-12	12				

☞ Other special size is available upon request.
 ☞ Note : Assemble DM drillmill firstly in DMH holder before fasten XCGX inserts.



DM

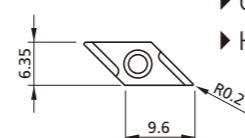


- ▶ Solid carbide material, TiAlN coated
- ▶ YESTOOL's own designed for drilling & milling
- ▶ Flatted grinding to fit two XCGX inserts
- ▶ Used in DMH holder
- ▶ TiAlN coated for longer tool life

CODE No.	D(mm)	d(mm)	L1	L2	L3
DM 080 TiAlN	8.0	8.0	70	30	14.6
DM 100 TiAlN	10.0	10.0			
DM 120 TiAlN	12.0	12.0			

☞ DM drill is to use max. 14mm hole depth. If requires deeper hole, ask us separately stating necessary hole depth

XCGX



XCGX1102

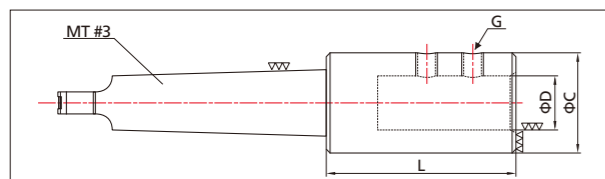
- ▶ Carbide insert with grinded edges
- ▶ Used two corners economically
- ▶ Hole chamfering application

New MT shank side lock holder

MT



MTC



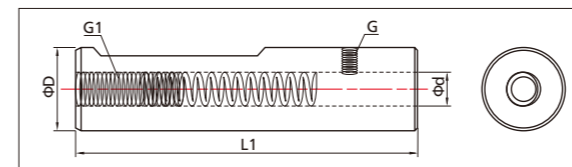
- ▶ Morse Taper shank holder to fit KRUZ body
- ▶ Side locking system by set screw to fit KRUZ straight shank body
- ▶ Alternative tool for excessively longer HSS MT shank drill
- ▶ Ideal tool in old or unstable machine or chattering work-piece

CODE No.	MT#	D(mm)	L(mm)	C(mm)	G
MT3S-SLA16-95	#3	16	95	33	M12
MT3S-SLA20-70		20		37	
MT3S-SLA25-70		25	70	40	
MT3S-SLA32-70		32		42	
MT3S-SLA40-80		40	80	52	

☞ MT#2, MT#4 is available upon request.

New Scribing tool

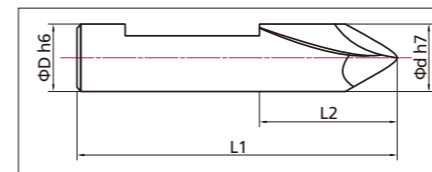
STH



- ▶ Interchangeable carbide scribing drill mounted in the holder
- ▶ Rigid heat-treated tool steel holder
- ▶ Designed with spring system to retract drill for uneven surface.
- ▶ Extra function to use chamfer milling for hole edge

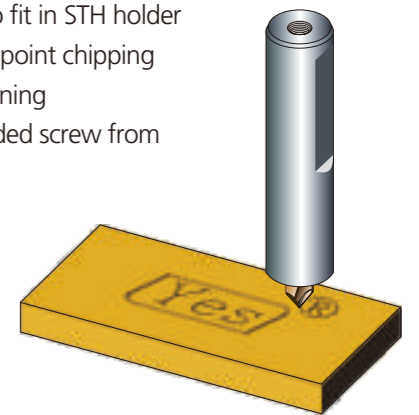
CODE No.	D(mm)	d(mm)	L1	G	G1
STH 080	20	8	120	M4x6	M8x20
STH-Spring	6		40		

SD



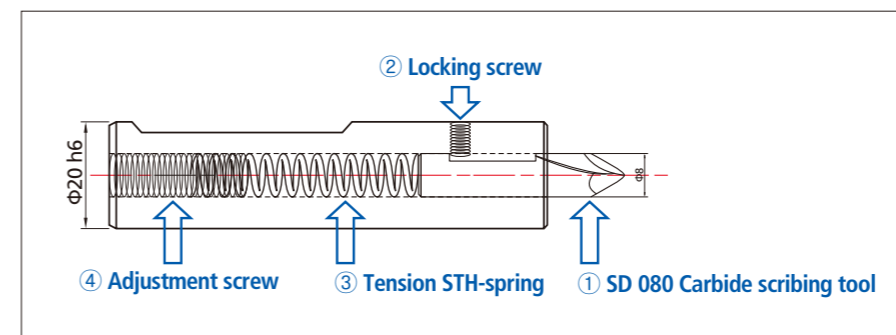
- ▶ TiN coated 90 degree drill point with dual angle for stable scribing
- ▶ Carbide flatted shank drill to fit in STH holder
- ▶ Dual angle point to prevent point chipping
- ▶ Locking by side screws fastening
- ▶ Adjustable tension by threaded screw from holder end

CODE No.	D(mm)	d(mm)	L1	L2
SD 080 TiN	8	8	37	13



How to assemble scribing tool

- Push ① SD 080, Scribing tool into tool body until hiding flatted shank completely
- Lock ② Locking screw completely.
- Insert ③ Tension STH-spring inside of tool body
- Turn ④ Adjustment screw right-hand direction and push into the holder-end.
- Finally, loose ② Locking screw by 45° left-hand direction (about 1/8 turn) so that spring's tension can be performed.



How to dismantle scribing tool

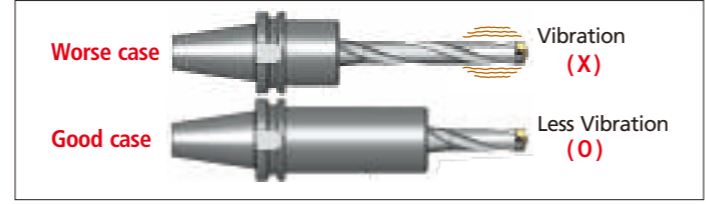
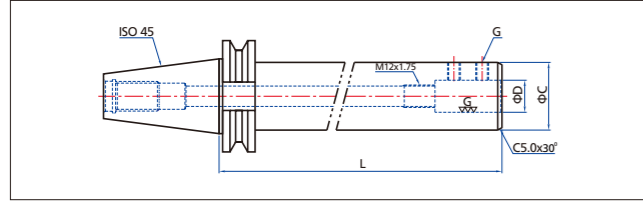
- Remove ④ Adjustment screw by left-hand direction.
- Take out ③ Tension STH-spring from tool body.
- Loose ② Locking screw.
- Take out ① SD 080 Scribing tool from tool body.

Warning ! : Be sure to locate scribing drill head lower during disassembly for safety, while tool body-end is upper position (See above photo).

ISO 45 & HSK Extension holder for Structural



- ▶ ISO 45(HSK) holder can help drilling with strong rigidity
- ▶ Internal coolant channel structure
- ▶ Side locking with two set screws
- ▶ Ideal holder to run KRUZ-SLK body & IDFK insert
- ▶ HSK holder is available upon request



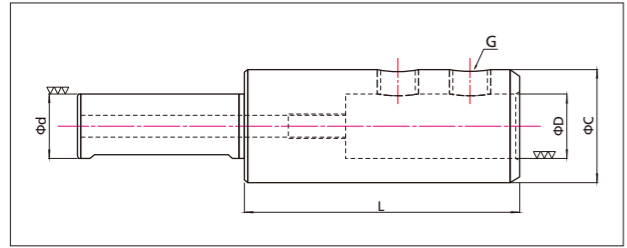
CODE No.	D	L	C	G	CODE No.	D	L	C	G	CODE No.	D	L	C	G
ISO45(HSK)-SLA16-80	16	80	56	M10	ISO45(HSK)-SLA20-400	20	400	56	M12	ISO45(HSK)-SLA32-270	32	270	60	M14
ISO45(HSK)-SLA16-160	16	160	56	M10	ISO45(HSK)-SLA20-450	20	450	56	M12	ISO45(HSK)-SLA32-300	32	300	60	M14
ISO45(HSK)-SLA16-210	16	210	56	M10	ISO45(HSK)-SLA20-500	20	500	56	M12	ISO45(HSK)-SLA32-350	32	350	60	M14
ISO45(HSK)-SLA16-240	16	240	56	M10	ISO45(HSK)-SLA25-80	25	80	56	M12	ISO45(HSK)-SLA32-400	32	400	60	M14
ISO45(HSK)-SLA16-270	16	270	56	M10	ISO45(HSK)-SLA25-160	25	160	56	M12	ISO45(HSK)-SLA32-450	32	450	60	M14
ISO45(HSK)-SLA16-300	16	300	56	M10	ISO45(HSK)-SLA25-210	25	210	56	M12	ISO45(HSK)-SLA32-500	32	500	60	M14
ISO45(HSK)-SLA16-350	16	350	56	M10	ISO45(HSK)-SLA25-240	25	240	56	M12	ISO45(HSK)-SLA40-90	40	90	60	M14
ISO45(HSK)-SLA16-400	16	400	56	M10	ISO45(HSK)-SLA25-270	25	270	56	M12	ISO45(HSK)-SLA40-160	40	160	60	M14
ISO45(HSK)-SLA16-450	16	450	56	M10	ISO45(HSK)-SLA25-300	25	300	56	M12	ISO45(HSK)-SLA40-210	40	210	60	M14
ISO45(HSK)-SLA16-500	16	500	56	M10	ISO45(HSK)-SLA25-350	25	350	56	M12	ISO45(HSK)-SLA40-240	40	240	60	M14
ISO45(HSK)-SLA20-80	20	80	56	M12	ISO45(HSK)-SLA25-400	25	400	56	M12	ISO45(HSK)-SLA40-270	40	270	60	M14
ISO45(HSK)-SLA20-160	20	160	56	M12	ISO45(HSK)-SLA25-450	25	450	56	M12	ISO45(HSK)-SLA40-300	40	300	60	M14
ISO45(HSK)-SLA20-210	20	210	56	M12	ISO45(HSK)-SLA25-500	25	500	56	M12	ISO45(HSK)-SLA40-350	40	350	60	M14
ISO45(HSK)-SLA20-240	20	240	56	M12	ISO45(HSK)-SLA32-80	32	80	60	M14	ISO45(HSK)-SLA40-400	40	400	60	M14
ISO45(HSK)-SLA20-270	20	270	56	M12	ISO45(HSK)-SLA32-160	32	160	60	M14	ISO45(HSK)-SLA40-450	40	450	60	M14
ISO45(HSK)-SLA20-300	20	300	56	M12	ISO45(HSK)-SLA32-210	32	210	60	M14	ISO45(HSK)-SLA40-500	40	500	60	M14
ISO45(HSK)-SLA20-350	20	350	56	M12	ISO45(HSK)-SLA32-240	32	240	60	M14					

* Pull stud bolt not included in the above holder.
* ISO40 holder is available upon request.

Extension socket



- ▶ When drill length is in short, use extension socket
- ▶ Side lock clamping
- ▶ Holding same drill shank diameter



CODE No.	d(mm)	D(mm)	L(mm)	C(mm)	G
EXT16-SLA16-80	16	16	80	50	M10
EXT16-SLA16-125	16	16	125	50	M10
EXT16-SLA16-150	16	16	150	50	M10
EXT16-SLA16-200	16	16	200	50	M10
EXT16-SLA16-250	16	16	250	50	M10
EXT20-SLA20-80	20	20	80	50	M12
EXT20-SLA20-125	20	20	125	50	M12
EXT20-SLA20-150	20	20	150	50	M12
EXT20-SLA20-200	20	20	200	50	M12
EXT20-SLA20-250	20	20	250	50	M12
EXT25-SLA25-80	25	25	80	50	M14
EXT25-SLA25-125	25	25	125	50	M14
EXT25-SLA25-150	25	25	150	50	M14
EXT25-SLA25-200	25	25	200	50	M14
EXT25-SLA25-250	25	25	250	50	M14
EXT32-SLA32-80	32	32	80	60	M14
EXT32-SLA32-125	32	32	125	60	M14
EXT32-SLA32-150	32	32	150	60	M14
EXT32-SLA32-200	32	32	200	60	M14
EXT32-SLA32-250	32	32	250	60	M14
EXT40-SLA40-80	40	40	80	60	M14
EXT40-SLA40-125	40	40	125	60	M14
EXT40-SLA40-150	40	40	150	60	M14
EXT40-SLA40-200	40	40	200	60	M14
EXT40-SLA40-250	40	40	250	60	M14

Cutting Parameter table (for structural steel)

KRUZ SLK body + Carbide IDFK insert

Step	Drill Dia		RPM	Feed rate		Surface speed		Forward speed/min.		Power (KW)	Thrust (KGF)	Stability	Tool life	Speed		
	Metric	Inch		f(mm/rev.)	IPR(inch/rev.)	V(m/min.)	SFM(feet/min.)	F(mm)	IPM(inch)							
Step 1	14.0	9/16"	760	0.20	0.008	33	110	152	6.0	1.7	331	↑ stable ↑ longer ↑ slower	↑ ↑ ↑			
	16.0	41/64"	740	0.21	0.008	37	122	155	6.1	2.2	387					
	17.5	45/64"	720	0.22	0.009	40	130	158	6.3	2.6	434					
	18.0	23/32"	700	0.22	0.009	40	130	154	6.1	2.6	445					
	21.5	55/64"	620	0.24	0.009	42	137	149	5.8	3.3	556					
	22.0	7/8"	600	0.24	0.009	41	136	144	5.6	3.3	568					
	24.0	15/16"	570	0.26	0.010	43	141	148	5.8	3.9	648					
	24.5	31/32"	550	0.26	0.010	42	139	143	5.6	3.9	661					
	26.0	1-1/32"	520	0.28	0.011	42	139	146	5.7	4.2	732					
	26.5	1-3/64"	510	0.28	0.011	42	139	143	5.6	4.3	745					
	27.0	1-1/16"	500	0.28	0.011	42	139	140	5.5	4.3	758					
	30.0	1-3/16"	400	0.29	0.011	38	124	116	4.6	4.1	856					
	40.0	1-37/64"	300	0.29	0.011	38	124	87	3.4	5.0	1126					
	Step 2	14.0	9/16"	970	0.21	0.008	43	140	204	8.1	2.3			341	↑ ↑ ↑	↑ ↑ ↑
		16.0	41/64"	950	0.22	0.009	48	157	209	8.3	3.0			398		
		17.5	45/64"	930	0.24	0.009	51	168	223	8.7	3.7			457		
18.0		23/32"	900	0.24	0.009	51	167	216	8.5	3.8	470					
21.5		55/64"	800	0.26	0.010	54	177	208	8.2	4.8	584					
22.0		7/8"	780	0.26	0.010	54	177	203	8.0	4.9	597					
24.0		15/16"	710	0.28	0.011	54	175	199	7.8	5.3	678					
24.5		31/32"	690	0.28	0.011	53	174	193	7.6	5.4	692					
26.0		1-1/32"	640	0.30	0.012	52	171	192	7.6	5.7	763					
26.5		1-3/64"	630	0.30	0.012	52	172	189	7.4	5.8	777					
27.0		1-1/16"	610	0.30	0.012	52	170	183	7.2	5.8	791					
30.0		1-3/16"	500	0.30	0.012	47	154	150	5.9	5.5	874					
40.0		1-37/64"	350	0.31	0.012	44	144	109	4.3	6.3	1172					
Step 3		14.0	9/16"	1,180	0.22	0.009	52	170	260	10.3	3.1	351	↑ ↑ ↑	↑ ↑ ↑		
		16.0	41/64"	1,160	0.23	0.009	58	191	267	10.6	4.0	409				
		17.5	45/64"	1,140	0.26	0.010	63	205	296	11.6	5.0	480				
	18.0	23/32"	1,100	0.26	0.010	62	204	286	11.2	5.1	493					
	21.5	55/64"	980	0.28	0.011	66	217	274	10.8	6.5	611					
	22.0	7/8"	960	0.28	0.011	66	218	269	10.6	6.6	624					
	24.0	15/16"	850	0.30	0.012	64	210	255	10.0	7.0	707					
	24.5	31/32"	830	0.30	0.012	64	209	249	9.8	7.1	721					
	26.0	1-1/32"	760	0.32	0.013	62	204	243	9.6	7.4	794					
	26.5	1-3/64"	750	0.32	0.013	62	205	240	9.5	7.5	808					
	27.0	1-1/16"	720	0.32	0.013	61	200	230	9.1	7.4	823					
	30.0	1-3/16"	600	0.32	0.013	57	185	192	7.6	7.2	909					
	40.0	1-37/64"	400	0.32	0.013	50	165	128	5.0	7.6	1195					
	Step 4	14.0	9/16"	1,330	0.23	0.009	58	192	306	12.1	3.7	360			↑ ↑ ↑	↑ ↑ ↑
		16.0	41/64"	1,310	0.24	0.009	66	216	314	12.3	4.8	420				
		17.5	45/64"	1,290	0.28	0.011	71	233	361	14.2	6.2	502				
18.0		23/32"	1,240	0.28	0.011	70	230	347	13.6	6.2	516					
21.5		55/64"	1,100	0.30	0.012	74	244	330	13.0	7.8	637					
22.0		7/8"	1,080	0.30	0.012	75	245	324	12.7	8.0	651					
24.0		15/16"	930	0.32	0.013	70	230	298	11.7	8.2	736					
24.5		31/32"	910	0.32	0.013	70	230	291	11.5	8.3	750					
26.0		1-1/32"	850	0.34	0.013	69	228	289	11.4	8.8	824					
26.5		1-3/64"	810	0.34	0.013	67	221	275	10.9	8.6	839					
27.0		1-1/16"	800	0.34	0.013	68	222	272	10.7	8.8	854					
30.0		1-3/16"	700	0.34	0.013	66	216	238	9.4	9.1	944					
40.0		1-37/64"	450	0.34	0.013	57	185	153	6.0	9.1	1240					
Step 5		14.0	9/16"	1,800	0.24	0.009	79	260	432	16.9	5.6	370	↑ ↑ ↑	↑ ↑ ↑		
		16.0	41/64"	1,780	0.25	0.010	89	293	445	17.4	7.3	431				
		17.5	45/64"	1,760	0.30	0.012	97	317	528	20.8	9.5	524				
	18.0	23/32"	1,660	0.30	0.012	94	308	498	19.6	9.3	538					
	21.5	55/64"	1,500	0.32	0.013	101	332	480	18.9	12.1	663					
	22.0	7/8"	1,440	0.32	0.013	99	326	461	18.1	12.0	677					
	24.0	15/16"	1,250	0.34	0.013	94	309	425	16.8	12.3	763					
	24.5	31/32"	1,190	0.34	0.013	92	300	405	16.0	12.0	778					
	26.0	1-1/32"	1,120	0.36	0.014	91	300	403	15.9	12.9	853					
	26.5	1-3/64"	1,070	0.36	0.014	89	292	385	15.2	12.7	868					
	27.0	1-1/16"	1,020	0.36	0.014	86	284	367	14.5	12.4	884					
	30.0	1-3/16"	800	0.36	0.014	75	247	288	11.4	11.2	977					
	40.0	1-37/64"	500	0.36	0.014	63	206	180	7.1	10.8	1284					
	Step 6	14.0	9/16"	2,040	0.25	0.010	90	294	510	20.0	6.7	379			↑ ↑ ↑	↑ ↑ ↑
		16.0	41/64"	2,020	0.26	0.010	101	333	525	20.6	8.8	441				
		17.5	45/64"	2,000	0.31	0.012	110	360	620	24.4	11.4	535				
18.0		23/32"	1,900	0.31	0.012	107	352	589	23.2	11.3	549					
21.5		55/64"	1,700	0.33	0.013	115	376	561	22.1	14.4	675					
22.0		7/8"	1,650	0.33	0.013	114	374	545	21.5							

KRUZ special step drill body

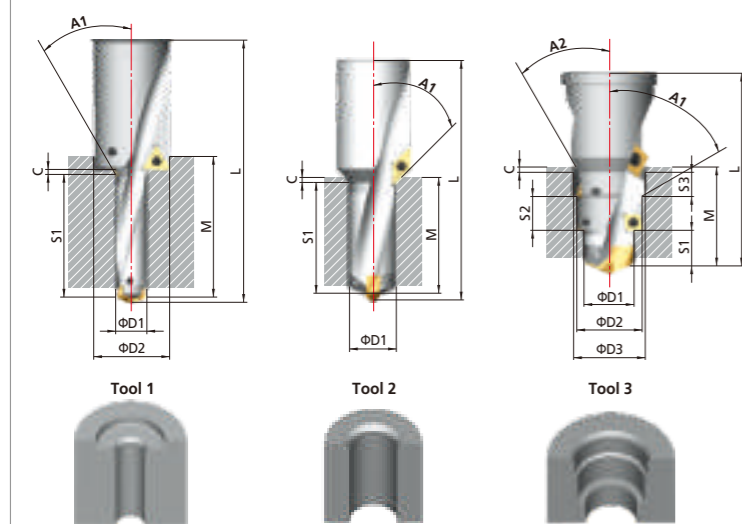
Combination drill bodies (Perform multiple operations with one tool)



- ▶ Helically fluted drill body with through spindle coolant for easy chip evacuation.
- ▶ Special bodies use standard YESTOOL drill inserts (ID, IDP, IDF). Uses ISO standard facing & chamfering inserts.
- ▶ All inserts lock from the side-no removing body to replace inserts.
- ▶ Reduced cycle times result in higher productivity at reduced costs.

Special
KRUZ

For Price Quote Specify Style of Tool and Fill Out Per Below



- HA Shank
- HB Shank
- HE Shank

Note:

More helpful information to design if provided

- Kind of Material to be machined :
- Shank style (HA, HB, HE or special) :
- Type of chamfer or facing insert (if any) :
- Coolant through or no coolant :
- Work-piece drawing if avail. :

Easy torque driver

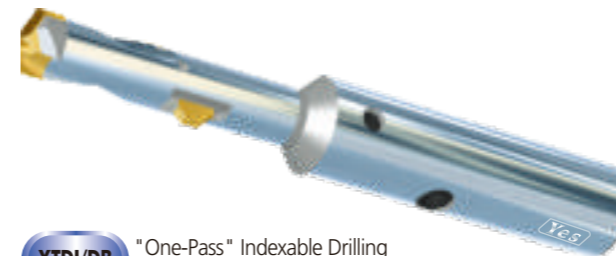
- ▶ Easier to tighten cap screw when assembly carbide insert
- ▶ Ideally protect over-torque by click sound
- ▶ To avoid torx screw damage by excessive tightening of conventional driver



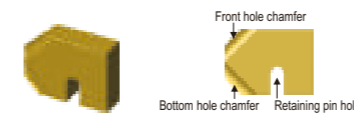
Item	Order code				
T-Handle	TPK-H01				
Torx bit	T6	T7	T8	T15	T20
Adapter	TX6	TX7	TX8	TX15	TX20
Max. torque	0.6Nm	0.9Nm	1.5Nm	3.5Nm	5.0Nm

"One-Pass" Indexable Drilling & Deburring system

YESTOOL's Innovative combination drilling & deburring tool



YTDI/DB "One-Pass" Indexable Drilling & Deburring bodies



DBI Carbide Deburring Insert 45° (TiN, TiAlN available)

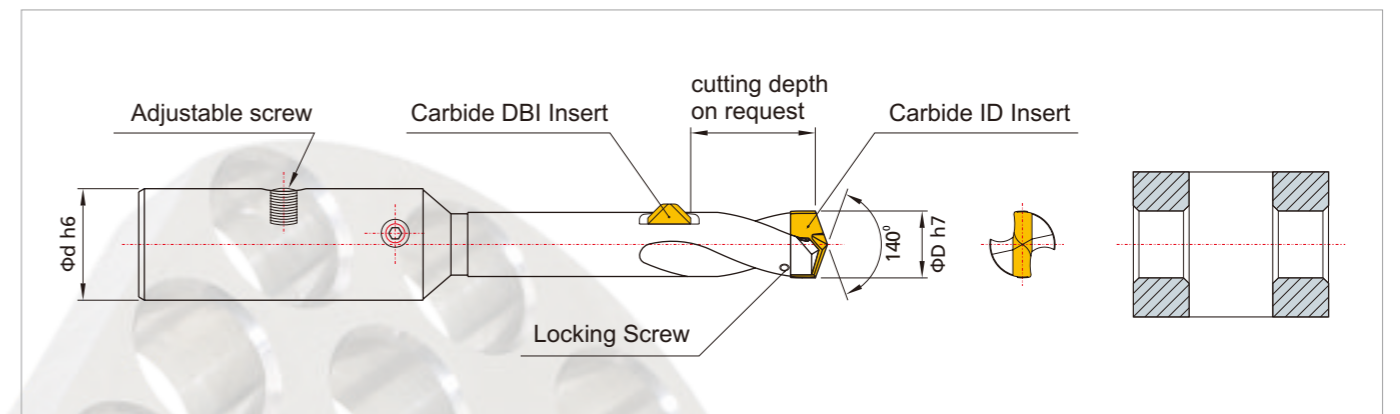


IDF Standard Carbide ID Insert (TiN, TiAlN available)

ID

* Note : Fixed chamfer length (like C=1.0) is not available, but chamfer approximately

- ▶ Enables drilling & deburring of both top and bottom of hole in one operation
- ▶ Drill body uses standard replaceable YESTOOL drilling insert
- ▶ Cutting tension adjustable by screw
- ▶ "DBI" deburring insert replaceable by removing square bar
- ▶ Inserts can be replaced without removing the drill body from the machine
- ▶ Can be designed for different depth and chamfer angle



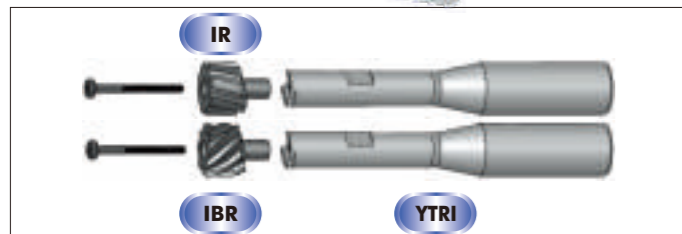
Reduce machining cost and increase productivity with YESTOOL "One-Pass" drilling system.



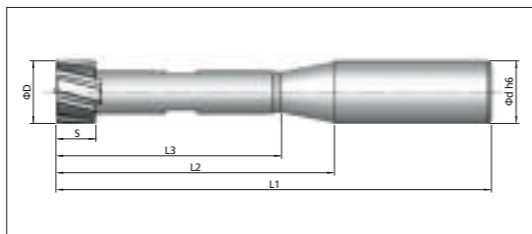
DBI insert remove the burr on the front and back side of hole. The insert retracts automatically when the tool passes through the hole.

YTRI Indexable Reamer

Indexable, Coolant Drill Series



- ▶ Interchangeable Carbide Reamer insert
- ▶ Economical usage for large size over 15mm
- ▶ Locking by center head cap-screw
- ▶ IR : Right helix spiral multi-flutes
- ▶ IBR : Left helix broach reamer insert
- ▶ Speedy reaming available with H7 tolerance



Please make required cutting depth in the like T, P.

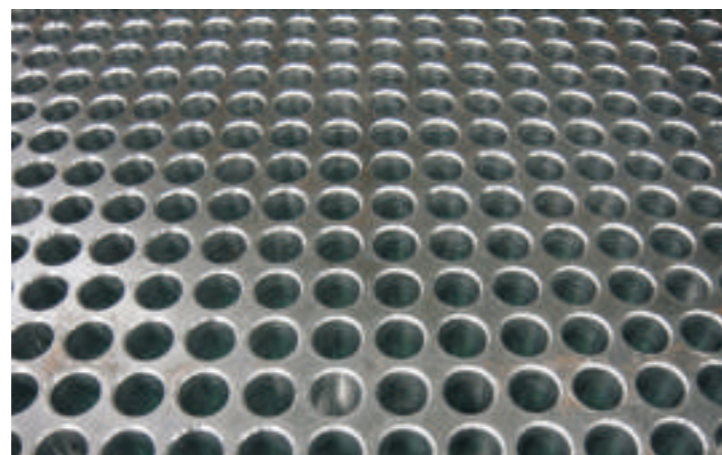
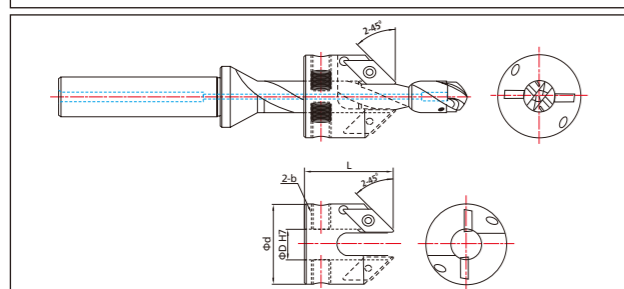
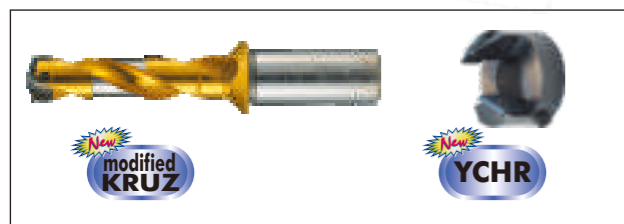
Body code No.	Shank d	S	T(3 x Dia.)			P(5 x Dia.)			Applicable IR, IBR	Cap screw M	No. of flute
			L1	L2	L3	L1	L2	L3			
YTRI 150-174 <input type="checkbox"/>	20	7.4	114	64	53	148	98	87	IR 150~174, IBR 150~174	M2.5x30	6
YTRI 175-199 <input type="checkbox"/>		9.4	125	75	61	165	115	101	IR 175~199, IBR 175~199	M2.5x30	
YTRI 200-224 <input type="checkbox"/>		9.3	136	86	69	180	130	113	IR 200~224, IBR 200~224	M3x35	
YTRI 225-249 <input type="checkbox"/>	25	10.6	153	97	75	203	147	125	IR 225~249, IBR 225~249	M4x40	8
YTRI 250-274 <input type="checkbox"/>		10.4	158	102	82	213	157	137	IR 250~274, IBR 250~274	M5x45	
YTRI 275-299 <input type="checkbox"/>	32	12.2	177	117	90	237	177	150	IR 275~299, IBR 275~299	M5x45	10
YTRI 300-324 <input type="checkbox"/>		13.1	183	123	96	248	188	161	IR 300~324, IBR 300~324	M6x40	
YTRI 325-349 <input type="checkbox"/>		13.8	190	130	103	260	200	173	IR 325~349, IBR 325~349	M6x45	
YTRI 350-374 <input type="checkbox"/>	40	14.6	215	145	110	290	220	185	IR 350~374, IBR 350~374	M8x50	12
YTRI 375-400 <input type="checkbox"/>		15.4	222	152	117	302	232	197	IR 375~400, IBR 375~400	M8x50	

* Note : Bottom edge geometry for blind hole is available as special

KRUZ Combination Chamfer Tool



- ▶ Combination chamfer ring to fit in modified standard KRUZ body
- ▶ YCHR chamfer ring with two XCGX 1102 chamfer inserts
- ▶ Two set screws supported on the KRUZ body flute part
- ▶ Available size from KRUZ body dia.8.0~50.0mm
- ▶ Special made to order after hearing cutting depth requirement



Test Report Form

Yes® YESTOOL Co., Ltd.

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COMPANY AND LOCATION	PHONE	DATE	ENGINEER NAME
CUSTOMER NAME	PHONE	MATERIAL TYPE AND CONDITION	HARDNESS RC BRN
PART DESCRIPTION	THROUGH OR FLOOD COOLANT <input type="checkbox"/> <input type="checkbox"/>	DRILLING POSITION HORIZONTAL <input type="checkbox"/> VERTICAL <input type="checkbox"/>	
MACHINE AND TYPE	COOLANT TYPE BRAND	COOLANT PRESSURE PSI	COOLANT FLOW GPM
MACHINE CONDITION	HP	HOLE PURPOSE TAPPED <input type="checkbox"/> CLEARANCE <input type="checkbox"/> ROUGH HOLE BORING <input type="checkbox"/>	
OPERATION			

PERFORMANCE, TECHNICAL, AND COST DATA	YES INDEXABLE DRILL	COMPETITOR'S
DRILL BRAND		
DRILL TYPE & DIAMETER		
TOOLHOLDING DEVICE		
INSERT OR BLADE		
INSERT GRADE & BRAND		
HOLE DIAMETER AND TOLERANCE(ROUGH)		
HOLE DIAMETER AND TOLERANCE(FINISH)		
HOLE DEPTH BLIND YES NO		
RPM		
SPEED (V: m/min)		
FEED RATE (f: mm/rev)		
FEED (F: mm/min)		
CUTTING TIME PER HOLE IN MINUTES		
CHIP CONTROL		
SURFACE FINISH		
NUMBER OF HOLES PER EDGE		
LINEAR METERS DRILLED PER EDGE		
REASON FOR CHANGING DRILL		
INSERT (BLADES) PER DRILL		
INDEXES PER INSERT		
INSERT COST		
PROJECTED RECONDITIONS PER BLADE		
RECONDITION COST		
MACHINE COST PER HOUR		
HOLES PER PART		
ESTIMATED PARTS PER YEAR		