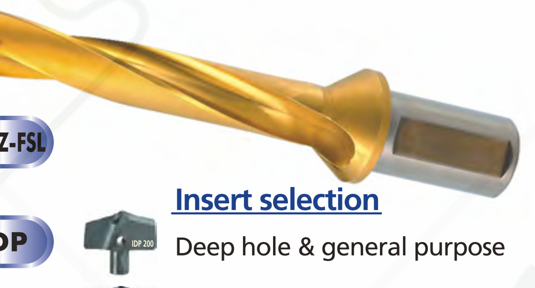
KRUZ-FSL, YTDI-FSL Flange body & Carbide insert

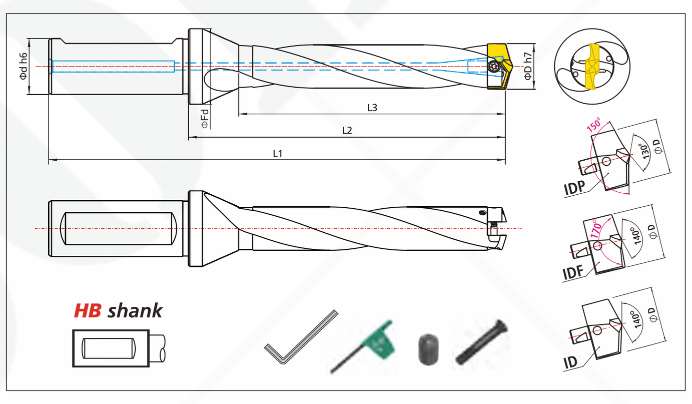


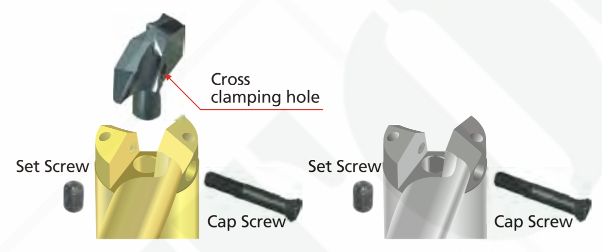
KRUZ-FSL

- 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

Insert selection

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





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 (IDP, IDF, ID)	Cap Screw	Torx driver	Set Screw	L-wrench
Φ8.0 ~Φ8.4	YTDI 080 □ FSL KRUZ 080 □ FSL	10.0 (HA)	T(3xD)	87	42	32	18	IDP 080, IDP 081, IDP 082, IDP 083, IDP 084 IDF 080, IDF 081, IDF 082, IDF 083, IDF 084 ID 080, ID 081, ID 082, ID 083, ID 084	CS 080 -095 SL	T6 Torque 0.6Nm (Max)	None	None
			P(5xD)	103	58	48						
			H(7xD)	119	74	64						
Φ8.5 ~Φ8.9	YTDI 085 □ FSL KRUZ 085 □ FSL		T(3xD)	89	44	34		IDP 085, IDP 086, IDP 087, IDP 088, IDP 089 IDF 085, IDF 086, IDF 087, IDF 088, IDF 089 ID 085, ID 086, ID 087, ID 088, ID 089				
			P(5xD)	106	61	51						
			H(7xD)	123	78	68						
Φ9.0 ~Φ9.4	YTDI 090 □ FSL KRUZ 090 □ FSL		T(3xD)	92	47	36		IDP 090, IDP 091, IDP 092, IDP 093, IDP 094 IDF 090, IDF 091, IDF 092, IDF 093, IDF 094 ID 090, ID 091, ID 092, ID 093, ID 094				
			P(5xD)	110	65	54						
			H(7xD)	128	83	72						
Φ9.5 ~Φ9.9	YTDI 095 □ FSL KRUZ 095 □ FSL	12.0 (HA)	T(3xD)	97	49	38		IDP 095, IDP 096, IDP 097, IDP 098, IDP 099 IDF 095, IDF 096, IDF 097, IDF 098, IDF 099 ID 095, ID 096, ID 097, ID 098, ID 099				
			P(5xD)	116	68	57						
			H(7xD)	135	87	76						
Φ10.0 ~Φ10.4	YTDI 100 □ FSL KRUZ 100 □ FSL		T(3xD)	99	51	40		IDP 100, IDP 101, IDP 102, IDP 103, IDP 104 IDF 100, IDF 101, IDF 102, IDF 103, IDF 104 ID 100, ID 101, ID 102, ID 103, ID 104	CS100 -115 SL			
			P(5xD)	119	71	60						
			H(7xD)	139	91	80						
Φ10.5 ~Φ10.9	YTDI 105 □ FSL KRUZ 105 □ FSL		T(3xD)	102	54	42		IDP 105, IDP 106, IDP 107, IDP 108, IDP 109 IDF 105, IDF 106, IDF 107, IDF 108, IDF 109 ID 105, ID 106, ID 107, ID 108, ID 109				
			P(5xD)	123	75	63						
			H(7xD)	144	96	84						
Φ11.0 ~Φ11.4	YTDI 110 □ FSL KRUZ 110 □ FSL		T(3xD)	104	56	44		IDP 110, IDP 111, IDP 112, IDP 113, IDP 114 IDF 110, IDF 111, IDF 112, IDF 113, IDF 114 ID 110, ID 111, ID 112, ID 113, ID 114				
			P(5xD)	126	78	66						
			H(7xD)	148	100	88						
			L(10xD)	181	133	121						
Φ11.5 ~Φ11.9	YTDI 115 □ FSL KRUZ 115 □ FSL		T(3xD)	107	59	46		IDP 115, IDP 116, IDP 117, IDP 118, IDP 119 IDF 115, IDF 116, IDF 117, IDF 118, IDF 119 ID 115, ID 116, ID 117, ID 118, ID 119				
			P(5xD)	130	82	69						
			H(7xD)	153	105	92						
			L(10xD)	188	140	127						
Φ12.0 ~Φ12.4	YTDI 120 □ FSL KRUZ 120 □ FSL	16.0	T(3xD)	109	61	48	21	IDP 120, IDP 121, IDP 122, IDP 123, IDP 124 IDF 120, IDF 121, IDF 122, IDF 123, IDF 124 ID 120, ID 121, ID 122, ID 123, ID 124	CS120 -135 SL		M2.5x4	1.3mm
			P(5xD)	133	85	72						
			H(7xD)	157	109	96						
			L(10xD)	193	145	132						

Continued

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 (IDP, IDF, ID)	Cap Screw	Torx driver	Set Screw	L-wrench
Φ12.5 ~Φ12.9	YTDI 125 □ FSL KRUZ 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)	M2.5x4	1.3mm
			P(5xD)	136	88	75						
			H(7xD)	161	113	100						
			L(10xD)	199	151	138						
Φ13.0 ~Φ13.4	YTDI 130 □ FSL KRUZ 130 □ FSL		T(3xD)	114	66	52		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				
			P(5xD)	140	92	78						
			H(7xD)	166	118	104						
			L(10xD)	205	157	143						
Φ13.5 ~Φ13.9	YTDI 135 □ FSL KRUZ 135 □ FSL		T(3xD)	116	68	54		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				
			P(5xD)	143	95	81						
			H(7xD)	170	122	108						
			L(10xD)	211	163	149						
Φ14.0 ~Φ14.4	YTDI 140 □ FSL KRUZ 140 □ FSL		T(3xD)	119	71	56		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)		
			P(5xD)	147	99	84						
			H(7xD)	175	127	112						
			L(10xD)	217	169	154						
Φ14.5 ~Φ14.9	YTDI 145 □ FSL KRUZ 145 □ FSL	20.0	T(3xD)	123	73	58	27	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				
			P(5xD)	152	102	87						
			H(7xD)	181	131	116						
			L(10xD)	225	175	160						
Φ15.0 ~Φ15.4	YTDI 150 □ FSL KRUZ 150 □ FSL		T(3xD)	127	77	60		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				
			P(5xD)	157	107	90						
			H(7xD)	187	137	120						
			L(10xD)	232	182	165						
Φ15.5 ~Φ15.9	YTDI 155 □ FSL KRUZ 155 □ FSL		T(3xD)	130	80	62		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				
			P(5xD)	161	111	93						
			H(7xD)	192	142	124						
			L(10xD)	239	189	171						
Φ16.0 ~Φ16.4	YTDI 160 □ FSL KRUZ 160 □ FSL		T(3xD)	132	82	64		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			
			P(5xD)	164	114	96						
			H(7xD)	196	146	128						
			L(10xD)	244	194	176						
Φ16.5 ~Φ16.9	YTDI 165 □ FSL KRUZ 165 □ FSL		T(3xD)	135	85	66		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				
			P(5xD)	168	118	99						
			H(7xD)	201	151	132						
			L(10xD)	251	201	182						
Φ17.0 ~Φ17.4	YTDI 170 □ FSL KRUZ 170 □ FSL		T(3xD)	137	87	68		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				
			P(5xD)	171	121	102						
			H(7xD)	205	155	136						
			L(10xD)	256	206	187						
Φ17.5 ~Φ17.9	YTDI 175 □ FSL KRUZ 175 □ FSL		T(3xD)	139	89	70		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				
			P(5xD)	174	124	105						
			H(7xD)	209	159	140						
			L(10xD)	262	212	193						
Φ18.0 ~Φ18.4	YTDI 180 □ FSL KRUZ 180 □ FSL		T(3xD)	142	92	72		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)		
			P(5xD)	178	128	108						
			H(7xD)	214	164	144						
			L(10xD)	268	218	198						
Φ18.5 ~Φ18.9	YTDI 185 □ FSL KRUZ 185 □ FSL		T(3xD)	144	94	74		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				
			P(5xD)	181	131	111						
			H(7xD)	218	168	148						
			L(10xD)	274	224	204						
Φ19.0 ~Φ19.4	YTDI 190 □ FSL KRUZ 190 □ FSL		T(3xD)	147	97	76		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				
			P(5xD)	185	135	114						
			H(7xD)	223	173	152						
			L(10xD)	280	230	209						
Φ19.5 ~Φ19.9	YTDI 195 □ FSL KRUZ 195 □ FSL		T(3xD)	149	99	78		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				
			P(5xD)	188	138	117						
			H(7xD)	227	177	156						
			L(10xD)	286	236	215						
Φ20.0 ~Φ20.4	YTDI 200 □ FSL KRUZ 200 □ FSL	25.0	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		M3x6	1.5mm
			P(5xD)	197	141	120						
			H(7xD)	237	181	160						
			L(10xD)	297	241	220						

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 (IDP, IDF, ID)	Cap Screw	Torx driver	Set Screw	L-wrench
Φ20.5 ~Φ20.9	YTDI 205 □ FSL KRUZ 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)	M3x6	1.5mm
			P(5xD)	201	145	123						
			H(7xD)	242	186	164						
			L(10xD)	304	248	226						
Φ21.0 ~Φ21.4	YTDI 210 □ FSL KRUZ 210 □ FSL		T(3xD)	162	106	84		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				
			P(5xD)	204	148	126						
			H(7xD)	246	190	168						
			L(10xD)	309	253	231						
Φ21.5 ~Φ21.9	YTDI 215 □ FSL KRUZ 215 □ FSL		T(3xD)	165	109	86		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				
			P(5xD)	208	152	129						
			H(7xD)	251	195	172						
			L(10xD)	316	260	237						
Φ22.0 ~Φ22.4	YTDI 220 □ FSL KRUZ 220 □ FSL		T(3xD)	167	111	88		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			
			P(5xD)	211	155	132						
			H(7xD)	255	199	176						
			L(10xD)	321	265	242						
Φ22.5 ~Φ22.9	YTDI 225 □ FSL KRUZ 225 □ FSL		T(3xD)	169	113	90		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				
			P(5xD)	214	158	135						
			H(7xD)	259	203	180						
			L(10xD)	327	271	248						
Φ23.0 ~Φ23.4	YTDI 230 □ FSL KRUZ 230 □ FSL		T(3xD)	172	116	92		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				
			P(5xD)	218	162	138						
			H(7xD)	264	208	184						
			L(10xD)	333	277	253						
Φ23.5 ~Φ23.9	YTDI 235 □ FSL KRUZ 235 □ FSL		T(3xD)	174	118	94		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				
			P(5xD)	221	165	141						
			H(7xD)	268	212	188						
			L(10xD)	339	283	259						
Φ24.0 ~Φ24.4	YTDI 240 □ FSL KRUZ 240 □ FSL	32.0	T(3xD)	181	121	96	39	IDP 240, IDP 241, IDP 242, IDP 243, IDP244 IDF 240, IDF 241, IDF 242, IDF 243, IDF244 ID 240, ID 241, ID 242, ID 243, ID 244	CS 240 -255 SL	T15 Torque 3.5Nm (Max)		
			P(5xD)	229	169	144						
			H(7xD)	277	217	192						
			L(10xD)	349	289	264						
Φ24.5 ~Φ24.9	YTDI 245 □ FSL KRUZ 245 □ FSL		T(3xD)	183	123	98		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				
			P(5xD)	232	172	147						
			H(7xD)	281	221	196						
			L(10xD)	355	295	270						
Φ25.0 ~Φ25.4	YTDI 250 □ FSL KRUZ 250 □ FSL		T(3xD)	185	125	100		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				
			P(5xD)	235	175	150						
			H(7xD)	285	225	200						
			L(10xD)	360	300	275						
Φ25.5 ~Φ25.9	YTDI 255 □ FSL KRUZ 255 □ FSL		T(3xD)	188	128	102		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				
			P(5xD)	239	179	153						
			H(7xD)	290	230	204						
			L(10xD)	367	307	281						
Φ26.0 ~Φ26.4	YTDI 260 □ FSL KRUZ 260 □ FSL		T(3xD)	190	130	104		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			
			P(5xD)	242	182	156						
			H(7xD)	294	234	208						
			L(10xD)	372	312	286						
Φ26.5 ~Φ26.9	YTDI 265 □ FSL KRUZ 265 □ FSL		T(3xD)	193	133	106		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				
			P(5xD)	246	186	159						
			H(7xD)	299	239	212						
			L(10xD)	379	319	292						
Φ27.0 ~Φ27.4	YTDI 270 □ FSL KRUZ 270 □ FSL		T(3xD)	195	135	108		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			M4x8	2.0mm
			P(5xD)	249	189	162						
			H(7xD)	303	243	216						
			L(10xD)	384	324	297						
Φ27.5 ~Φ27.9	YTDI 275 □ FSL KRUZ 275 □ FSL		T(3xD)	197	137	110		IDP 275, IDP 276, IDP 277, IDP 278, IDP 279 IDF 275, IDF 276, IDF 277, IDF 278, IDF 279 ID 275, ID 276, ID 277, ID 278, ID 279				
			P(5xD)	252	192	165						
			H(7xD)	307	247	220						
			L(10xD)	390	330	303						
Φ28.0 ~Φ28.4	YTDI 280 □ FSL KRUZ 280 □ FSL		T(3xD)	200	140	112		IDP 280, IDP 281, IDP 282, IDP 283, IDP 284 IDF 280, IDF 281, IDF 282, IDF 283, IDF 284 ID 280, ID 281, ID 282, ID 283, ID 284	CS 280 -295 SL			
			P(5xD)	256	196	168						
			H(7xD)	312	252	224						
			L(10xD)	396	336	308						

Continued

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 (IDP, IDF, ID)	Cap Screw	Torx driver	Set Screw	L-wrench
Φ28.5 ~Φ28.9	YTDI 285 □ FSL KRUZ 285 □ FSL	32.0	T(3xD)	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
			P(5xD)	259	199	171						
			H(7xD)	316	256	228						
			L(10xD)	402	342	314						
Φ29.0 ~Φ29.4	YTDI 290 □ FSL KRUZ 290 □ FSL		T(3xD)	205	145	116		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				
			P(5xD)	263	203	174						
			H(7xD)	321	261	232						
			L(10xD)	408	348	319						
Φ29.5 ~Φ29.9	YTDI 295 □ FSL KRUZ 295 □ FSL		T(3xD)	207	147	118		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				
			P(5xD)	266	206	177						
			H(7xD)	325	265	236						
			L(10xD)	414	354	325						
Φ30.0 ~Φ30.4	YTDI 300 □ FSL KRUZ 300 □ FSL		T(3xD)	209	149	120		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)		
			P(5xD)	269	209	180						
			H(7xD)	329	269	240						
			L(10xD)	419	359	330						
Φ30.5 ~Φ30.9	YTDI 305 □ FSL KRUZ 305 □ FSL		T(3xD)	212	152	122		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				
			P(5xD)	273	213	183						
			H(7xD)	334	274	244						
			L(10xD)	426	366	336						
Φ31.0 ~Φ31.4	YTDI 310 □ FSL KRUZ 310 □ FSL		T(3xD)	214	154	124		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			M5x10	2.5mm
			P(5xD)	276	216	186						
			H(7xD)	338	278	248						
			L(10xD)	431	371	341						
Φ31.5 ~Φ31.9	YTDI 315 □ FSL KRUZ 315 □ FSL		T(3xD)	217	157	126		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				
			P(5xD)	280	220	189						
			H(7xD)	343	283	252						
			L(10xD)	438	378	347						
Φ32.0 ~Φ32.4	YTDI 320 □ FSL KRUZ 320 □ FSL		T(3xD)	219	159	128		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 320 -355 SL			
			P(5xD)	283	223	192						
			H(7xD)	347	287	256						
			L(10xD)	443	383	352						
Φ32.5 ~Φ32.9	YTDI 325 □ FSL KRUZ 325 □ FSL		T(3xD)	221	161	130		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				
			P(5xD)	286	226	195						
			H(7xD)	351	291	260						
			L(10xD)	449	389	358						
Φ33.0 ~Φ33.4	YTDI 330 □ FSL KRUZ 330 □ FSL		T(3xD)	224	164	132		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				
			P(5xD)	290	230	198						
			H(7xD)	356	296	264						
			L(10xD)	455	395	363						
Φ33.5 ~Φ33.9	YTDI 335 □ FSL KRUZ 335 □ FSL		T(3xD)	226	166	134		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				
			P(5xD)	293	233	201						
			H(7xD)	360	300	268						
			L(10xD)	461	401	369						
Φ34.0 ~Φ34.4	YTDI 340 □ FSL KRUZ 340 □ FSL	40.0	T(3xD)	239	169	136	55	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				
			P(5xD)	307	237	204						
			H(7xD)	375	305	272						
			L(10xD)	477	407	374						
Φ34.5 ~Φ34.9	YTDI 345 □ FSL KRUZ 345 □ FSL		T(3xD)	241	171	138		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				
			P(5xD)	310	240	207						
			H(7xD)	379	309	276						
			L(10xD)	483	413	380						
Φ35.0 ~Φ35.4	YTDI 350 □ FSL KRUZ 350 □ FSL		T(3xD)	243	173	140		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				
			P(5xD)	313	243	210						
			H(7xD)	383	313	280						
			L(10xD)	488	418	385						
Φ35.5 ~Φ35.9	YTDI 355 □ FSL KRUZ 355 □ FSL		T(3xD)	246	176	142		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				
			P(5xD)	317	247	213						
			H(7xD)	388	318	284						
			L(10xD)	495	425	391						
Φ36.0 ~Φ36.4	YTDI 360 □ FSL KRUZ 360 □ FSL		T(3xD)	248	178	144		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			
			P(5xD)	320	250	216						
			H(7xD)	392	322	288						
			L(10xD)	500	430	396						

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 (IDP, IDF, ID)	Cap Screw	Torx driver	Set Screw	L-wrench
Φ36.5 ~Φ36.9	YTDI 365 □ FSL KRUZ 365 □ FSL	40.0	T(3xD)	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
			P(5xD)	324	254	219						
			H(7xD)	397	327	292						
			L(10xD)	507	437	402						
Φ37.0 ~Φ37.4	YTDI 370 □ FSL KRUZ 370 □ FSL		T(3xD)	253	183	148		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				
			P(5xD)	327	257	222						
			H(7xD)	401	331	296						
			L(10xD)	512	442	407						
Φ37.5 ~Φ37.9	YTDI 375 □ FSL KRUZ 375 □ FSL		T(3xD)	255	185	150		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				
			P(5xD)	330	260	225						
			H(7xD)	405	335	300						
			L(10xD)	518	448	413						
Φ38.0 ~Φ38.4	YTDI 380 □ FSL KRUZ 380 □ FSL		T(3xD)	258	188	152		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				
			P(5xD)	334	264	228						
			H(7xD)	410	340	304						
			L(10xD)	524	454	418						
Φ38.5 ~Φ38.9	YTDI 385 □ FSL KRUZ 385 □ FSL		T(3xD)	260	196	154		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				
			P(5xD)	337	267	231						
			H(7xD)	414	344	308						
			L(10xD)	530	460	424						
Φ39.0 ~Φ39.4	YTDI 390 □ FSL KRUZ 390 □ FSL		T(3xD)	263	193	156		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				
			P(5xD)	341	271	234						
			H(7xD)	419	349	312						
			L(10xD)	536	466	429						
Φ39.5 ~Φ39.9	YTDI 395 □ FSL KRUZ 395 □ FSL		T(3xD)	265	195	158		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				
			P(5xD)	344	274	237						
			H(7xD)	423	353	316						
			L(10xD)	542	472	435						
Φ40.0 ~Φ40.4	YTDI 400 □ FSL KRUZ 400 □ FSL		T(3xD)	267	197	160		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 400 -445 SL		M6x12	3.0mm
			P(5xD)	347	277	240						
			H(7xD)	427	357	320						
			L(10xD)	547	477	440						
Φ40.5 ~Φ40.9	YTDI 405 □ FSL KRUZ 405 □ FSL		T(3xD)	270	200	162		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				
			P(5xD)	351	281	243						
			H(7xD)	432	362	324						
			L(10xD)	554	484	446						
Φ41.0 ~Φ41.4	YTDI 410 □ FSL KRUZ 410 □ FSL		T(3xD)	272	202	164		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				
			P(5xD)	354	284	246						
			H(7xD)	436	366	328						
			L(10xD)	559	489	451						
Φ41.5 ~Φ41.9	YTDI 415 □ FSL KRUZ 415 □ FSL		T(3xD)	275	205	166		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				
			P(5xD)	358	288	249						
			H(7xD)	441	371	332						
			L(10xD)	566	496	457						
Φ42.0 ~Φ42.4	YTDI 420 □ FSL KRUZ 420 □ FSL		T(3xD)	277	207	168		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				
			P(5xD)	361	291	252						
			H(7xD)	445	375	336						
			L(10xD)	571	501	462						
Φ42.5 ~Φ42.9	YTDI 425 □ FSL KRUZ 425 □ FSL		T(3xD)	279	209	170		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				
			P(5xD)	364	294	255						
			H(7xD)	449	379	340						
			L(10xD)	577	507	468						
Φ43.0 ~Φ43.4	YTDI 430 □ FSL KRUZ 430 □ FSL		T(3xD)	282	212	172		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				
			P(5xD)	368	298	258						
			H(7xD)	454	384	344						
			L(10xD)	583	513	473						
Φ43.5 ~Φ43.9	YTDI 435 □ FSL KRUZ 435 □ FSL		T(3xD)	284	214	174		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				
			P(5xD)	371	301	261						
			H(7xD)	458	388	348						
			L(10xD)	589	519	479						
Φ44.0 ~Φ44.4	YTDI 440 □ FSL KRUZ 440 □ FSL		T(3xD)	287	217	176		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				
			P(5xD)	375	305	264						
			H(7xD)	463	393	352						
			L(10xD)	595	525	484						

Continued

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 (IDP, IDF, ID)	Cap Screw	Torx driver	Set Screw	L-wrench
Φ44.5 ~Φ44.9	YTDI 445 □ FSL KRUZ 445 □ FSL	40.0	T(3xD)	289	219	178	55	IDP 445, IDP 446, IDP 447, IDP 448, IDP 449 IDF 445, IDF 446, IDF 447, IDF 448, IDF 449 ID 445, ID 446, ID 447, ID 448, ID 449	CS 400 -445 SL	T20 Torque 4.0Nm (Max)	M6x12	3.0mm
			P(5xD)	378	308	267						
			H(7xD)	467	397	356						
			L(10xD)	601	531	490						
Φ45.0 ~Φ45.4	YTDI 450 □ FSL KRUZ 450 □ FSL		T(3xD)	291	221	180		IDP 450, IDP 451, IDP 452, IDP 453, IDP 454 IDF 450, IDF 451, IDF 452, IDF 453, IDF 454 ID 450, ID 451, ID 452, ID 453, ID 454	CS 450 -500 SL			
			P(5xD)	381	311	270						
			H(7xD)	471	401	360						
			L(10xD)	606	536	495						
Φ45.5 ~Φ45.9	YTDI 455 □ FSL KRUZ 455 □ FSL		T(3xD)	294	224	182		IDP 455, IDP 456, IDP 457, IDP 458, IDP 459 IDF 455, IDF 456, IDF 457, IDF 458, IDF 459 ID 455, ID 456, ID 457, ID 458, ID 459				
			P(5xD)	385	315	273						
			H(7xD)	476	406	364						
			L(10xD)	613	543	501						
Φ46.0 ~Φ46.4	YTDI 460 □ FSL KRUZ 460 □ FSL		T(3xD)	296	226	184		IDP 460, IDP 461, IDP 462, IDP 463, IDP 464 IDF 460, IDF 461, IDF 462, IDF 463, IDF 464 ID 460, ID 461, ID 462, ID 463, ID 464				
			P(5xD)	388	318	276						
			H(7xD)	480	410	368						
			L(10xD)	618	548	506						
Φ46.5 ~Φ46.9	YTDI 465 □ FSL KRUZ 465 □ FSL		T(3xD)	299	229	186		IDP 465, IDP 466, IDP 467, IDP 468, IDP 469 IDF 465, IDF 466, IDF 467, IDF 468, IDF 469 ID 465, ID 466, ID 467, ID 468, ID 469				
			P(5xD)	392	322	279						
			H(7xD)	485	415	372						
			L(10xD)	625	555	512						
Φ47.0 ~Φ47.4	YTDI 470 □ FSL KRUZ 470 □ FSL		T(3xD)	301	231	188		IDP 470, IDP 471, IDP 472, IDP 473, IDP 474 IDF 470, IDF 471, IDF 472, IDF 473, IDF 474 ID 470, ID 471, ID 472, ID 473, ID 474				
			P(5xD)	395	325	282						
			H(7xD)	489	419	376						
			L(10xD)	630	560	517						
Φ47.5 ~Φ47.9	YTDI 475 □ FSL KRUZ 475 □ F SL		T(3xD)	303	233	190		IDP 475, IDP 476, IDP 477, IDP 478, IDP 479 IDF 475, IDF 476, IDF 477, IDF 478, IDF 479 ID 475, ID 476, ID 477, ID 478, ID 479				
			P(5xD)	398	328	285						
			H(7xD)	493	423	380						
			L(10xD)	636	566	523						
Φ48.0 ~Φ48.4	YTDI 480 □ F SL KRUZ 480 □ FSL		T(3xD)	306	236	192		IDP 480, IDP 481, IDP 482, IDP 483, IDP 484 IDF 480, IDF 481, IDF 482, IDF 483, IDF 484 ID 480, ID 481, ID 482, ID 483, ID 484				
			P(5xD)	402	332	288						
			H(7xD)	498	428	384						
			L(10xD)	642	572	528						
Φ48.5 ~Φ48.9	YTDI 485 □ FSL KRUZ 485 □ FSL		T(3xD)	308	238	194		IDP 485, IDP 486, IDP 487, IDP 488, IDP 489 IDF 485, IDF 486, IDF 487, IDF 488, IDF 489 ID 485, ID 486, ID 487, ID 488, ID 489				
			P(5xD)	405	335	291						
			H(7xD)	502	432	388						
			L(10xD)	648	578	534						
Φ49.0 ~Φ49.4	YTDI 490 □ FSL KRUZ 490 □ FSL		T(3xD)	311	241	196		IDP 490, IDP 491, IDP 492, IDP 493, IDP 494 IDF 490, IDF 491, IDF 492, IDF 493, IDF 494 ID 490, ID 491, ID 492, ID 493, ID 494				
			P(5xD)	409	339	294						
			H(7xD)	507	437	392						
			L(10xD)	654	584	539						
Φ49.5 ~Φ49.9	YTDI 495 □ FSL KRUZ 495 □ FSL		T(3xD)	313	243	198		IDP 495, IDP 496, IDP 497, IDP 498, IDP 499 IDF 495, IDF 496, IDF 497, IDF 498, IDF 499 ID 495, ID 496, ID 497, ID 498, ID 499				
			P(5xD)	412	342	297						
			H(7xD)	511	441	396						
			L(10xD)	660	590	545						
Φ50.0 ~Φ50.4	YTDI 500 □ FSL KRUZ 500 □ FSL		T(3xD)	315	245	200		IDP 500, IDP 501, IDP 502, IDP 503, IDP 504 IDF 500, IDF 501, IDF 502, IDF 503, IDF 504 ID 500, ID 501, ID 502, ID 503, ID 504				
			P(5xD)	415	345	300						
			H(7xD)	515	445	400						
			L(10xD)	665	595	550						

KRUZ-FSL Drills, Cutting Speed Recommendation

Drill Dia. / Condition / Material Group	Φ8~16mm Speed (m/min)	Φ8~16mm Feed (mm/rev)	Φ16~25mm Speed (m/min)	Φ16~25mm Feed (mm/rev)	Φ25~32mm Speed (m/min)	Φ25~32mm Feed (mm/rev)	Φ32~40mm Speed (m/min)	Φ32~40mm Feed (mm/rev)	Φ40~50mm Speed (m/min)	Φ40~50mm 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.

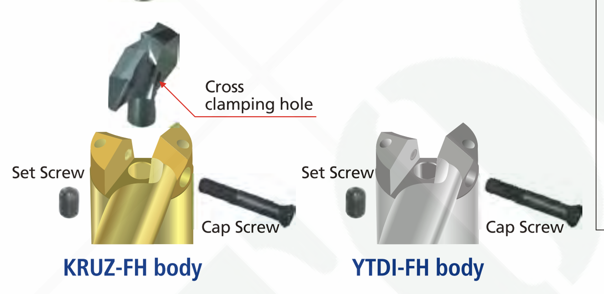
- Higher helix flute to reduce machine load and faster chip ejection
- Rugged flange type body to decrease vibration or chattering
- Interchangeable <IDPH>, <IDFH>, <IDH> carbide "H" drill inserts
- Drill body consists of premium tool steel with heat treatment
- Increased tool life by less vibration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

Insert selection

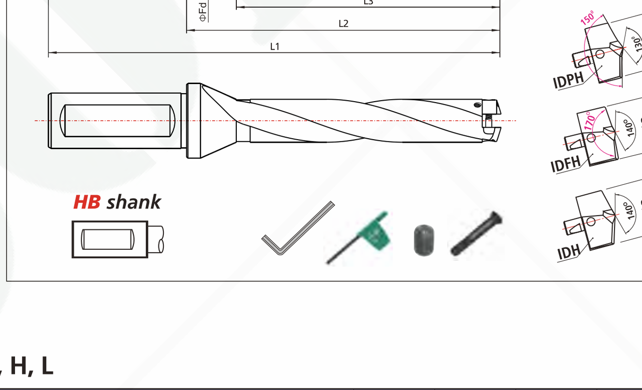
IDPH — Deep hole & general purpose

IDFH — Thin plate & shallow depth

IDH — General purpose



KRUZ-FH body YTDI-FH body



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 (IDPH / IDFH / IDH)	Cap Screw	Torx driver	Set Screw	L-wrench
Φ12.0 ~Φ12.4	YTDI 120 □ FH KRUZ 120 □ FH	16.0	T(3xD)	109	61	48	21	IDPH 120, IDPH 121, IDPH 122, IDPH 123, IDPH 124 IDFH 120, IDFH 121, IDFH 122, IDFH 123, IDFH 124 IDH 120, IDH 121, IDH 122, IDH 123, IDH 124	CS120 -135 SL	T7 Torque 0.9Nm (Max)	M2.5x4	1.3mm
			P(5xD)	133	85	72						
			H(7xD)	157	109	96						
			L(10xD)	193	145	132						
Φ12.5 ~Φ12.9	YTDI 125 □ FH KRUZ 125 □ FH		T(3xD)	111	63	50		IDPH 125, IDPH 126, IDPH 127, IDPH 128, IDPH 129 IDFH 125, IDFH 126, IDFH 127, IDFH 128, IDFH 129 IDH 125, IDH 126, IDH 127, IDH 128, IDH 129				
			P(5xD)	136	88	75						
			H(7xD)	161	113	100						
			L(10xD)	199	151	138						
Φ13.0 ~Φ13.4	YTDI 130 □ FH KRUZ 130 □ FH		T(3xD)	114	66	52		IDPH 130, IDPH 131, IDPH 132, IDPH 133, IDPH 134 IDFH 130, IDFH 131, IDFH 132, IDFH 133, IDFH 134 IDH 130, IDH 131, IDH 132, IDH 133, IDH 134				
			P(5xD)	140	92	78						
			H(7xD)	166	118	104						
			L(10xD)	205	157	143						
Φ13.5 ~Φ13.9	YTDI 135 □ FH KRUZ 135 □ FH		T(3xD)	116	68	54		IDPH 135, IDPH 136, IDPH 137, IDPH 138, IDPH 139 IDFH 135, IDFH 136, IDFH 137, IDFH 138, IDFH 139 IDH 135, IDH 136, IDH 137, IDH 138, IDH 139				
			P(5xD)	143	95	81						
			H(7xD)	170	122	108						
			L(10xD)	211	163	149						
Φ14.0 ~Φ14.4	YTDI 140 □ FH KRUZ 140 □ FH		T(3xD)	119	71	56		IDPH 140, IDPH 141, IDPH 142, IDPH 143, IDPH 144 IDFH 140, IDFH 141, IDFH 142, IDFH 143, IDFH 144 IDH 140, IDH 141, IDH 142, IDH 143, IDH 144	CS140 -155 SL			
			P(5xD)	147	99	84						
			H(7xD)	175	127	112						
			L(10xD)	217	169	154						
Φ14.5 ~Φ14.9	YTDI 145 □ FH KRUZ 145 □ FH	20.0	T(3xD)	123	73	58	27	IDPH 145, IDPH 146, IDPH 147, IDPH 148, IDPH 149 IDFH 145, IDFH 146, IDFH 147, IDFH 148, IDFH 149 IDH 145, IDH 146, IDH 147, IDH 148, IDH 149				
			P(5xD)	152	102	87						
			H(7xD)	181	131	116						
			L(10xD)	225	175	160						
Φ15.0 ~Φ15.4	YTDI 150 □ FH KRUZ 150 □ FH		T(3xD)	127	77	60		IDPH 150, IDPH 151, IDPH 152, IDPH 153, IDPH 154 IDFH 150, IDFH 151, IDFH 152, IDFH 153, IDFH 154 IDH 150, IDH 151, IDH 152, IDH 153, IDH 154				
			P(5xD)	157	107	90						
			H(7xD)	187	137	120						
			L(10xD)	232	182	165						

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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 (IDPH / IDFH / IDH)	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	27	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	CS 140 -155 SL	T7 Torque 0.9Nm (Max)	M2.5x4	1.3mm
			P(5xD)	161	111	93						
			H(7xD)	192	142	124						
			L(10xD)	239	189	171						
Φ16.0 ~Φ16.4	YTDI 160 □ FH KRUZ 160 □ FH		T(3xD)	132	82	64		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	CS 160 -175 SL			
			P(5xD)	164	114	96						
			H(7xD)	196	146	128						
			L(10xD)	244	194	176						
Φ16.5 ~Φ16.9	YTDI 165 □ FH KRUZ 165 □ FH		T(3xD)	135	85	66		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				
			P(5xD)	168	118	99						
			H(7xD)	201	151	132						
			L(10xD)	251	201	182						
Φ17.0 ~Φ17.4	YTDI 170 □ FH KRUZ 170 □ FH		T(3xD)	137	87	68		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				
			P(5xD)	171	121	102						
			H(7xD)	205	155	136						
			L(10xD)	256	206	187						
Φ17.5 ~Φ17.9	YTDI 175 □ FH KRUZ 175 □ FH		T(3xD)	139	89	70		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				
			P(5xD)	174	124	105						
			H(7xD)	209	159	140						
			L(10xD)	262	212	193						
Φ18.0 ~Φ18.4	YTDI 180 □ FH KRUZ 180 □ FH		T(3xD)	142	92	72		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	CS 180 -195 SL			
			P(5xD)	178	128	108						
			H(7xD)	214	164	144						
			L(10xD)	268	218	198						
Φ18.5 ~Φ18.9	YTDI 185 □ FH KRUZ 185 □ FH		T(3xD)	144	94	74		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				
			P(5xD)	181	131	111						
			H(7xD)	218	168	148						
			L(10xD)	274	224	204						
Φ19.0 ~Φ19.4	YTDI 190 □ FH KRUZ 190 □ FH		T(3xD)	147	97	76		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				
			P(5xD)	185	135	114						
			H(7xD)	223	173	152						
			L(10xD)	280	230	209						
Φ19.5 ~Φ19.9	YTDI 195 □ FH KRUZ 195 □ FH		T(3xD)	149	99	78		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				
			P(5xD)	188	138	117						
			H(7xD)	227	177	156						
			L(10xD)	286	236	215						
Φ20.0 ~Φ20.4	YTDI 200 □ FH KRUZ 200 □ FH	25.0	T(3xD)	157	101	80	32	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	CS 200 -215 SL	T8 Torque 1.5Nm (Max)	M3x6	1.5mm
			P(5xD)	197	141	120						
			H(7xD)	237	181	160						
			L(10xD)	297	241	220						
Φ20.5 ~Φ20.9	YTDI 205 □ FH KRUZ 205 □ FH		T(3xD)	160	104	82		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				
			P(5xD)	201	145	123						
			H(7xD)	242	186	164						
			L(10xD)	304	248	226						
Φ21.0 ~Φ21.4	YTDI 210 □ FH KRUZ 210 □ FH		T(3xD)	162	106	84		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				
			P(5xD)	204	148	126						
			H(7xD)	246	190	168						
			L(10xD)	309	253	231						
Φ21.5 ~Φ21.9	YTDI 215 □ FH KRUZ 215 □ FH		T(3xD)	165	109	86		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				
			P(5xD)	208	152	129						
			H(7xD)	251	195	172						
			L(10xD)	316	260	237						
Φ22.0 ~Φ22.4	YTDI 220 □ FH KRUZ 220 □ FH		T(3xD)	167	111	88		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	CS 220 -235 SL			
			P(5xD)	211	155	132						
			H(7xD)	255	199	176						
			L(10xD)	321	265	242						
Φ22.5 ~Φ22.9	YTDI 225 □ FH KRUZ 225 □ FH		T(3xD)	169	113	90		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 227L, IDH 228L, IDH 229				
			P(5xD)	214	158	135						
			H(7xD)	259	203	180						
			L(10xD)	327	271	248						

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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 (IDPH / IDFH / IDH)	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	32	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	CS 220 -235 SL	T8 Torque 1.5Nm (Max)	M3x6	1.5mm
			P(5xD)	218	162	138						
			H(7xD)	264	208	184						
			L(10xD)	333	277	253						
Φ23.5 ~Φ23.9	YTDI 235 □ FH KRUZ 235 □ FH		T(3xD)	174	118	94		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				
			P(5xD)	221	165	141						
			H(7xD)	268	212	188						
			L(10xD)	339	283	259						
Φ24.0 ~Φ24.4	YTDI 240 □ FH KRUZ 240 □ FH	32.0	T(3xD)	181	121	96	39	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	CS 240 -255 SL	T15 Torque 3.5Nm (Max)		
			P(5xD)	229	169	144						
			H(7xD)	277	217	192						
			L(10xD)	349	289	264						
Φ24.5 ~Φ24.9	YTDI 245 □ FH KRUZ 245 □ FH		T(3xD)	183	123	98		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				
			P(5xD)	232	172	147						
			H(7xD)	281	221	196						
			L(10xD)	355	295	270						
Φ25.0 ~Φ25.4	YTDI 250 □ FH KRUZ 250 □ FH		T(3xD)	185	125	100		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 253L, IDH 254				
			P(5xD)	235	175	150						
			H(7xD)	285	225	200						
			L(10xD)	360	300	275						
Φ25.5 ~Φ25.9	YTDI 255 □ FH KRUZ 255 □ FH		T(3xD)	188	128	102		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				
			P(5xD)	239	179	153						
			H(7xD)	290	230	204						
			L(10xD)	367	307	281						
Φ26.0 ~Φ26.4	YTDI 260 □ FH KRUZ 260 □ FH		T(3xD)	190	130	104		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	CS 260 -275 SL			
			P(5xD)	242	182	156						
			H(7xD)	294	234	208						
			L(10xD)	372	312	286						
Φ26.5 ~Φ26.9	YTDI 265 □ FH KRUZ 265 □ FH		T(3xD)	193	133	106		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				
			P(5xD)	246	186	159						
			H(7xD)	299	239	212						
			L(10xD)	379	319	292						
Φ27.0 ~Φ27.4	YTDI 270 □ FH KRUZ 270 □ FH		T(3xD)	195	135	108		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			M4x8	2.0mm
			P(5xD)	249	189	162						
			H(7xD)	303	243	216						
			L(10xD)	384	324	297						
Φ27.5 ~Φ27.9	YTDI 275 □ FH KRUZ 275 □ FH		T(3xD)	197	137	110		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				
			P(5xD)	252	192	165						
			H(7xD)	307	247	220						
			L(10xD)	390	330	303						
Φ28.0 ~Φ28.4	YTDI 280 □ FH KRUZ 280 □ FH		T(3xD)	200	140	112		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	CS 280 -295 SL			
			P(5xD)	256	196	168						
			H(7xD)	312	252	224						
			L(10xD)	396	336	308						
Φ28.5 ~Φ28.9	YTDI 285 □ FH KRUZ 285 □ FH		T(3xD)	202	142	114		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				
			P(5xD)	259	199	171						
			H(7xD)	316	256	228						
			L(10xD)	402	342	314						
Φ29.0 ~Φ29.4	YTDI 290 □ FH KRUZ 290 □ FH		T(3xD)	205	145	116		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				
			P(5xD)	263	203	174						
			H(7xD)	321	261	232						
			L(10xD)	408	348	319						
Φ29.5 ~Φ29.9	YTDI 295 □ FH KRUZ 295 □ FH		T(3xD)	207	147	118		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				
			P(5xD)	266	206	177						
			H(7xD)	325	265	236						
			L(10xD)	414	354	325						
Φ30.0 ~Φ30.4	YTDI 300 □ FH KRUZ 300 □ FH		T(3xD)	209	149	120		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	CS 300 -315 SL	T15 Torque 3.5Nm (Max)		
			P(5xD)	269	209	180						
			H(7xD)	329	269	240						
			L(10xD)	419	359	330						

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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 (IDPH / IDFH / IDH)	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	39	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	CS 300 -315 SL	T20 Torque 4.0Nm (Max)	M4x8	2.0mm
			P(5xD)	273	213	183						
			H(7xD)	334	274	244						
			L(10xD)	426	366	336						
Φ31.0 ~Φ31.4	YTDI 310 □ FH KRUZ 310 □ FH		T(3xD)	214	154	124		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			M5x10	2.5mm
			P(5xD)	276	216	186						
			H(7xD)	338	278	248						
			L(10xD)	431	371	341						
Φ31.5 ~Φ31.9	YTDI 315 □ FH KRUZ 315 □ FH		T(3xD)	217	157	126		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				
			P(5xD)	280	220	189						
			H(7xD)	343	283	252						
			L(10xD)	438	378	347						
Φ32.0 ~Φ32.4	YTDI 320 □ FH KRUZ 320 □ FH		T(3xD)	219	159	128		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	CS 320 -355 SL			
			P(5xD)	283	223	192						
			H(7xD)	347	287	256						
			L(10xD)	443	383	352						
Φ32.5 ~Φ32.9	YTDI 325 □ FH KRUZ 325 □ FH		T(3xD)	221	161	130		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				
			P(5xD)	286	226	195						
			H(7xD)	351	291	260						
			L(10xD)	449	389	358						
Φ33.0 ~Φ33.4	YTDI 330 □ FH KRUZ 330 □ FH		T(3xD)	224	164	132		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				
			P(5xD)	290	230	198						
			H(7xD)	356	296	264						
			L(10xD)	455	395	363						
Φ33.5 ~Φ33.9	YTDI 335 □ FH KRUZ 335 □ FH		T(3xD)	226	166	134		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				
			P(5xD)	293	233	201						
			H(7xD)	360	300	268						
			L(10xD)	461	401	369						
Φ34.0 ~Φ34.4	YTDI 340 □ FH KRUZ 340 □ FH	40.0	T(3xD)	239	169	136	55	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				
			P(5xD)	307	237	204						
			H(7xD)	375	305	272						
			L(10xD)	477	407	374						
Φ34.5 ~Φ34.9	YTDI 345 □ FH KRUZ 345 □ FH		T(3xD)	241	171	138		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				
			P(5xD)	310	240	207						
			H(7xD)	379	309	276						
			L(10xD)	483	413	380						
Φ35.0 ~Φ35.4	YTDI 350 □ FH KRUZ 350 □ FH		T(3xD)	243	173	140		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				
			P(5xD)	313	243	210						
			H(7xD)	383	313	280						
			L(10xD)	488	418	385						
Φ35.5 ~Φ35.9	YTDI 355 □ FH KRUZ 355 □ FH		T(3xD)	246	176	142		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				
			P(5xD)	317	247	213						
			H(7xD)	388	318	284						
			L(10xD)	495	425	391						
Φ36.0 ~Φ36.4	YTDI 360 □ FH KRUZ 360 □ FH		T(3xD)	248	178	144		IDPH 360, IDPH 361, IDPH 362, IDPH 363, IDPH 364 IDFH 360, IDFH 361, IDFH 362, IDFH 363, IDFH 364 IDH 360, IDH 361, IDH 362, IDH 363, IDH 364	CS 360 -395 SL			
			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		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				
			P(5xD)	324	254	219						
			H(7xD)	397	327	292						
			L(10xD)	507	437	402						
Φ37.0 ~Φ37.4	YTDI 370 □ FH KRUZ 370 □ FH		T(3xD)	253	183	148		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				
			P(5xD)	327	257	222						
			H(7xD)	401	331	296						
			L(10xD)	512	442	407						
Φ37.5 ~Φ37.9	YTDI 375 □ FH KRUZ 375 □ FH		T(3xD)	255	185	150		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				
			P(5xD)	330	260	225						
			H(7xD)	405	335	300						
			L(10xD)	518	448	413						

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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 (IDPH / IDFH / IDH)	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	55	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	CS 360 -395 SL	T20 Torque 4.0Nm (Max)	M5x10	2.5mm
			P(5xD)	334	264	228						
			H(7xD)	410	340	304						
			L(10xD)	524	454	418						
Φ38.5 ~Φ38.9	YTDI 385 □ FH KRUZ 385 □ FH		T(3xD)	260	196	154		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				
			P(5xD)	337	267	231						
			H(7xD)	414	344	308						
			L(10xD)	530	460	424						
Φ39.0 ~Φ39.4	YTDI 390 □ FH KRUZ 390 □ FH		T(3xD)	263	193	156		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				
			P(5xD)	341	271	234						
			H(7xD)	419	349	312						
			L(10xD)	536	466	429						
Φ39.5 ~Φ39.9	YTDI 395 □ FH KRUZ 395 □ FH		T(3xD)	265	195	158		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				
			P(5xD)	344	274	237						
			H(7xD)	423	353	316						
			L(10xD)	542	472	435						
Φ40.0 ~Φ40.4	YTDI 400 □ FH KRUZ 400 □ FH		T(3xD)	267	197	160		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	CS 400 -445 SL		M6x12	3.0mm
			P(5xD)	347	277	240						
			H(7xD)	427	357	320						
			L(10xD)	547	477	440						
Φ40.5 ~Φ40.9	YTDI 405 □ FH KRUZ 405 □ FH		T(3xD)	270	200	162		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				
			P(5xD)	351	281	243						
			H(7xD)	432	362	324						
			L(10xD)	554	484	446						
Φ41.0 ~Φ41.4	YTDI 410 □ FH KRUZ 410 □ FH		T(3xD)	272	202	164		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				
			P(5xD)	354	284	246						
			H(7xD)	436	366	328						
			L(10xD)	559	489	451						
Φ41.5 ~Φ41.9	YTDI 415 □ FH KRUZ 415 □ FH		T(3xD)	275	205	166		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				
			P(5xD)	358	288	249						
			H(7xD)	441	371	332						
			L(10xD)	566	496	457						
Φ42.0 ~Φ42.4	YTDI 420 □ FH KRUZ 420 □ FH		T(3xD)	277	207	168		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				
			P(5xD)	361	291	252						
			H(7xD)	445	375	336						
			L(10xD)	571	501	462						
Φ42.5 ~Φ42.9	YTDI 425 □ FH KRUZ 425 □ FH		T(3xD)	279	209	170		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				
			P(5xD)	364	294	255						
			H(7xD)	449	379	340						
			L(10xD)	577	507	468						
Φ43.0 ~Φ43.4	YTDI 430 □ FH KRUZ 430 □ FH		T(3xD)	282	212	172		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				
			P(5xD)	368	298	258						
			H(7xD)	454	384	344						
			L(10xD)	583	513	473						
Φ43.5 ~Φ43.9	YTDI 435 □ FH KRUZ 435 □ FH		T(3xD)	284	214	174		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				
			P(5xD)	371	301	261						
			H(7xD)	458	388	348						
			L(10xD)	589	519	479						
Φ44.0 ~Φ44.4	YTDI 440 □ FH KRUZ 440 □ FH		T(3xD)	287	217	176		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				
			P(5xD)	375	305	264						
			H(7xD)	463	393	352						
			L(10xD)	595	525	484						
Φ44.5 ~Φ44.9	YTDI 445 □ FH KRUZ 445 □ FH		T(3xD)	289	219	178		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				
			P(5xD)	378	308	267						
			H(7xD)	467	397	356						
			L(10xD)	601	531	490						
Φ45.0 ~Φ45.4	YTDI 450 □ FH KRUZ 450 □ FH		T(3xD)	291	221	180		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	CS 450 -500 SL			
			P(5xD)	381	311	270						
			H(7xD)	471	401	360						
			L(10xD)	606	536	495						

Continued ▶▶

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 (IDPH / IDFH / IDH)	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	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		T(3xD)	296	226	184		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				
			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		T(3xD)	299	229	186		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				
			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		T(3xD)	301	231	188		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				
			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		T(3xD)	303	233	190		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				
			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		T(3xD)	306	236	192		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				
			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		T(3xD)	308	238	194		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				
			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		T(3xD)	311	241	196		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				
			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		T(3xD)	313	243	198		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				
			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		T(3xD)	315	245	200		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				
			P(5xD)	415	345	300						
			H(7xD)	515	445	400						
			L(10xD)	665	595	550						

KRUZ-FH Drills, Cutting Speed Recommendation

Material Group / Condition / 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

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

IDFK

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

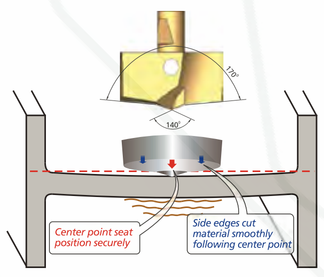
(for stacked plates)

IDPK

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

KRUZ-SLK



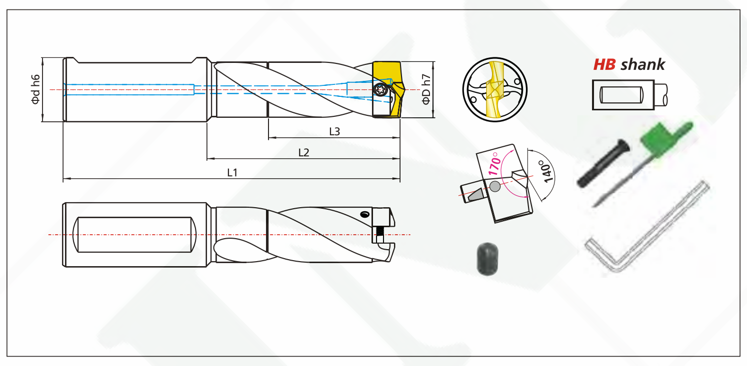
(Plate) (Angle) (Beam)

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 L1	Dimension L2	Dimension L3	Insert IDFK / Insert IDPK	Cap Screw	Torx driver	Set Screw	L-wrench
14.0~14.4	KRUZ 140 L3=50 SLK	16	110	62	50	IDFK 140, IDFK 141, IDFK 142, IDFK 143, IDFK 144 IDPK 140, IDPK 141, IDPK 142, IDPK 143, IDPK 144	CS 140 -155 SL	T7 Torque 0.9Nm (Max)	M2.5x4	1.3mm
14.5~14.9	KRUZ 145 L3=50 SLK					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 150 L3=50 SLK	20	115	65		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 155 L3=50 SLK					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 160 L3=50 SLK					IDFK 160, IDFK 161, IDFK 162, IDFK 163, IDFK 164 IDPK 160, IDPK 161, IDPK 162, IDPK 163, IDPK 164	CS 160 -175 SL			
16.5~16.9	KRUZ 165 L3=50 SLK					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 170 L3=50 SLK		118	68		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 175 L3=50 SLK					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 180 L3=50 SLK					IDFK 180, IDFK 181, IDFK 182, IDFK 183, IDFK 184 IDPK 180, IDPK 181, IDPK 182, IDPK 183, IDPK 184	CS 180 -195 SL	T8 Torque 1.5Nm (Max)		
18.5~18.9	KRUZ 185 L3=50 SLK					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 190 L3=50 SLK					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 195 L3=50 SLK					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 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	CS 200 -215 SL		M3x6	1.5mm
20.5~20.9	KRUZ 205 L3=50 SLK					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 210 L3=50 SLK					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 215 L3=50 SLK					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 220 L3=50 SLK					IDFK 220, IDFK 221, IDFK 222, IDFK 223, IDFK 224 IDPK 220, IDPK 221, IDPK 222, IDPK 223, IDPK 224	CS 220 -235 SL			
22.5~22.9	KRUZ 225 L3=50 SLK					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 230 L3=50 SLK					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 235 L3=50 SLK					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 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	CS 240 -255 SL	T15 Torque 3.5Nm (Max)		
24.5~24.9	KRUZ 245 L3=50 SLK					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 250 L3=50 SLK					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 255 L3=50 SLK					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 260 L3=50 SLK		140	80		IDFK 260, IDFK 261, IDFK 262, IDFK 263, IDFK 264 IDPK 260, IDPK 261, IDPK 262, IDPK 263, IDPK 264	CS 260 -275 SL			
26.5~26.9	KRUZ 265 L3=50 SLK					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 270 L3=50 SLK					IDFK 270, IDFK 271, IDFK 272, IDFK 273, IDFK 274 IDPK 270, IDPK 271, IDPK 272, IDPK 273, IDPK 274			M4x8	2.0mm
27.5~27.9	KRUZ 275 L3=50 SLK					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 280 L3=50 SLK					IDFK 280, IDFK 281, IDFK 282, IDFK 283, IDFK 284 IDPK 280, IDPK 281, IDPK 282, IDPK 283, IDPK 284	CS 280 -295 SL			
28.5~28.9	KRUZ 285 L3=50 SLK					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 290 L3=50 SLK					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 295 L3=50 SLK					IDFK 295, IDFK 296, IDFK 297, IDFK 298, IDFK 299 IDPK 295, IDPK 296, IDPK 297, IDPK 298, IDPK 299				

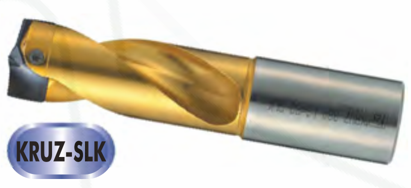
☞ Size not shown on above is available upon request.

KRUZ "K" series drill body & insert, Metric

Exclusively designed for Structural machining

Hole (Φ) mm	Body Code	Shank (Φd)	Dimension L1	Dimension L2	Dimension L3	Insert IDFK / Insert IDPK	Cap Screw	Torx driver	Set Screw	L-wrench
30.0~30.4	KRUZ 300 L3=70 SLK	32	155	95	70	IDFK 300, IDFK 301, IDFK 302, IDFK 303, IDFK 304 IDPK 300, IDPK 301, IDPK 302, IDPK 303, IDPK 304	CS 300 -315 SL	T20 Torque 4.0Nm (Max)	M4x8	2.0mm
30.5~30.9	KRUZ 305 L3=70 SLK					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 310 L3=70 SLK					IDFK 310, IDFK 311, IDFK 312, IDFK 313, IDFK 314 IDPK 310, IDPK 311, IDPK 312, IDPK 313, IDPK 314			M5x10	2.5mm
31.5~31.9	KRUZ 315 L3=70 SLK					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 320 L3=70 SLK					IDFK 320, IDFK 321, IDFK 322, IDFK 323, IDFK 324 IDPK 320, IDPK 321, IDPK 322, IDPK 323, IDPK 324	CS 320 -355 SL			
32.5~32.9	KRUZ 325 L3=70 SLK					IDFK 325, IDFK 326, IDFK 327, IDFK 328, IDFK 329 IDPK 325, IDPK 326, IDPK 327, IDPK 328, IDPK 329				
33.0~33.4	KRUZ 330 L3=70 SLK					IDFK 330, IDFK 331, IDFK 332, IDFK 333, IDFK 334 IDPK 330, IDPK 331, IDPK 332, IDPK 333, IDPK 334				
33.5~33.9	KRUZ 335 L3=70 SLK					IDFK 335, IDFK 336, IDFK 337, IDFK 338, IDFK 339 IDPK 335, IDPK 336, IDPK 337, IDPK 338, IDPK 339				
34.0~34.4	KRUZ 340 L3=80 SLK	40	180	110	80	IDFK 340, IDFK 341, IDFK 342, IDFK 343, IDFK 344 IDPK 340, IDPK 341, IDPK 342, IDPK 343, IDPK 344				
34.5~34.9	KRUZ 345 L3=80 SLK					IDFK 345, IDFK 346, IDFK 347, IDFK 348, IDFK 349 IDPK 345, IDPK 346, IDPK 347, IDPK 348, IDPK 349				
35.0~35.4	KRUZ 350 L3=80 SLK					IDFK 350, IDFK 351, IDFK 352, IDFK 353, IDFK 354 IDPK 350, IDPK 351, IDPK 352, IDPK 353, IDPK 354				
35.5~35.9	KRUZ 355 L3=80 SLK					IDFK 355, IDFK 356, IDFK 357, IDFK 358, IDFK 359 IDPK 355, IDPK 356, IDPK 357, IDPK 358, IDPK 359				
36.0~36.4	KRUZ 360 L3=80 SLK					IDFK 360, IDFK 361, IDFK 362, IDFK 363, IDFK 364 IDPK 360, IDPK 361, IDPK 362, IDPK 363, IDPK 364	CS 360 -395 SL			
36.5~36.9	KRUZ 365 L3=80 SLK					IDFK 365, IDFK 366, IDFK 367, IDFK 368, IDFK 369 IDPK 365, IDPK 366, IDPK 367, IDPK 368, IDPK 369				
37.0~37.4	KRUZ 370 L3=80 SLK					IDFK 370, IDFK 371, IDFK 372, IDFK 373, IDFK 374 IDPK 370, IDPK 371, IDPK 372, IDPK 373, IDPK 374				
37.5~37.9	KRUZ 375 L3=80 SLK					IDFK 375, IDFK 376, IDFK 377, IDFK 378, IDFK 379 IDPK 375, IDPK 376, IDPK 377, IDPK 378, IDPK 379				
38.0~38.4	KRUZ 380 L3=80 SLK					IDFK 380, IDFK 381, IDFK 382, IDFK 383, IDFK 384 IDPK 380, IDPK 381, IDPK 382, IDPK 383, IDPK 384				
38.5~38.9	KRUZ 385 L3=80 SLK					IDFK 385, IDFK 386, IDFK 387, IDFK 388, IDFK 389 IDPK 385, IDPK 386, IDPK 387, IDPK 388, IDPK 389				
39.0~39.4	KRUZ 390 L3=80 SLK					IDFK 390, IDFK 391, IDFK 392, IDFK 393, IDFK 394 IDPK 390, IDPK 391, IDPK 392, IDPK 393, IDPK 394				
39.5~39.9	KRUZ 395 L3=80 SLK					IDFK 395, IDFK 396, IDFK 397, IDFK 398, IDFK 399 IDPK 395, IDPK 396, IDPK 397, IDPK 398, IDPK 399				
40.0~40.4	KRUZ 400 L3=80 SLK					IDFK 400, IDFK 401, IDFK 402, IDFK 403, IDFK 404 IDPK 400, IDPK 401, IDPK 402, IDPK 403, IDPK 404	CS 400 -445 SL		M6x12	3.0mm
40.5~40.9	KRUZ 405 L3=80 SLK					IDFK 405, IDFK 406, IDFK 407, IDFK 408, IDFK 409 IDPK 405, IDPK 406, IDPK 407, IDPK 408, IDPK 409				
41.0~41.4	KRUZ 410 L3=80 SLK		185	115		IDFK 410, IDFK 411, IDFK 412, IDFK 413, IDFK 414 IDPK 410, IDPK 411, IDPK 412, IDPK 413, IDPK 414				
41.5~41.9	KRUZ 415 L3=80 SLK					IDFK 415, IDFK 416, IDFK 417, IDFK 418, IDFK 419 IDPK 415, IDPK 416, IDPK 417, IDPK 418, IDPK 419				
42.0~42.4	KRUZ 420 L3=80 SLK					IDFK 420, IDFK 421, IDFK 422, IDFK 423, IDFK 424 IDPK 420, IDPK 421, IDPK 422, IDPK 423, IDPK 424				
42.5~42.9	KRUZ 425 L3=80 SLK					IDFK 425, IDFK 426, IDFK 427, IDFK 428, IDFK 429 IDPK 425, IDPK 426, IDPK 427, IDPK 428, IDPK 429				
43.0~43.4	KRUZ 430 L3=80 SLK					IDFK 430, IDFK 431, IDFK 432, IDFK 433, IDFK 434 IDPK 430, IDPK 431, IDPK 432, IDPK 433, IDPK 434				
43.5~43.9	KRUZ 435 L3=80 SLK					IDFK 435, IDFK 436, IDFK 437, IDFK 438, IDFK 439 IDPK 435, IDPK 436, IDPK 437, IDPK 438, IDPK 439				
44.0~44.4	KRUZ 440 L3=80 SLK					IDFK 440, IDFK 441, IDFK 442, IDFK 443, IDFK 444 IDPK 440, IDPK 441, IDPK 442, IDPK 443, IDPK 444				
44.5~44.9	KRUZ 445 L3=80 SLK					IDFK 445, IDFK 446, IDFK 447, IDFK 448, IDFK 449 IDPK 445, IDPK 446, IDPK 447, IDPK 448, IDPK 449				
45.0~45.4	KRUZ 450 L3=80 SLK					IDFK 450, IDFK 451, IDFK 452, IDFK 453, IDFK 454 IDPK 450, IDPK 451, IDPK 452, IDPK 453, IDPK 454	CS 450 -500 SL			
45.5~45.9	KRUZ 455 L3=80 SLK					IDFK 455, IDFK 456, IDFK 457, IDFK 458, IDFK 459 IDPK 455, IDPK 456, IDPK 457, IDPK 458, IDPK 459				
46.0~46.4	KRUZ 460 L3=80 SLK					IDFK 460, IDFK 461, IDFK 462, IDFK 463, IDFK 464 IDPK 460, IDPK 461, IDPK 462, IDPK 463, IDPK 464				
46.5~46.9	KRUZ 465 L3=80 SLK					IDFK 465, IDFK 466, IDFK 467, IDFK 468, IDFK 469 IDPK 465, IDPK 466, IDPK 467, IDPK 468, IDPK 469				
47.0~47.4	KRUZ 470 L3=80 SLK					IDFK 470, IDFK 471, IDFK 472, IDFK 473, IDFK 474 IDPK 470, IDPK 471, IDPK 472, IDPK 473, IDPK 474				
47.5~47.9	KRUZ 475 L3=80 SLK					IDFK 475, IDFK 476, IDFK 477, IDFK 478, IDFK 479 IDPK 475, IDPK 476, IDPK 477, IDPK 478, IDPK 479				
48.0~48.4	KRUZ 480 L3=80 SLK		200	130	90	IDFK 480, IDFK 481, IDFK 482, IDFK 483, IDFK 484 IDPK 480, IDPK 481, IDPK 482, IDPK 483, IDPK 484				
48.5~48.9	KRUZ 485 L3=80 SLK					IDFK 485, IDFK 486, IDFK 487, IDFK 488, IDFK 489 IDPK 485, IDPK 486, IDPK 487, IDPK 488, IDPK 489				
49.0~49.4	KRUZ 490 L3=80 SLK					IDFK 490, IDFK 491, IDFK 492, IDFK 493, IDFK 494 IDPK 490, IDPK 491, IDPK 492, IDPK 493, IDPK 494				
49.5~49.9	KRUZ 495 L3=80 SLK					IDFK 495, IDFK 496, IDFK 497, IDFK 498, IDFK 499 IDPK 495, IDPK 496, IDPK 497, IDPK 498, IDPK 499				
50.0~50.4	KRUZ 500 L3=90 SLK					IDFK 500, IDFK 501, IDFK 502, IDFK 503, IDFK 504 IDPK 500, IDPK 501, IDPK 502, IDPK 503, IDPK 504				

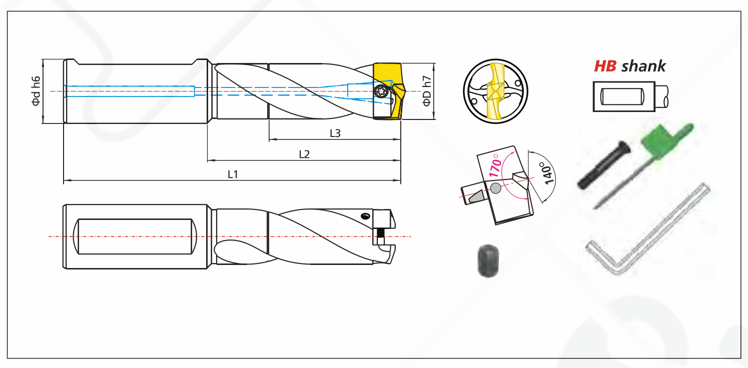
KRUZ "K" series drill body & insert, Inch



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 L1	Dimension L2	Dimension L3	Insert IDFK	Insert IDPK	Alternative Metric body
.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					IDFK-37/64"(14.68mm)	IDPK-37/64"(14.68mm)	KRUZ 145 L3=50 SLK
.5906~.6098	KRUZ .5906-SLK	3/4 (19.05mm)	4.5276 (115mm)	2.5591 (65mm)		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		4.6457 (118mm)	2.6772 (68mm)		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	1" (25.4mm)	5.1181 (130mm)	2.9134 (74mm)		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 1/4 (31.75mm)	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		5.5118 (140mm)	3.1496 (80mm)		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		6.1024 (155mm)	3.7402 (95mm)	2.7559 (70mm)	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		7.0866 (180mm)	4.3307 (110mm)	3.1496 (80mm)	IDFK-1 11/32"(34.13mm)	IDPK-1 11/32"(34.13mm)	KRUZ 340 L3=80 SLK
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

☞ 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.

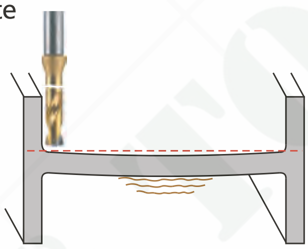
KRUZ-FSLK Flanged body(7xD), IDFK & IDPK insert

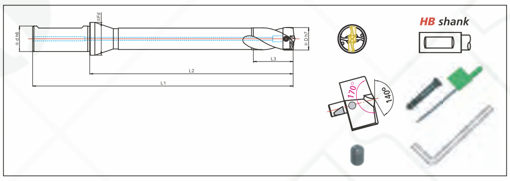
KRUZ-FSLK

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





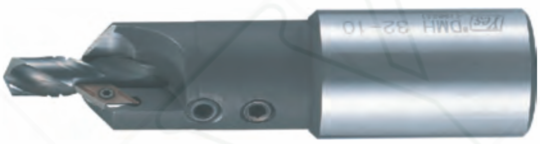
Exclusively designed for Structural machining

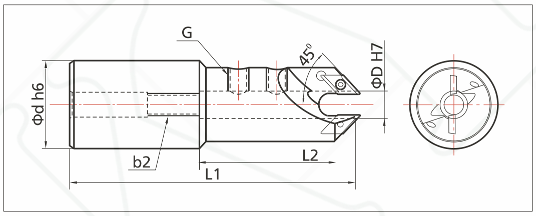
Hole (Φ) mm	Body Code	Shank (Φd)	Dimension L1	Dimension L2	Dimension L3	Flanged dia.(ΦFd)	Insert IDFK / Insert IDPK	Cap Screw	Torx driver	Set Screw	L-wrench
14.0~14.4	KRUZ 140H FL50 FSLK	16	175	127	50	21	IDFK 140, IDFK 141, IDFK 142, IDFK 143, IDFK 144 IDPK 140, IDPK 141, IDPK 142, IDPK 143, IDPK 144	CS 140 -155 SL	T7	M2.5x4	1.3mm
14.5~14.9	KRUZ 145H FL50 FSLK	20	181	131		27	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	CS 160 -175 SL			
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	CS 180 -195 SL	T8		
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	25	237	181		32	IDFK 200, IDFK 201, IDFK 202, IDFK 203, IDFK 204 IDPK 200, IDPK 201, IDPK 202, IDPK 203, IDPK 204	CS 200 -215 SL		M3x6	1.5mm
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	CS 220 -235 SL			
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	32	277	217		39	IDFK 240, IDFK 241, IDFK 242, IDFK 243, IDFK 244 IDPK 240, IDPK 241, IDPK 242, IDPK 243, IDPK 244	CS 240 -255 SL	T15		
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	CS 260 -275 SL			
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			M4x8	2.0mm
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	CS 280 -295 SL			
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	70		IDFK 300, IDFK 301, IDFK 302, IDFK 303, IDFK 304 IDPK 300, IDPK 301, IDPK 302, IDPK 303, IDPK 304	CS 300 -315 SL	T20		
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			M5x10	2.5mm
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	CS 320 -355 SL			

☞ Size not shown on above is available upon request.

Drilling & Milling tool

DMH

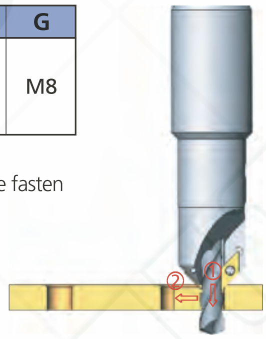




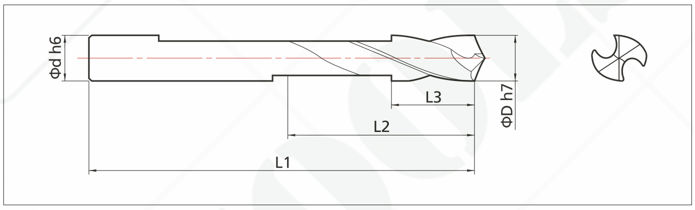
- Interchangeable carbide drillmill & XCGX insert mounted in the holder
- Specially designed carbide drillmill(TiAlN) with milling functioned flute
- Carbide chamfer insert XCGX 1102 with two corner edges
- Rigid heat-treated tool steel holder with side locking system
- Drilling, milling and chamfering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

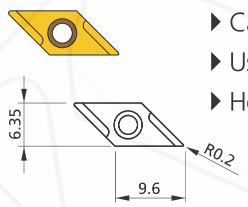


- Solid carbide material, TiAlN coated
- YESTOOL's own designed for drilling & milling
- Flatted grinding to fit two XCGX inserts
- Used in DMH holder
- TiAlN coated for longer tool life

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



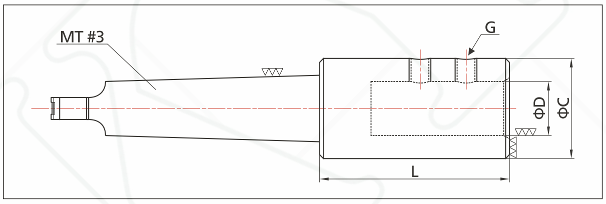
- Carbide insert with grinded edges
- Used two corners economically
- Hole chamfering application

XCGX1102

MT shank side lock holder

MT

- 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	70	37	
MT3S-SLA25-70		25		40	
MT3S-SLA32-70		32		42	
MT3S-SLA40-80		40	80	52	

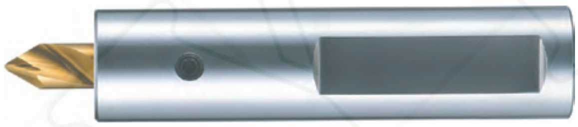
☞ MT#2, MT#4 is available upon request.

New

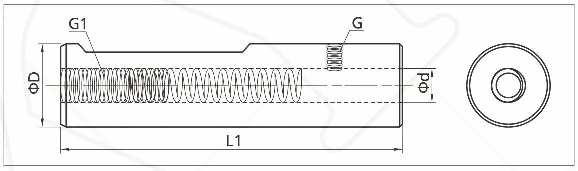
Scribing tool

New

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

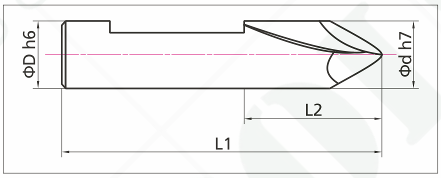


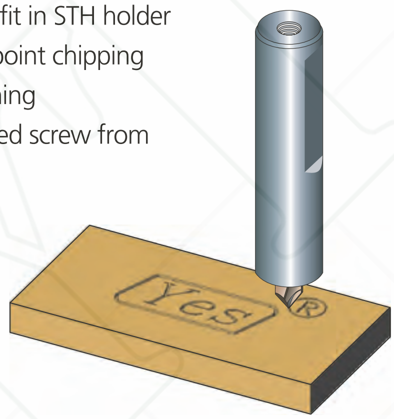
CODE No.	D(mm)	d(mm)	L1	G	G1
STH	20	8	120	M6	M8
STH-Spring	6		40		

New

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

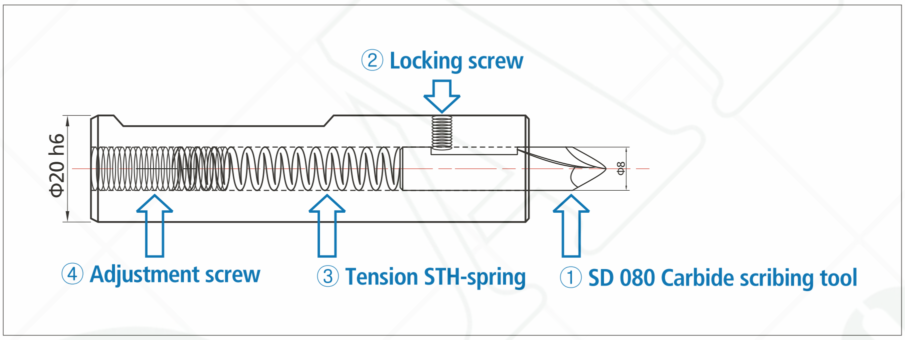
A. Push ① SD 080, Scribing tool into tool body until hiding flatted shank completely

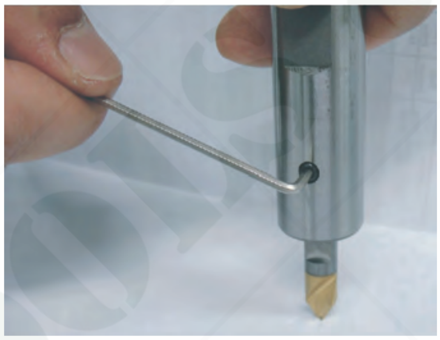
B. Lock ② Locking screw completely.

C. Insert ③ Tension STH-spring inside of tool body

D. Turn ④ Adjustment screw right-hand direction and push into the holder-end.

E. 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

A. Remove ④ Adjustment screw by left-hand direction.

B. Take out ③ Tension STH-spring from tool body.

C. Loose ② Locking screw .

D. Take out ① SD 080 Scribing tool from tool body.

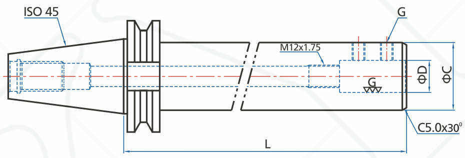
Warning ! : Be sure to locate scribing drill head lower during disassembly for safety, while tool body-end is upper position(See above photo).

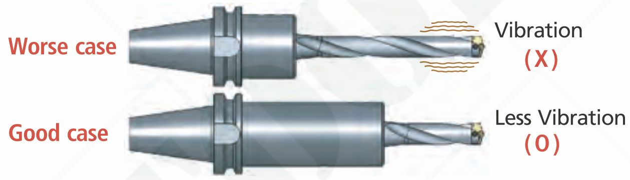
ISO 45 & HSK Extension holder for Structural

ISO45

HSK

- 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
ISO45(HSK)-SLA16-80	16	80	56	M10
ISO45(HSK)-SLA16-160		160		
ISO45(HSK)-SLA16-210		210		
ISO45(HSK)-SLA16-240		240		
ISO45(HSK)-SLA16-270		270		
ISO45(HSK)-SLA16-300		300		
ISO45(HSK)-SLA16-350		350		
ISO45(HSK)-SLA16-400		400		
ISO45(HSK)-SLA16-450		450		
ISO45(HSK)-SLA16-500		500		
ISO45(HSK)-SLA20-80	20	80		M12
ISO45(HSK)-SLA20-160		160		
ISO45(HSK)-SLA20-210		210		
ISO45(HSK)-SLA20-240		240		
ISO45(HSK)-SLA20-270		270		
ISO45(HSK)-SLA20-300		300		
ISO45(HSK)-SLA20-350		350		

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

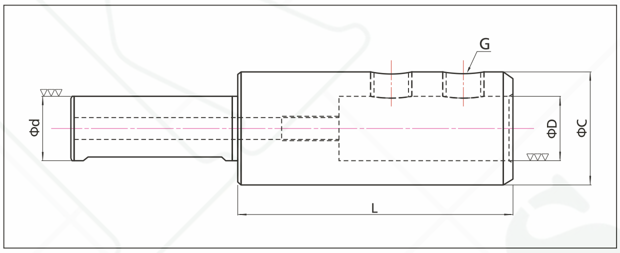
CODE No.	D	L	C	G
ISO45(HSK)-SLA32-270	32	270	56	M14
ISO45(HSK)-SLA32-300		300		
ISO45(HSK)-SLA32-350		350		
ISO45(HSK)-SLA32-400		400		
ISO45(HSK)-SLA32-450		450		
ISO45(HSK)-SLA32-500		500		
ISO45(HSK)-SLA40-90	40	90	60	
ISO45(HSK)-SLA40-160		160		
ISO45(HSK)-SLA40-210		210		
ISO45(HSK)-SLA40-240		240		
ISO45(HSK)-SLA40-270		270		
ISO45(HSK)-SLA40-300		300		
ISO45(HSK)-SLA40-350		350		
ISO45(HSK)-SLA40-400		400		
ISO45(HSK)-SLA40-450		450		
ISO45(HSK)-SLA40-500		500		

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

Extension socket

EXT

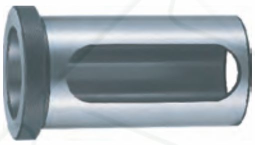
- When drill length is in short, use extension socket
- Side lock clamping
- Holding same drill shank diameter

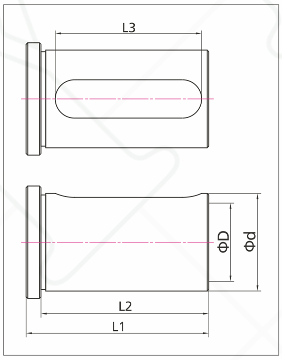


CODE No.	d(mm)	D(mm)	L(mm)	C(mm)	G
EXT16-SLA16-80	16	16	80	50	M10
EXT16-SLA16-125			125		
EXT16-SLA16-150			150		
EXT16-SLA16-200			200		
EXT16-SLA16-250			250		
EXT20-SLA20-80	20	20	80		M12
EXT20-SLA20-125			125		
EXT20-SLA20-150			150		
EXT20-SLA20-200			200		
EXT20-SLA20-250			250		
EXT25-SLA25-80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

Reduction sleeve

RSL



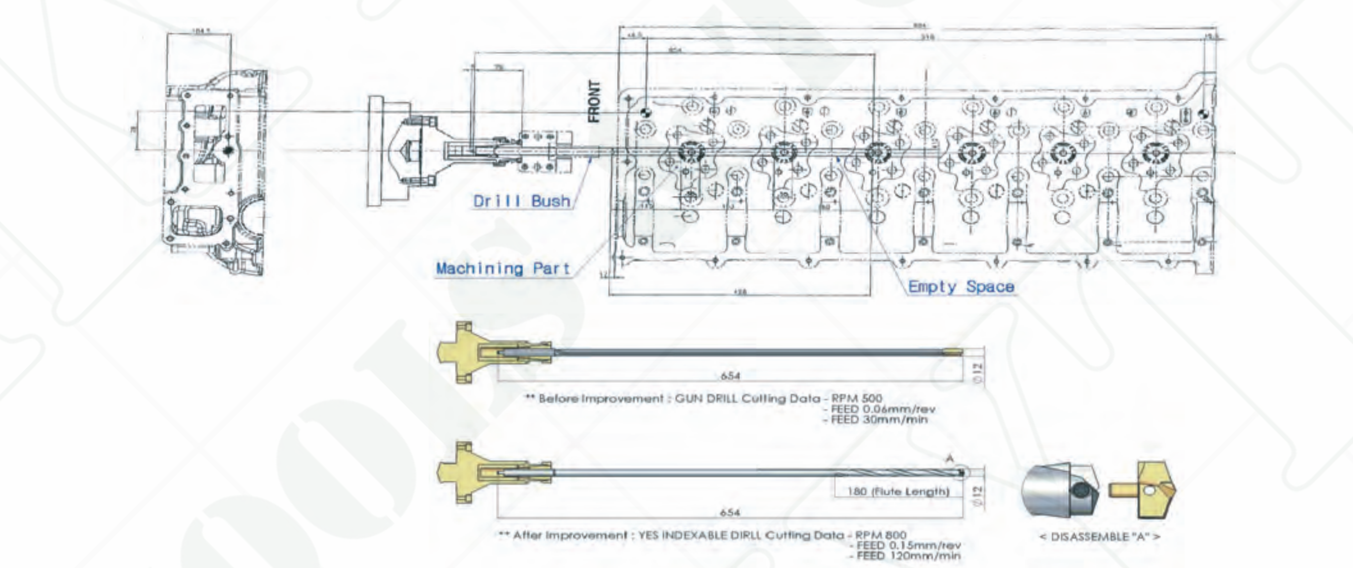


- RSL designed to use smaller drill shank in bigger holder
- Fitting KRUZ drill straight shank body easily
- Both Metric and Inch size available

CODE No.	d(mm)	D(mm)	L1	L2	L3
RSL 32-16		16			
RSL 32-20	32	20	65	59	50
RSL 32-25		25			
RSL 40-32	40	32	75	69	60
RSL 1 1/4-16		16			
RSL 1 1/4-20	1 1/4"	20	65	59	50
RSL 1 1/4-25		25			
RSL 1 1/2-32	1 1/2"	32			

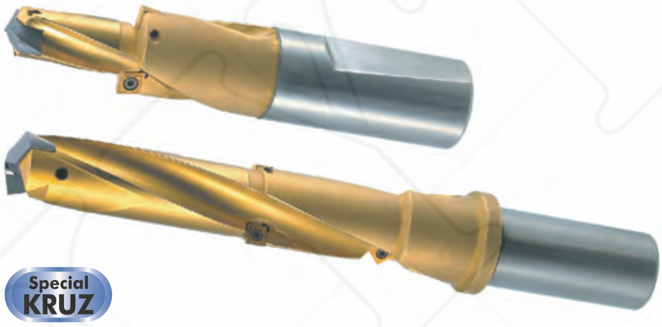
Indexable Extra-long Drill body (15xD, 20xD, 30xD)

- Alternative solution for conventional gun-drill application
- Compatible to fit all Yestool standard carbide inserts
- Drastically increased cutting speed & productivity



KRUZ special step drill body

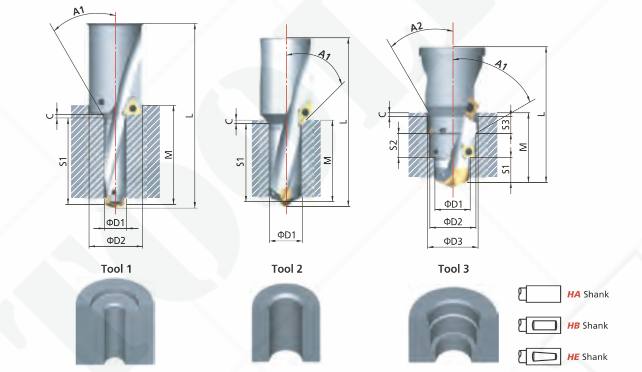
Combination drill bodies (Perform multiple operations with one tool)



Special KRUZ

- 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.

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



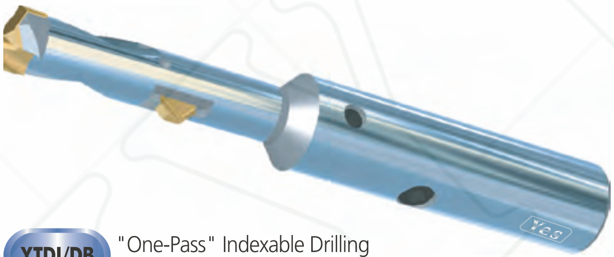
Note

More helpful information to design if provided

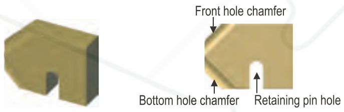
Kind of Material to be machined :
Shank style(HA, HB, HE or special) :
Type of chamfer or facing insert(if any) :
Coolant through or no coolant :
Work-piece drawing if avail. :

"One-Pass" Indexable Drilling & Deburring system

YESTOOL's Innovative combination drilling & deburring tool



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

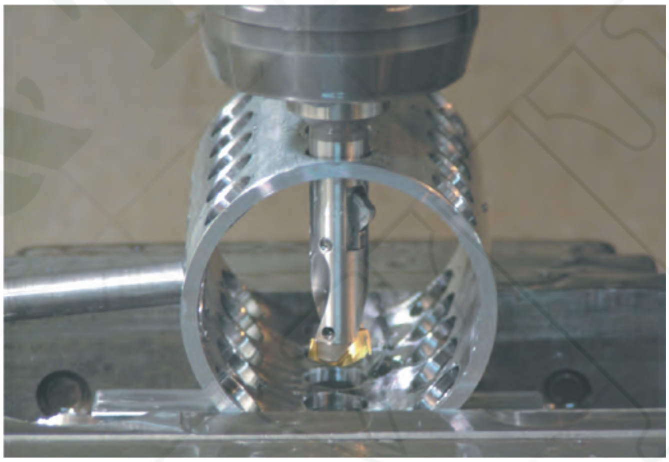


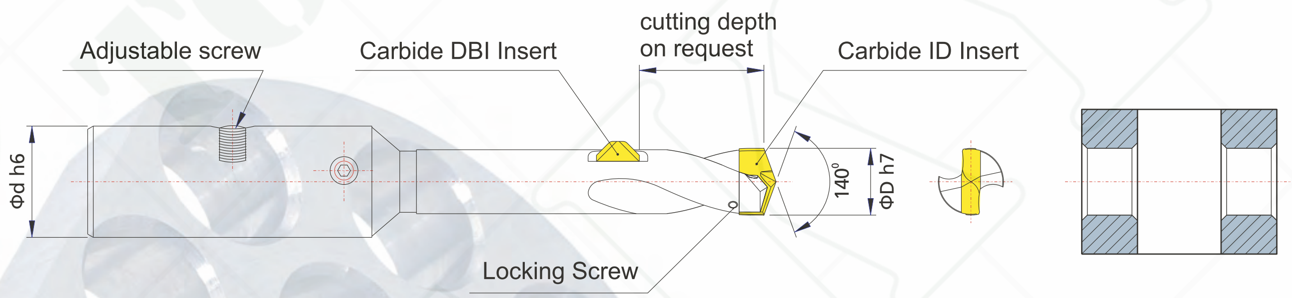
DBI Carbide Deburring Insert 45°
(TiN, TiAlN available)

IDP
IDF
ID
Standard Carbide ID Insert
(TiN, TiAlN available)

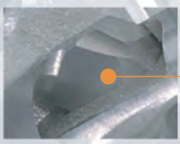
* Note : Fixed chamfer length(like C=1.0) is not available, but chamfer approximately

- 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





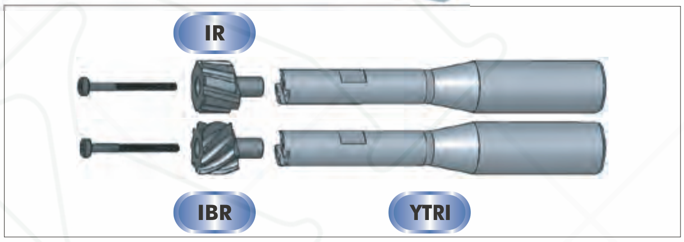
Reduce machining cost and increase productivity with YESTOOL "One-Pass" drilling system.

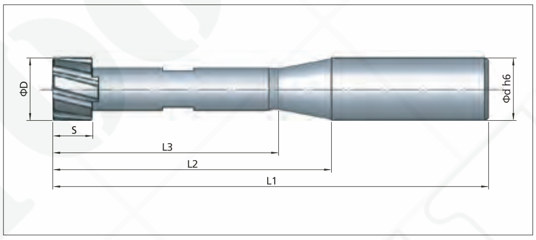


DBI insert remove the burr on the front and back side of hole.
The insert retracts automatically when the tool passes through the hole.

YTRI Indexable Reamer

- 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



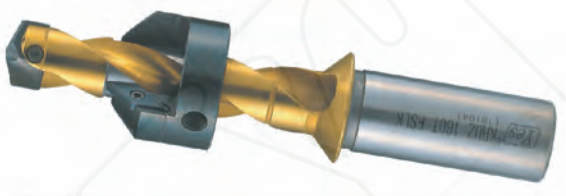


Please make required cutting depth in the □ like T, P.

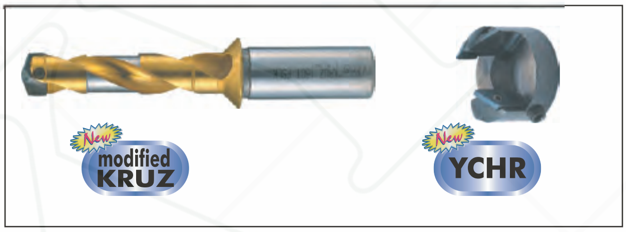
Body code No.	Shank d	S	T(3 x Dia.) L1	T(3 x Dia.) L2	T(3 x Dia.) L3	P(5 x Dia.) L1	P(5 x Dia.) L2	P(5 x Dia.) L3	Applicable IR, IBR	Cap screw M	No. of flute
YTRI 150-174 □	20	12.0	119	69	58	153	103	92	IR 150~174, IBR 150~174	M2.5x30	6
YTRI 175-199 □		13.0	129	79	65	169	119	105	IR 175~199, IBR 175~199	M2.5x30	
YTRI 200-224 □		14.7	141	91	74	185	135	118	IR 200~224, IBR 200~224	M3x30	8
YTRI 225-249 □	25	16.5	159	103	81	209	153	131	IR 225~249, IBR 225~249	M4x39	
YTRI 250-274 □		18.2	166	110	90	221	165	145	IR 250~274, IBR 250~274	M5x43	10
YTRI 275-299 □	32	20.0	185	125	98	245	185	158	IR 275~299, IBR 275~299	M5x49	
YTRI 300-324 □		22.0	192	132	105	257	197	170	IR 300~324, IBR 300~324	M6x53	
YTRI 325-349 □		23.5	200	140	113	270	210	183	IR 325~349, IBR 325~349	M6x57	
YTRI 350-374 □	40	25.2	225	155	120	300	230	195	IR 350~374, IBR 350~374	M8x61	12
YTRI 375-400 □		27.0	233	163	128	313	243	208	IR 375~400, IBR 375~400	M8x67	

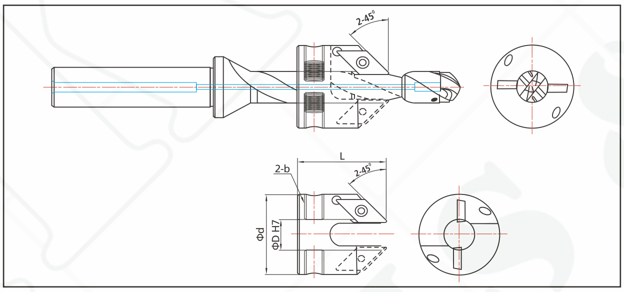
* Note : Bottom edge geometry for blind hole is available as special

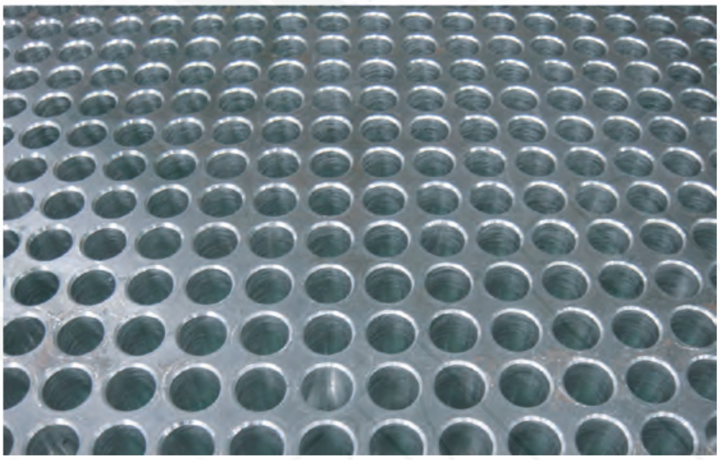
KRUZ Combination Chamfer Tool



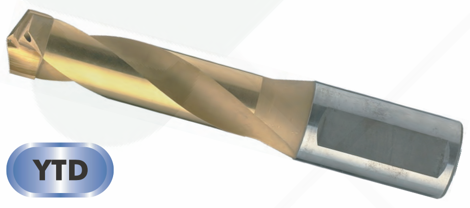
- Combination chamfer ring to fit in modified standard KRUZ body
- YCHR chamfer ring with two XCGX 1102 chamfer inserts
- Two set screws supported on the KRUZ body flute part
- Available size from KRUZ body dia.8.0~50.0mm
- Special made to order after hearing cutting depth requirement

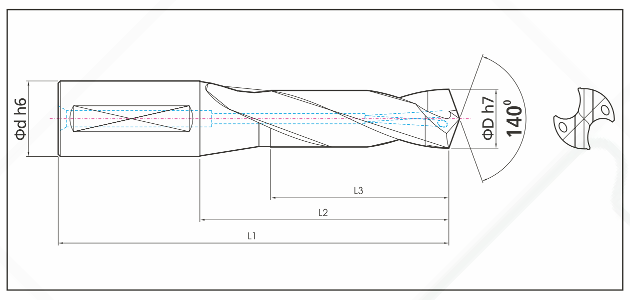






Carbide Tipped Drill, Metric





Model : YTD

- Carbide Brazed Tipped drill, HB shank, Internal coolant hole.
- 140° self-centering point for accurate hole positioning. Regular helix angle : 25°.
- Drill body consists of heat-treated tool steel and cutting edge is brazed with carbide tip.

Carbide substrate:

- Ultra-fine Micro Grain, TiN & TiAlN coated.

Application

- To perform heavy drilling operation and ideal for high productivity.
- Specially designed for powerful machine. Effective cutting depth 3xDia.
- Broad range application from general to tough material.

Code No.	D	d	L1	L2	L3
YTD 135	13.5				
YTD 136	13.6				
YTD 137	13.7				
YTD 138	13.8				
YTD 139	13.9				
YTD 140	14.0	16.0	115	67	48
YTD 141	14.1				
YTD 142	14.2				
YTD 143	14.3				
YTD 144	14.4				
YTD 145	14.5				
YTD 146	14.6				
YTD 147	14.7				
YTD 148	14.8				
YTD 149	14.9				
YTD 150	15.0				
YTD 151	15.1				
YTD 152	15.2				
YTD 153	15.3				
YTD 154	15.4				
YTD 155	15.5	20.0	130	80	59
YTD 156	15.6				
YTD 157	15.7				
YTD 158	15.8				
YTD 159	15.9				
YTD 160	16.0				
YTD 161	16.1				
YTD 162	16.2				
YTD 163	16.3				
YTD 164	16.4				
YTD 165	16.5				

Code No.	D	d	L1	L2	L3
YTD 166	16.6				
YTD 167	16.7				
YTD 168	16.8				
YTD 169	16.9				
YTD 170	17.0				
YTD 171	17.1				
YTD 172	17.2				
YTD 173	17.3				
YTD 174	17.4				
YTD 175	17.5				
YTD 176	17.6	20.0	140	90	66
YTD 177	17.7				
YTD 178	17.8				
YTD 179	17.9				
YTD 180	18.0				
YTD 181	18.1				
YTD 182	18.2				
YTD 183	18.3				
YTD 184	18.4				
YTD 185	18.5				
YTD 186	18.6				
YTD 187	18.7				
YTD 188	18.8				
YTD 189	18.9				
YTD 190	19.0				
YTD 191	19.1	25.0	155	99	73
YTD 192	19.2				
YTD 193	19.3				
YTD 194	19.4				
YTD 195	19.5				
YTD 196	19.6				

Code No.	D	d	L1	L2	L3
YTD 197	19.7				
YTD 198	19.8				
YTD 199	19.9				
YTD 200	20.0				
YTD 201	20.1				
YTD 202	20.2				
YTD 203	20.3				
YTD 204	20.4				
YTD 205	20.5				
YTD 206	20.6		155	99	73
YTD 207	20.7				
YTD 208	20.8				
YTD 209	20.9				
YTD 210	21.0				
YTD 211	21.1				
YTD 212	21.2	25.0			
YTD 213	21.3				
YTD 214	21.4				
YTD 215	21.5				
YTD 216	21.6				
YTD 217	21.7				
YTD 218	21.8				
YTD 219	21.9				
YTD 220	22.0				
YTD 221	22.1		160	104	76
YTD 222	22.2				
YTD 223	22.3				
YTD 224	22.4				
YTD 225	22.5				
YTD 226	22.6				
YTD 227	22.7				

Continued ▶▶

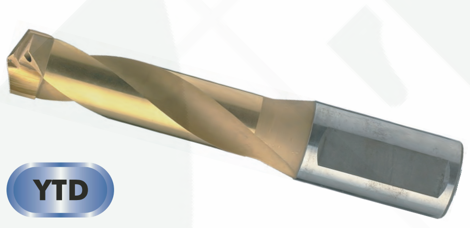
Carbide Tipped Drill, Metric

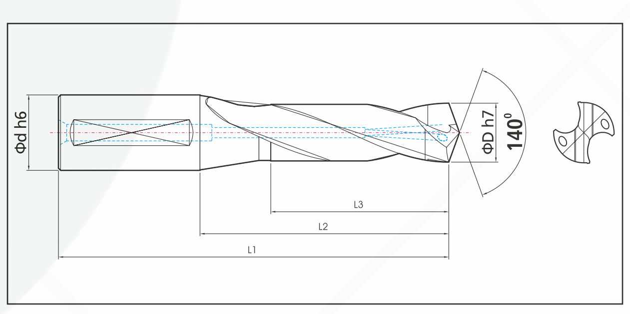
Code No.	D	d	L1	L2	L3
YTD 228	22.8				
YTD 229	22.9				
YTD 230	23.0				
YTD 231	23.1	25.0	160	104	76
YTD 232	23.2				
YTD 233	23.3				
YTD 234	23.4				
YTD 235	23.5				
YTD 236	23.6				
YTD 237	23.7				
YTD 238	23.8				
YTD 239	23.9				
YTD 240	24.0				
YTD 241	24.1				
YTD 242	24.2				
YTD 243	24.3				
YTD 244	24.4				
YTD 245	24.5				
YTD 246	24.6		170	110	79
YTD 247	24.7				
YTD 248	24.8				
YTD 249	24.9				
YTD 250	25.0				
YTD 251	25.1				
YTD 252	25.2				
YTD 253	25.3				
YTD 254	25.4				
YTD 255	25.5				
YTD 256	25.6				
YTD 257	25.7				
YTD 258	25.8				
YTD 259	25.9				
YTD 260	26.0				
YTD 261	26.1				
YTD 262	26.2				
YTD 263	26.3	32.0			
YTD 264	26.4				
YTD 265	26.5		175	115	83
YTD 266	26.6				
YTD 267	26.7				
YTD 268	26.8				
YTD 269	26.9				
YTD 270	27.0				
YTD 271	27.1				
YTD 272	27.2				
YTD 273	27.3				
YTD 274	27.4				
YTD 275	27.5				
YTD 276	27.6				
YTD 277	27.7				
YTD 278	27.8				
YTD 279	27.9				
YTD 280	28.0				
YTD 281	28.1				
YTD 282	28.2				
YTD 283	28.3		185	125	92
YTD 284	28.4				
YTD 285	28.5				
YTD 286	28.6				
YTD 287	28.7				
YTD 288	28.8				
YTD 289	28.9				
YTD 290	29.0				

Code No.	D	d	L1	L2	L3
YTD 291	29.1				
YTD 292	29.2				
YTD 293	29.3				
YTD 294	29.4				
YTD 295	29.5				
YTD 296	29.6				
YTD 297	29.7				
YTD 298	29.8	32.0	185	125	92
YTD 299	29.9				
YTD 300	30.0				
YTD 301	30.1				
YTD 302	30.2				
YTD 303	30.3				
YTD 304	30.4				
YTD 305	30.5				
YTD 306	30.6				
YTD 307	30.7				
YTD 308	30.8				
YTD 309	30.9				
YTD 310	31.0				
YTD 311	31.1				
YTD 312	31.2				
YTD 313	31.3				
YTD 314	31.4				
YTD 315	31.5		210	140	98
YTD 316	31.6				
YTD 317	31.7				
YTD 318	31.8				
YTD 319	31.9				
YTD 320	32.0				
YTD 321	32.1				
YTD 322	32.2				
YTD 323	32.3				
YTD 324	32.4				
YTD 325	32.5				
YTD 326	32.6				
YTD 327	32.7				
YTD 328	32.8				
YTD 329	32.9				
YTD 330	33.0	40.0			
YTD 331	33.1				
YTD 332	33.2				
YTD 333	33.3				
YTD 334	33.4				
YTD 335	33.5		220	150	104
YTD 336	33.6				
YTD 337	33.7				
YTD 338	33.8				
YTD 339	33.9				
YTD 340	34.0				
YTD 341	34.1				
YTD 342	34.2				
YTD 343	34.3				
YTD 344	34.4				
YTD 345	34.5				
YTD 346	34.6				
YTD 347	34.7				
YTD 348	34.8				
YTD 349	34.9		230	160	113
YTD 350	35.0				
YTD 351	35.1				
YTD 352	35.2				
YTD 353	35.3				

Code No.	D	d	L1	L2	L3
YTD 354	35.4				
YTD 355	35.5				
YTD 356	35.6				
YTD 357	35.7				
YTD 358	35.8				
YTD 359	35.9				
YTD 360	36.0				
YTD 361	36.1				
YTD 362	36.2				
YTD 363	36.3				
YTD 364	36.4		230	160	113
YTD 365	36.5				
YTD 366	36.6				
YTD 367	36.7				
YTD 368	36.8				
YTD 369	36.9				
YTD 370	37.0				
YTD 371	37.1				
YTD 372	37.2				
YTD 373	37.3				
YTD 374	37.4				
YTD 375	37.5				
YTD 376	37.6				
YTD 377	37.7				
YTD 378	37.8				
YTD 379	37.9				
YTD 380	38.0				
YTD 381	38.1				
YTD 382	38.2				
YTD 383	38.3				
YTD 384	38.4				
YTD 385	38.5	40.0	240	170	119
YTD 386	38.6				
YTD 387	38.7				
YTD 388	38.8				
YTD 389	38.9				
YTD 390	39.0				
YTD 391	39.1				
YTD 392	39.2				
YTD 393	39.3				
YTD 394	39.4				
YTD 395	39.5				
YTD 396	39.6				
YTD 397	39.7				
YTD 398	39.8				
YTD 399	39.9				
YTD 400	40.0				
YTD 401	40.1				
YTD 402	40.2				
YTD 403	40.3				
YTD 404	40.4				
YTD 405	40.5		250	180	122
YTD 406	40.6				
YTD 407	40.7				
YTD 408	40.8				
YTD 409	40.9				
YTD 410	41.0				
YTD 411	41.1				
YTD 412	41.2				
YTD 413	41.3				
YTD 414	41.4				
YTD 415	41.5				

Carbide Tipped Drill, Inch





* Inch YTD available upon request only.

Model : YTD

- Carbide Brazed Tipped drill, HB shank, Internal coolant hole.
- 140° self-centering point for accurate hole positioning. Regular helix angle : 25°.
- Drill body consists of heat-treated tool steel and cutting edge is brazed with carbide tip.

Carbide substrate:

- Ultra-fine Micro Grain, TiN & TiAlN coated.

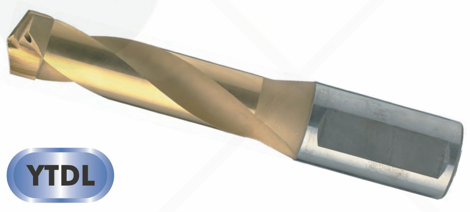
Application

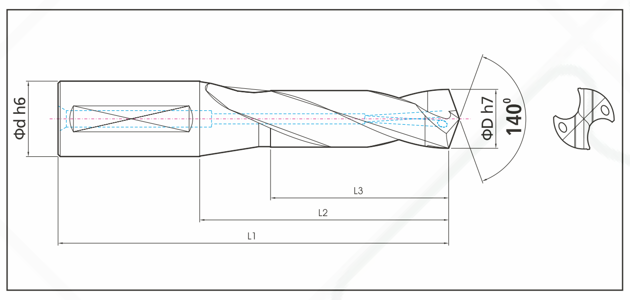
- To perform heavy drilling operation and ideal for high productivity.
- Specially designed for powerful machine. Effective cutting depth 3xDia.
- Broad range application from general to tough material.

Code No.	D	d	L1	L2	L3
YTD .5310	0.531				
YTD .5460	0.546	0.625	4.52	2.63	1.88
YTD .5620	0.562				
YTD .5780	0.578				
YTD .5930	0.593				
YTD .6090	0.609		5.11	3.14	2.32
YTD .6250	0.625				
YTD .6400	0.640				
YTD .6560	0.656	0.750			
YTD .6710	0.671				
YTD .6870	0.687		5.51	3.54	2.59
YTD .7030	0.703				
YTD .7180	0.718				
YTD .7340	0.734				
YTD .7500	0.750				
YTD .7650	0.765				
YTD .7810	0.781				
YTD .7960	0.796		6.10	3.89	2.87
YTD .8120	0.812				
YTD .8280	0.828	1.000			
YTD .8430	0.843				
YTD .8590	0.859				
YTD .8750	0.875				
YTD .8900	0.890		6.29	4.09	2.99
YTD .9060	0.906				
YTD .9210	0.921				

Code No.	D	d	L1	L2	L3
YTD .9370	0.937				
YTD .9530	0.953				
YTD .9680	0.968		6.69	4.33	3.11
YTD .9840	0.984				
YTD1 .0000	1.000				
YTD1 .0150	1.015				
YTD1 .0310	1.031				
YTD1 .0460	1.046		6.88	4.52	3.26
YTD1 .0620	1.062	1.250			
YTD1 .0780	1.078				
YTD1 .0930	1.093				
YTD1 .1090	1.109				
YTD1 .1250	1.125				
YTD1 .1400	1.140		7.28	4.92	3.62
YTD1 .1560	1.156				
YTD1 .1710	1.171				
YTD1 .1870	1.187				
YTD1 .2500	1.250		8.26	5.51	3.85
YTD1 .3120	1.312		8.66	5.90	4.09
YTD1 .3430	1.343				
YTD1 .3750	1.375				
YTD1 .4210	1.421	1.500	9.05	6.29	4.44
YTD1 .4370	1.437				
YTD1 .5000	1.500		9.44	6.69	4.68
YTD1 .5620	1.562		9.84	7.08	4.80
YTD1 .6250	1.625				

Carbide Tipped Drill, Long Series, Metric





Model : YTDL

- Carbide Brazed Tipped drill, HB shank, Internal coolant hole, long series.
- 140° self-centering point for accurate hole positioning. Regular helix angle : 25°.
- Drill body consists of heat-treated tool steel and cutting edge is brazed with carbide tip.

Carbide substrate:

- Ultra-fine Micro Grain, TiN & TiAlN coated.

Application

- To perform heavy drilling operation and ideal for high productivity.
- Specially designed for powerful machine. Effective cutting depth 5xDia.
- Broad range application from general to tough material.

Code No.	D	d	L1	L2	L3
YTDL 135	13.5	16.0	145	97	73
YTDL 136	13.6				
YTDL 137	13.7				
YTDL 138	13.8				
YTDL 139	13.9				
YTDL 140	14.0				
YTDL 141	14.1				
YTDL 142	14.2				
YTDL 143	14.3				
YTDL 144	14.4				
YTDL 145	14.5				
YTDL 146	14.6	20.0	165	115	94
YTDL 147	14.7				
YTDL 148	14.8				
YTDL 149	14.9				
YTDL 150	15.0				
YTDL 151	15.1				
YTDL 152	15.2				
YTDL 153	15.3				
YTDL 154	15.4				
YTDL 155	15.5				
YTDL 156	15.6				
YTDL 157	15.7				
YTDL 158	15.8				
YTDL 159	15.9				
YTDL 160	16.0				
YTDL 161	16.1				
YTDL 162	16.2				
YTDL 163	16.3				
YTDL 164	16.4				
YTDL 165	16.5				

Code No.	D	d	L1	L2	L3
YTDL 166	16.6	20.0	175	125	101
YTDL 167	16.7				
YTDL 168	16.8				
YTDL 169	16.9				
YTDL 170	17.0				
YTDL 171	17.1				
YTDL 172	17.2				
YTDL 173	17.3				
YTDL 174	17.4				
YTDL 175	17.5				
YTDL 176	17.6				
YTDL 177	17.7				
YTDL 178	17.8				
YTDL 179	17.9				
YTDL 180	18.0				
YTDL 181	18.1				
YTDL 182	18.2				
YTDL 183	18.3				
YTDL 184	18.4				
YTDL 185	18.5				
YTDL 186	18.6	25.0	195	139	112
YTDL 187	18.7				
YTDL 188	18.8				
YTDL 189	18.9				
YTDL 190	19.0				
YTDL 191	19.1				
YTDL 192	19.2				
YTDL 193	19.3				
YTDL 194	19.4				
YTDL 195	19.5				
YTDL 196	19.6				

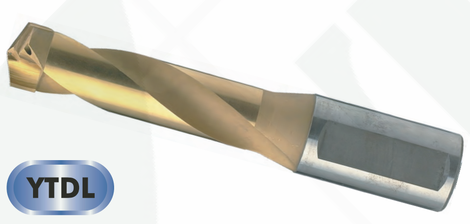
Code No.	D	d	L1	L2	L3
YTDL 197	19.7	25.0	195	139	112
YTDL 198	19.8				
YTDL 199	19.9				
YTDL 200	20.0				
YTDL 201	20.1				
YTDL 202	20.2				
YTDL 203	20.3				
YTDL 204	20.4				
YTDL 205	20.5				
YTDL 206	20.6				
YTDL 207	20.7				
YTDL 208	20.8				
YTDL 209	20.9				
YTDL 210	21.0				
YTDL 211	21.1				
YTDL 212	21.2				
YTDL 213	21.3				
YTDL 214	21.4				
YTDL 215	21.5				
YTDL 216	21.6		210	154	124
YTDL 217	21.7				
YTDL 218	21.8				
YTDL 219	21.9				
YTDL 220	22.0				
YTDL 221	22.1				
YTDL 222	22.2				
YTDL 223	22.3				
YTDL 224	22.4				
YTDL 225	22.5				
YTDL 226	22.6				
YTDL 227	22.7				

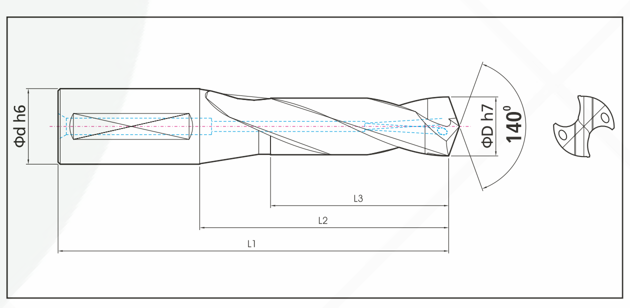
Code No.	D	d	L1	L2	L3
YTDL 228	22.8	25.0	210	154	124
YTDL 229	22.9				
YTDL 230	23.0				
YTDL 231	23.1				
YTDL 232	23.2				
YTDL 233	23.3				
YTDL 234	23.4				
YTDL 235	23.5				
YTDL 236	23.6	32.0	225	165	133
YTDL 237	23.7				
YTDL 238	23.8				
YTDL 239	23.9				
YTDL 240	24.0				
YTDL 241	24.1				
YTDL 242	24.2				
YTDL 243	24.3				
YTDL 244	24.4				
YTDL 245	24.5				
YTDL 246	24.6				
YTDL 247	24.7				
YTDL 248	24.8				
YTDL 249	24.9				
YTDL 250	25.0				
YTDL 251	25.1				
YTDL 252	25.2				
YTDL 253	25.3				
YTDL 254	25.4				
YTDL 255	25.5				
YTDL 256	25.6		235	175	141
YTDL 257	25.7				
YTDL 258	25.8				
YTDL 259	25.9				
YTDL 260	26.0				
YTDL 261	26.1				
YTDL 262	26.2				
YTDL 263	26.3				
YTDL 264	26.4				
YTDL 265	26.5				
YTDL 266	26.6				
YTDL 267	26.7				
YTDL 268	26.8				
YTDL 269	26.9				
YTDL 270	27.0				
YTDL 271	27.1				
YTDL 272	27.2				
YTDL 273	27.3				
YTDL 274	27.4				
YTDL 275	27.5				
YTDL 276	27.6		245	185	148
YTDL 277	27.7				
YTDL 278	27.8				
YTDL 279	27.9				
YTDL 280	28.0				
YTDL 281	28.1				
YTDL 282	28.2				
YTDL 283	28.3				
YTDL 284	28.4				
YTDL 285	28.5				
YTDL 286	28.6				
YTDL 287	28.7				
YTDL 288	28.8				
YTDL 289	28.9				
YTDL 290	29.0				

Code No.	D	d	L1	L2	L3
YTDL 291	29.1	32.0	245	185	148
YTDL 292	29.2				
YTDL 293	29.3				
YTDL 294	29.4				
YTDL 295	29.5				
YTDL 296	29.6		255	195	157
YTDL 297	29.7				
YTDL 298	29.8				
YTDL 299	29.9				
YTDL 300	30.0				
YTDL 301	30.1				
YTDL 302	30.2				
YTDL 303	30.3				
YTDL 304	30.4				
YTDL 305	30.5				
YTDL 306	30.6	40.0	280	210	172
YTDL 307	30.7				
YTDL 308	30.8				
YTDL 309	30.9				
YTDL 310	31.0				
YTDL 311	31.1				
YTDL 312	31.2				
YTDL 313	31.3				
YTDL 314	31.4				
YTDL 315	31.5				
YTDL 316	31.6				
YTDL 317	31.7				
YTDL 318	31.8				
YTDL 319	31.9				
YTDL 320	32.0				
YTDL 321	32.1				
YTDL 322	32.2				
YTDL 323	32.3				
YTDL 324	32.4				
YTDL 325	32.5				
YTDL 326	32.6		290	220	177
YTDL 327	32.7				
YTDL 328	32.8				
YTDL 329	32.9				
YTDL 330	33.0				
YTDL 331	33.1				
YTDL 332	33.2				
YTDL 333	33.3				
YTDL 334	33.4				
YTDL 335	33.5				
YTDL 336	33.6				
YTDL 337	33.7				
YTDL 338	33.8				
YTDL 339	33.9				
YTDL 340	34.0				
YTDL 341	34.1				
YTDL 342	34.2				
YTDL 343	34.3				
YTDL 344	34.4				
YTDL 345	34.5				
YTDL 346	34.6		300	230	183
YTDL 347	34.7				
YTDL 348	34.8				
YTDL 349	34.9				
YTDL 350	35.0				
YTDL 351	35.1				
YTDL 352	35.2				
YTDL 353	35.3				

Code No.	D	d	L1	L2	L3
YTDL 354	35.4	40.0	300	230	183
YTDL 355	35.5				
YTDL 356	35.6				
YTDL 357	35.7				
YTDL 358	35.8				
YTDL 359	35.9				
YTDL 360	36.0				
YTDL 361	36.1				
YTDL 362	36.2				
YTDL 363	36.3				
YTDL 364	36.4				
YTDL 365	36.5				
YTDL 366	36.6		315	245	193
YTDL 367	36.7				
YTDL 368	36.8				
YTDL 369	36.9				
YTDL 370	37.0				
YTDL 371	37.1				
YTDL 372	37.2				
YTDL 373	37.3				
YTDL 374	37.4				
YTDL 375	37.5				
YTDL 376	37.6				
YTDL 377	37.7				
YTDL 378	37.8				
YTDL 379	37.9				
YTDL 380	38.0				
YTDL 381	38.1				
YTDL 382	38.2				
YTDL 383	38.3				
YTDL 384	38.4				
YTDL 385	38.5				
YTDL 386	38.6		325	255	203
YTDL 387	38.7				
YTDL 388	38.8				
YTDL 389	38.9				
YTDL 390	39.0				
YTDL 391	39.1				
YTDL 392	39.2				
YTDL 393	39.3				
YTDL 394	39.4				
YTDL 395	39.5				
YTDL 396	39.6				
YTDL 397	39.7				
YTDL 398	39.8				
YTDL 399	39.9				
YTDL 400	40.0				
YTDL 401	40.1				
YTDL 402	40.2				
YTDL 403	40.3				
YTDL 404	40.4				
YTDL 405	40.5				
YTDL 406	40.6				
YTDL 407	40.7				
YTDL 408	40.8				
YTDL 409	40.9				
YTDL 410	41.0				
YTDL 411	41.1				
YTDL 412	41.2				
YTDL 413	41.3				
YTDL 414	41.4				
YTDL 415	41.5				

Carbide Tipped Drill, Long Series, Inch





∗ Inch YTD available upon request only.

Model : YTDL

- Carbide Brazed Tipped drill, HB shank, Internal coolant hole, long series.
- 140° self-centering point for accurate hole positioning. Regular helix angle : 25°.
- Drill body consists of heat-treated tool steel and cutting edge is brazed with carbide tip.

Carbide substrate:

- Ultra-fine Micro Grain, TiN & TiAlN coated.

Application

- To perform heavy drilling operation and ideal for high productivity.
- Specially designed for powerful machine. Effective cutting depth 5xDia.
- Broad range application from general to tough material.

Inch Size

Code No.	D	d	L1	L2	L3
YTDL .5310	0.531	0.625	5.70	3.81	2.87
YTDL .5460	0.546				
YTDL .5620	0.562				
YTDL .5780	0.578				
YTDL .5930	0.593	0.750	6.49	4.52	3.70
YTDL .6090	0.609				
YTDL .6250	0.625				
YTDL .6400	0.640				
YTDL .6560	0.656		6.88	4.92	3.97
YTDL .6710	0.671				
YTDL .6870	0.687				
YTDL .7030	0.703				
YTDL .7180	0.718				
YTDL .7340	0.734	1.000	7.67	5.47	4.40
YTDL .7500	0.750				
YTDL .7650	0.765				
YTDL .7810	0.781				
YTDL .7960	0.796				
YTDL .8120	0.812				
YTDL .8280	0.828				
YTDL .8430	0.843				
YTDL .8590	0.859		8.26	6.06	4.88
YTDL .8750	0.875				
YTDL .8900	0.890				
YTDL .9060	0.906				
YTDL .9210	0.921				

Inch Size

Code No.	D	d	L1	L2	L3
YTDL .9370	0.937	1.250	8.85	6.49	5.23
YTDL .9530	0.953				
YTDL .9680	0.968				
YTDL .9840	0.984				
YTDL 1.0000	1.000				
YTDL 1.0150	1.015		9.25	6.88	5.55
YTDL 1.0310	1.031				
YTDL 1.0460	1.046				
YTDL 1.0620	1.062				
YTDL 1.0780	1.078				
YTDL 1.0930	1.093		9.46	7.28	5.82
YTDL 1.1090	1.109				
YTDL 1.1250	1.125				
YTDL 1.1400	1.140				
YTDL 1.1560	1.156				
YTDL 1.1710	1.171		10.03	7.67	6.18
YTDL 1.1870	1.187				
YTDL 1.2500	1.250	1.500	11.02	8.26	6.77
YTDL 1.3120	1.312		11.41	8.66	6.96
YTDL 1.3430	1.343				
YTDL 1.3750	1.375		11.81	9.05	7.20
YTDL 1.4210	1.421				
YTDL 1.4370	1.437				
YTDL 1.5000	1.500		12.40	9.64	7.59
YTDL 1.5620	1.562		12.79	10.03	7.99
YTDL .6250	1.625				