

Tools for Steel Structures



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.

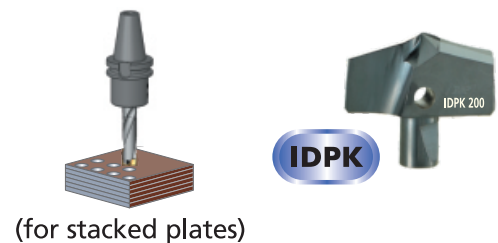
IDFK Carbide insert

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



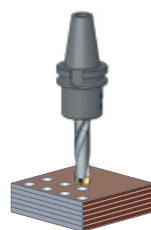
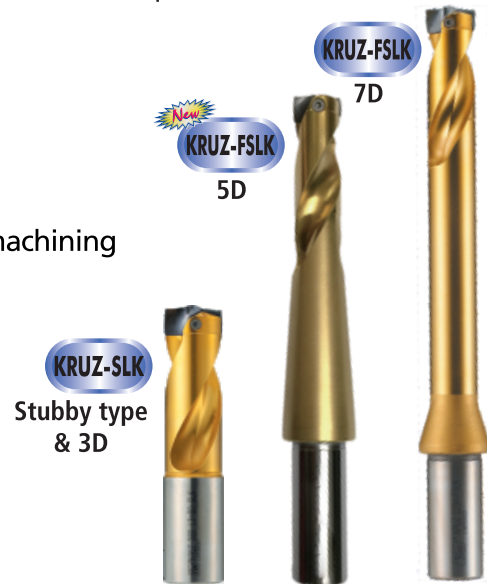
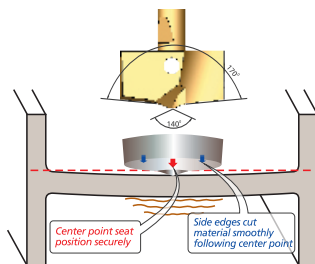
IDPK Carbide insert

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

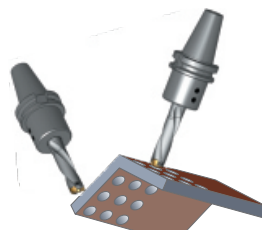


KRUZ-SLK Drill body

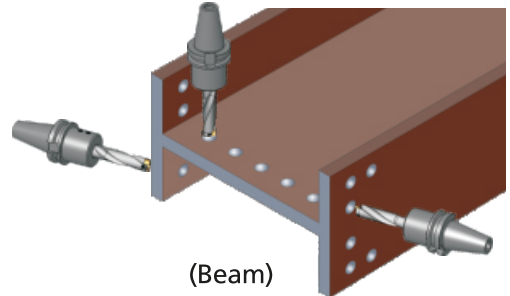
- Rigid drill body made of special premium steel and heat treated
- TiN coated body to enable longer tool life and higher lubricity
- Special flute design to increase faster chip's ejection rate
- Enabling to mount 0.5mm inclusive both IDFK & IDPK inserts
- Stubby length to perform maximum drilling ability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



(Plate)

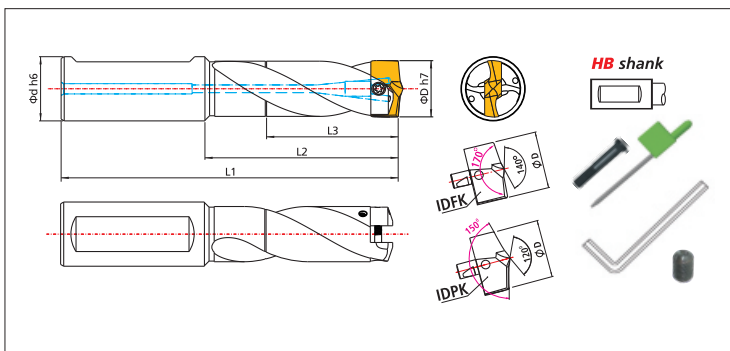


(Angle)



(Beam)





Exclusively designed for Structural machining

Hole (Φ) mm	Body Code Stubby type	Dimension			Body Code 3D	Dimension			Shank Φd (L)							
		L1	L2	L3		L1	L2	L3								
12.0~12.4	KRUZ 120 L3=50 SLK	110	62		KRUZ 120T SLK	105	57	50	16 (48)	IDFK 120~124 IDPK 120~124 IDFK 125~129 IDPK 125~129 IDFK 130~134 IDPK 130~134 IDFK 135~139 IDPK 135~139 IDFK 140~144 IDPK 140~144 IDFK 145~149 IDPK 145~149 IDFK 150~154 IDPK 150~154	CS 120 -135 SL	 Torque 0.6Nm (Max)	M2.5x4	1.3mm		
12.5~12.9	KRUZ 125 L3=50 SLK			KRUZ 125T SLK	110	62										
13.0~13.4	KRUZ 130 L3=50 SLK			KRUZ 130T SLK												
13.5~13.9	KRUZ 135 L3=50 SLK			KRUZ 135T SLK	115	67										
14.0~14.4	KRUZ 140 L3=50 SLK			KRUZ 140T SLK												
14.5~14.9	KRUZ 145 L3=50 SLK			KRUZ 145T SLK												
15.0~15.4	KRUZ 150 L3=50 SLK	115	65		KRUZ 150T SLK	125	75	60	20 (50)	IDFK 155~159 IDPK 155~159 IDFK 160~164 IDPK 160~164 IDFK 165~169 IDPK 165~169 IDFK 170~174 IDPK 170~174 IDFK 175~179 IDPK 175~179 IDFK 180~184 IDPK 180~184 IDFK 185~189 IDPK 185~189 IDFK 190~194 IDPK 190~194 IDFK 195~199 IDPK 195~199	CS 140 -155 SL	 Torque 0.9Nm (Max)	M2.5x4	1.3mm		
15.5~15.9	KRUZ 155 L3=50 SLK			KRUZ 155T SLK	130	80										
16.0~16.4	KRUZ 160 L3=50 SLK			KRUZ 160T SLK												
16.5~16.9	KRUZ 165 L3=50 SLK			KRUZ 165T SLK	140	90										
17.0~17.4	KRUZ 170 L3=50 SLK			KRUZ 170T SLK												
17.5~17.9	KRUZ 175 L3=50 SLK			KRUZ 175T SLK												
18.0~18.4	KRUZ 180 L3=50 SLK	118	68		KRUZ 180T SLK	140	90	70	25 (56)	IDFK 200~204 IDPK 200~204 IDFK 205~209 IDPK 205~209 IDFK 210~214 IDPK 210~214 IDFK 215~219 IDPK 215~219 IDFK 220~224 IDPK 220~224 IDFK 225~229 IDPK 225~229 IDFK 230~234 IDPK 230~234 IDFK 235~239 IDPK 235~239	CS 180 -195 SL	 Torque 1.5Nm (Max)	M3x6	1.5mm		
18.5~18.9	KRUZ 185 L3=50 SLK			KRUZ 185T SLK												
19.0~19.4	KRUZ 190 L3=50 SLK			KRUZ 190T SLK												
19.5~19.9	KRUZ 195 L3=50 SLK			KRUZ 195T SLK												
20.0~20.4	KRUZ 200 L3=50 SLK			KRUZ 200T SLK	150										94	
20.5~20.9	KRUZ 205 L3=50 SLK			KRUZ 205T SLK												
21.0~21.4	KRUZ 210 L3=50 SLK	130	74		KRUZ 210T SLK	160	104	80	32 (60)	IDFK 250~254 IDPK 250~254 IDFK 255~259 IDPK 255~259 IDFK 260~264 IDPK 260~264 IDFK 265~269 IDPK 265~269 IDFK 270~274 IDPK 270~274 IDFK 275~279 IDPK 275~279 IDFK 280~284 IDPK 280~284 IDFK 285~289 IDPK 285~289 IDFK 290~294 IDPK 290~294 IDFK 295~299 IDPK 295~299	CS 200 -215 SL	 Torque 1.5Nm (Max)	M3x6	1.5mm		
21.5~21.9	KRUZ 215 L3=50 SLK			KRUZ 215T SLK												
22.0~22.4	KRUZ 220 L3=50 SLK			KRUZ 220T SLK												
22.5~22.9	KRUZ 225 L3=50 SLK			KRUZ 225T SLK												
23.0~23.4	KRUZ 230 L3=50 SLK			KRUZ 230T SLK												
23.5~23.9	KRUZ 235 L3=50 SLK			KRUZ 235T SLK												
24.0~24.4	KRUZ 240 L3=50 SLK	136	76		KRUZ 240T SLK	170	110	84	32 (60)	IDFK 240~244 IDPK 240~244 IDFK 245~249 IDPK 245~249 IDFK 250~254 IDPK 250~254 IDFK 255~259 IDPK 255~259 IDFK 260~264 IDPK 260~264 IDFK 265~269 IDPK 265~269 IDFK 270~274 IDPK 270~274 IDFK 275~279 IDPK 275~279 IDFK 280~284 IDPK 280~284 IDFK 285~289 IDPK 285~289 IDFK 290~294 IDPK 290~294 IDFK 295~299 IDPK 295~299	CS 240 -255 SL	 Torque 1.5Nm (Max)	M3x6	1.5mm		
24.5~24.9	KRUZ 245 L3=50 SLK			KRUZ 245T SLK												
25.0~25.4	KRUZ 250 L3=50 SLK			KRUZ 250T SLK												
25.5~25.9	KRUZ 255 L3=50 SLK			KRUZ 255T SLK												
26.0~26.4	KRUZ 260 L3=50 SLK			KRUZ 260T SLK	180										120	90
26.5~26.9	KRUZ 265 L3=50 SLK			KRUZ 265T SLK												
27.0~27.4	KRUZ 270 L3=50 SLK	140	80		KRUZ 270T SLK	190	130	100	32 (60)	IDFK 270~274 IDPK 270~274 IDFK 275~279 IDPK 275~279 IDFK 280~284 IDPK 280~284 IDFK 285~289 IDPK 285~289 IDFK 290~294 IDPK 290~294 IDFK 295~299 IDPK 295~299	CS 260 -275 SL	 Torque 3.5Nm (Max)	M4x8	2.0mm		
27.5~27.9	KRUZ 275 L3=50 SLK			KRUZ 275T SLK												
28.0~28.4	KRUZ 280 L3=50 SLK			KRUZ 280T SLK												
28.5~28.9	KRUZ 285 L3=50 SLK			KRUZ 285T SLK												
29.0~29.4	KRUZ 290 L3=50 SLK			KRUZ 290T SLK												
29.5~29.9	KRUZ 295 L3=50 SLK			KRUZ 295T SLK												

☞ Size not shown on above is available upon request.



KRUIZ "K" series Stubby type & 3D drill body & insert, Metric

Exclusively designed for Structural machining

Hole (Φ) mm	Body Code Stubby type	Dimension			Body Code 3D	Dimension			Shank Ød (L)	 IDFK 	 Cap Screw	 Torx driver	 Set Screw	 L-wrench
		L1	L2	L3		L1	L2	L3						
30.0~30.4	KRUZ 300 L3=70 SLK	155	95	70	KRUZ 300T SLK	200	140	110	32 (60)	IDFK 300~304 IDPK 300~304	CS 300 ~315 SL		M4x8	2.0mm
30.5~30.9	KRUZ 305 L3=70 SLK				KRUZ 305T SLK					IDFK 305~309 IDPK 305~309				
31.0~31.4	KRUZ 310 L3=70 SLK				KRUZ 310T SLK					IDFK 310~314 IDPK 310~314				
31.5~31.9	KRUZ 315 L3=70 SLK				KRUZ 315T SLK	IDFK 315~319 IDPK 315~319								
32.0~32.4	KRUZ 320 L3=70 SLK				KRUZ 320T SLK	210	150			IDFK 320~324 IDPK 320~324				
32.5~32.9	KRUZ 325 L3=70 SLK				KRUZ 325T SLK						IDFK 325~329 IDPK 325~329			
33.0~33.4	KRUZ 330 L3=70 SLK				KRUZ 330T SLK								IDFK 330~334 IDPK 330~334	
33.5~33.9	KRUZ 335 L3=70 SLK				KRUZ 335T SLK	IDFK 335~339 IDPK 335~339	CS 320 ~355 SL							
34.0~34.4	KRUZ 340 L3=80 SLK				KRUZ 340T SLK	230					160		120	
34.5~34.9	KRUZ 345 L3=80 SLK	KRUZ 345T SLK	IDFK 345~349 IDPK 345~349											
35.0~35.4	KRUZ 350 L3=80 SLK	KRUZ 350T SLK	IDFK 350~354 IDPK 350~354											
35.5~35.9	KRUZ 355 L3=80 SLK	KRUZ 355T SLK	IDFK 355~359 IDPK 355~359	CS 360 ~395 SL										
36.0~36.4	KRUZ 360 L3=80 SLK	KRUZ 360T SLK	250		180	130	IDFK 360~364 IDPK 360~364							
36.5~36.9	KRUZ 365 L3=80 SLK	KRUZ 365T SLK					IDFK 365~369 IDPK 365~369							
37.0~37.4	KRUZ 370 L3=80 SLK	KRUZ 370T SLK					IDFK 370~374 IDPK 370~374							
37.5~37.9	KRUZ 375 L3=80 SLK	KRUZ 375T SLK	250		180	137	IDFK 375~379 IDPK 375~379							
38.0~38.4	KRUZ 380 L3=80 SLK	KRUZ 380T SLK					IDFK 380~384 IDPK 380~384							
38.5~38.9	KRUZ 385 L3=80 SLK	KRUZ 385T SLK					IDFK 385~389 IDPK 385~389							
39.0~39.4	KRUZ 390 L3=80 SLK	KRUZ 390T SLK	250		180	137	IDFK 390~394 IDPK 390~394							
39.5~39.9	KRUZ 395 L3=80 SLK	KRUZ 395T SLK					IDFK 395~399 IDPK 395~399							
40.0~40.4	KRUZ 400 L3=80 SLK	KRUZ 400T SLK		270			200	143	IDFK 400~404 IDPK 400~404					
40.5~40.9	KRUZ 405 L3=80 SLK	KRUZ 405T SLK	IDFK 405~409 IDPK 405~409											
41.0~41.4	KRUZ 410 L3=80 SLK	KRUZ 410T SLK	IDFK 410~414 IDPK 410~414											
41.5~41.9	KRUZ 415 L3=80 SLK	KRUZ 415T SLK	270	200	150	IDFK 415~419 IDPK 415~419								
42.0~42.4	KRUZ 420 L3=80 SLK	KRUZ 420T SLK				IDFK 420~424 IDPK 420~424								
42.5~42.9	KRUZ 425 L3=80 SLK	KRUZ 425T SLK				IDFK 425~429 IDPK 425~429								
43.0~43.4	KRUZ 430 L3=80 SLK	KRUZ 430T SLK	270	200	150	IDFK 430~434 IDPK 430~434								
43.5~43.9	KRUZ 435 L3=80 SLK	KRUZ 435T SLK				IDFK 435~439 IDPK 435~439								
44.0~44.4	KRUZ 440 L3=80 SLK	KRUZ 440T SLK				280	210	158	IDFK 440~444 IDPK 440~444					
44.5~44.9	KRUZ 445 L3=80 SLK	KRUZ 445T SLK	IDFK 445~449 IDPK 445~449											
45.0~45.4	KRUZ 450 L3=80 SLK	KRUZ 450T SLK	IDFK 450~454 IDPK 450~454											
45.5~45.9	KRUZ 455 L3=80 SLK	KRUZ 455T SLK	280	210	165	IDFK 455~459 IDPK 455~459								
46.0~46.4	KRUZ 460 L3=80 SLK	KRUZ 460T SLK				IDFK 460~464 IDPK 460~464								
46.5~46.9	KRUZ 465 L3=80 SLK	KRUZ 465T SLK				IDFK 465~469 IDPK 465~469								
47.0~47.4	KRUZ 470 L3=80 SLK	KRUZ 470T SLK	280	210	165	IDFK 470~474 IDPK 470~474								
47.5~47.9	KRUZ 475 L3=80 SLK	KRUZ 475T SLK				IDFK 475~479 IDPK 475~479								
48.0~48.4	KRUZ 480 L3=90 SLK	KRUZ 480T SLK				300	230	172	IDFK 480~484 IDPK 480~484					
48.5~48.9	KRUZ 485 L3=90 SLK	KRUZ 485T SLK	IDFK 485~489 IDPK 485~489											
49.0~49.4	KRUZ 490 L3=90 SLK	KRUZ 490T SLK	IDFK 490~494 IDPK 490~494											
49.5~49.9	KRUZ 495 L3=90 SLK	KRUZ 495T SLK	300	230	172	IDFK 495~499 IDPK 495~499								
50.0~50.4	KRUZ 500 L3=90 SLK	KRUZ 500T SLK				IDFK 500~504 IDPK 500~504								

KRUZ "K" series drill body & insert, Inch



KRUZ-SLK

IDFK



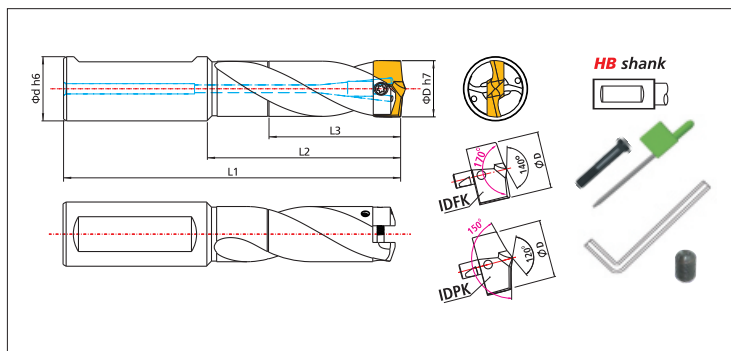
for beam, angle, single plate



IDPK



for stacked plate



Exclusively designed for Structural machining

Hole (Φ) decimal	Body Code	Shank Φd (L)	Dimension			Insert IDFK 	Insert IDPK 	Alternative Metric body
			L1	L2	L3			
.4724~.4917	KRUZ .4724 SLK	5/8 (15.875mm) (48)	4.3307 (110mm)	2.4409 (62mm)	1.9685 (50mm)	IDFK 31/64"(12.30mm)	IDPK 31/64"(12.30mm)	KRUZ 120 L3=50 SLK
.4921~.5114	KRUZ .4921 SLK					IDFK 1/2"(12.70mm)	IDPK 1/2"(12.70mm)	KRUZ 125 L3=50 SLK
.5118~.5311	KRUZ .5118 SLK					IDFK 33/64"(13.10mm)	IDPK 33/64"(13.10mm)	KRUZ 130 L3=50 SLK
.5315~.5508	KRUZ .5315 SLK					IDFK 17/32"(13.49mm)	IDPK 17/32"(13.49mm)	KRUZ 135 L3=50 SLK
.5512~.5705	KRUZ .5512 SLK					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) (50)	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					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	1" (25.4mm) (56)	4.6457 (118mm)	2.6772 (68mm)		IDFK 23/32"(18.26mm)	IDPK 23/32"(18.26mm)	KRUZ 180 L3=50 SLK
.7283~.7476	KRUZ .7283 SLK					IDFK 47/64"(18.65mm)	IDPK 47/64"(18.65mm)	KRUZ 185 L3=50 SLK
.7480~.7673	KRUZ .7480 SLK					IDFK 3/4(19.05mm), IDFK 49/64"(19.45mm)	IDPK 3/4(19.05mm), IDPK 49/64"(19.45mm)	KRUZ 190 L3=50 SLK
.7677~.7870	KRUZ .7677 SLK					IDFK 25/32"(19.84mm)	IDPK 25/32"(19.84mm)	KRUZ 195 L3=50 SLK
.7874~.8067	KRUZ .7874 SLK					IDFK 51/64"(20.24mm)	IDPK 51/64"(20.24mm)	KRUZ 200 L3=50 SLK
.8071~.8264	KRUZ .8071 SLK					IDFK 13/16"(20.64mm)	IDPK 13/16"(20.64mm)	KRUZ 205 L3=50 SLK
.8268~.8461	KRUZ .8268 SLK	1" (25.4mm) (56)	5.1181 (130mm)	2.9134 (74mm)		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) (60)	5.3543 (136mm)	2.9921 (76mm)		IDFK 31/32"(24.61mm)	IDPK 31/32"(24.61mm)	KRUZ 245 L3=50 SLK
.9843~1.0035	KRUZ .9843 SLK					IDFK 63/64"(25.00mm), IDFK 1"(25.4mm)	IDPK 63/64"(25.00mm), IDPK 1"(25.4mm)	KRUZ 250 L3=50 SLK
1.0039~1.0232	KRUZ 1.0039 SLK					IDFK 1-1/64"(25.80mm)	IDPK 1-1/64"(25.80mm)	KRUZ 255 L3=50 SLK
1.0236~1.0429	KRUZ 1.0236 SLK					IDFK 1-1/32"(26.19mm)	IDPK 1-1/32"(26.19mm)	KRUZ 260 L3=50 SLK
1.0433~1.0626	KRUZ 1.0433 SLK					IDFK 1-3/64"(26.59mm), IDFK 1-1/16"(26.99mm)	IDPK 1-3/64"(26.59mm), IDPK 1-1/16"(26.99mm)	KRUZ 265 L3=50 SLK
1.0827~1.1020	KRUZ 1.0827 SLK					IDFK 1-3/32"(27.78mm)	IDPK 1-3/32"(27.78mm)	KRUZ 275 L3=50 SLK
1.1024~1.1217	KRUZ 1.1024 SLK	1 1/4 (31.75mm) (60)	5.5118 (140mm)	3.1496 (80mm)		IDFK 1-7/64"(28.18mm)	IDPK 1-7/64"(28.18mm)	KRUZ 280 L3=50 SLK
1.1220~1.1413	KRUZ 1.1220 SLK					IDFK 1-1/8"(28.58mm)	IDPK 1-1/8"(28.58mm)	KRUZ 285 L3=50 SLK
1.1417~1.1610	KRUZ 1.1417 SLK					IDFK 1-5/32"(29.37mm)	IDPK 1-5/32"(29.37mm)	KRUZ 290 L3=50 SLK
1.1811~1.2004	KRUZ 1.1811 SLK					IDFK 1-3/16"(30.16mm)	IDPK 1-3/16"(30.16mm)	KRUZ 300 L3=50 SLK
1.2008~1.2201	KRUZ 1.2008 SLK					IDFK 1-7/32"(30.96mm)	IDPK 1-7/32"(30.96mm)	KRUZ 305 L3=50 SLK
1.2402~1.2594	KRUZ 1.2402 SLK					IDFK 1-1/4"(31.75mm)	IDPK 1-1/4"(31.75mm)	KRUZ 315 L3=50 SLK
1.2795~1.2988	KRUZ 1.2795 SLK	1 1/4 (31.75mm) (60)	6.1024 (155mm)	3.7402 (95mm)		IDFK 1-9/32"(32.54mm)	IDPK 1-9/32"(32.54mm)	KRUZ 325 L3=50 SLK
1.2992~1.3185	KRUZ 1.2992 SLK					IDFK 1-5/16"(33.34mm)	IDPK 1-5/16"(33.34mm)	KRUZ 330 L3=50 SLK
1.3386~1.3579	KRUZ 1.3386 SLK					IDFK 1-11/32"(34.13mm)	IDPK 1-11/32"(34.13mm)	KRUZ 340 L3=50 SLK
1.3583~1.3776	KRUZ 1.3583 SLK					IDFK 1-3/8"(34.93mm)	IDPK 1-3/8"(34.93mm)	KRUZ 345 L3=50 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.



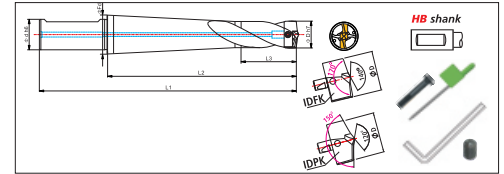
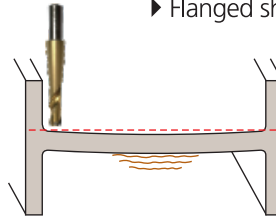
KRUZ-FSLK Flanged body(5xD), IDFK & IDPK insert



for beam, angle, single plate



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 5xDia drill length
- ▶ Internal coolant fed design
- ▶ Flanged shank to reduce chattering or vibrating

Exclusively designed for Structural machining

Hole (Φ) mm	Body Code	Shank Ød (L)	Dimension			Flanged dia.(ΦFd)	Insert IDFK	Insert IDPK	Cap Screw	Torx driver	Set Screw	L-wrench					
			L1	L2	L3												
12.0~12.4	KRUZ 120P FL50 FSLK	16 (48)	133	85	21	IDFK 120, IDFK 121, IDFK 122, IDFK 123, IDFK 124 IDPK 120, IDPK 121, IDPK 122, IDPK 123, IDPK 124	IDFK 125, IDFK 126, IDFK 127, IDFK 128, IDFK 129 IDPK 125, IDPK 126, IDPK 127, IDPK 128, IDPK 129	CS 120 -135 SL	 Torque 0.6Nm (Max)	M2.5x4	1.3mm						
12.5~12.9	KRUZ 125P FL50 FSLK		136	88													
13.0~13.4	KRUZ 130P FL50 FSLK		140	92													
13.5~13.9	KRUZ 135P FL50 FSLK		143	95													
14.0~14.4	KRUZ 140P FL50 FSLK		147	99													
14.5~14.9	KRUZ 145P FL50 FSLK		150	102													
15.0~15.4	KRUZ 150P FL50 FSLK	20 (50)	157	107	27	IDFK 150, IDFK 151, IDFK 152, IDFK 153, IDFK 154 IDPK 150, IDPK 151, IDPK 152, IDPK 153, IDPK 154	IDFK 155, IDFK 156, IDFK 157, IDFK 158, IDFK 159 IDPK 155, IDPK 156, IDPK 157, IDPK 158, IDPK 159	CS 140 -155 SL	 Torque 0.9Nm (Max)	M2.5x4	1.3mm						
15.5~15.9	KRUZ 155P FL50 FSLK		161	111													
16.0~16.4	KRUZ 160P FL50 FSLK		164	114													
16.5~16.9	KRUZ 165P FL50 FSLK		168	118													
17.0~17.4	KRUZ 170P FL50 FSLK		171	121													
17.5~17.9	KRUZ 175P FL50 FSLK		174	124													
18.0~18.4	KRUZ 180P FL50 FSLK		178	128													
18.5~18.9	KRUZ 185P FL50 FSLK		181	131													
19.0~19.4	KRUZ 190P FL50 FSLK		185	135													
19.5~19.9	KRUZ 195P FL50 FSLK		188	138													
20.0~20.4	KRUZ 200P FL50 FSLK		25 (56)	197		141		32				IDFK 200, IDFK 201, IDFK 202, IDFK 203, IDFK 204 IDPK 200, IDPK 201, IDPK 202, IDPK 203, IDPK 204	IDFK 205, IDFK 206, IDFK 207, IDFK 208, IDFK 209 IDPK 205, IDPK 206, IDPK 207, IDPK 208, IDPK 209	CS 200 -215 SL	 Torque 1.5Nm (Max)	M3x6	1.5mm
20.5~20.9	KRUZ 205P FL50 FSLK			201		145											
21.0~21.4	KRUZ 210P FL50 FSLK	204		148													
21.5~21.9	KRUZ 215P FL50 FSLK	208		152													
22.0~22.4	KRUZ 220P FL50 FSLK	211		155													
22.5~22.9	KRUZ 225P FL50 FSLK	214		158													
23.0~23.4	KRUZ 230P FL50 FSLK	218		162													
23.5~23.9	KRUZ 235P FL50 FSLK	221		165													
24.0~24.4	KRUZ 240P FL50 FSLK	32 (60)		229	169	39	IDFK 240, IDFK 241, IDFK 242, IDFK 243, IDFK 244 IDPK 240, IDPK 241, IDPK 242, IDPK 243, IDPK 244		IDFK 245, IDFK 246, IDFK 247, IDFK 248, IDFK 249 IDPK 245, IDPK 246, IDPK 247, IDPK 248, IDPK 249	CS 240 -255 SL	 Torque 3.5Nm (Max)	M4x8		2.0mm			
24.5~24.9	KRUZ 245P FL50 FSLK			232	172												
25.0~25.4	KRUZ 250P FL50 FSLK			235	175												
25.5~25.9	KRUZ 255P FL50 FSLK			239	179												
26.0~26.4	KRUZ 260P FL50 FSLK		242	182													
26.5~26.9	KRUZ 265P FL50 FSLK		246	186													
27.0~27.4	KRUZ 270P FL50 FSLK		249	189													
27.5~27.9	KRUZ 275P FL50 FSLK		252	192													
28.0~28.4	KRUZ 280P FL50 FSLK		256	196													
28.5~28.9	KRUZ 285P FL50 FSLK		259	199													
29.0~29.4	KRUZ 290P FL50 FSLK		263	203													
29.5~29.9	KRUZ 295P FL50 FSLK		266	206													

☞ Size not shown on above is available upon request.

Exclusively designed for Structural machining

Hole (Φ) mm	Body Code	Shank Φd (L)	Dimension			Flanged dia.(ΦFd)	Insert IDFK   Insert IDPK  		Cap Screw 	Torx driver 	Set Screw 	L-wrench 		
			L1	L2	L3									
30.0~30.4	KRUZ 300P FL70 FSLK	32 (60)	269	209	70	39	IDFK 300, IDFK 301, IDFK 302, IDFK 303, IDFK 304 IDPK 300, IDPK 301, IDPK 302, IDPK 303, IDPK 304	IDFK 305, IDFK 306, IDFK 307, IDFK 308, IDFK 309 IDPK 305, IDPK 306, IDPK 307, IDPK 308, IDPK 309	CS 300 -315 SL		M4x8	2.0mm		
30.5~30.9	KRUZ 305P FL70 FSLK		273	213			IDFK 310, IDFK 311, IDFK 312, IDFK 313, IDFK 314 IDPK 310, IDPK 311, IDPK 312, IDPK 313, IDPK 314							
31.0~31.4	KRUZ 310P FL70 FSLK		276	216			IDFK 315, IDFK 316, IDFK 317, IDFK 318, IDFK 319 IDPK 315, IDPK 316, IDPK 317, IDPK 318, IDPK 319							
31.5~31.9	KRUZ 315P FL70 FSLK		280	220			IDFK 320, IDFK 321, IDFK 322, IDFK 323, IDFK 324 IDPK 320, IDPK 321, IDPK 322, IDPK 323, IDPK 324							
32.0~32.4	KRUZ 320P FL70 FSLK		283	223			IDFK 325, IDFK 326, IDFK 327, IDFK 328, IDFK 329 IDPK 325, IDPK 326, IDPK 327, IDPK 328, IDPK 329		IDFK 330, IDFK 331, IDFK 332, IDFK 333, IDFK 334 IDPK 330, IDPK 331, IDPK 332, IDPK 333, IDPK 334				IDFK 335, IDFK 336, IDFK 337, IDFK 338, IDFK 339 IDPK 335, IDPK 336, IDPK 337, IDPK 338, IDPK 339	CS 320 -355 SL
32.5~32.9	KRUZ 325P FL70 FSLK		286	226			IDFK 340, IDFK 341, IDFK 342, IDFK 343, IDFK 344 IDPK 340, IDPK 341, IDPK 342, IDPK 343, IDPK 344							
33.0~33.4	KRUZ 330P FL70 FSLK		290	230			IDFK 345, IDFK 346, IDFK 347, IDFK 348, IDFK 349 IDPK 345, IDPK 346, IDPK 347, IDPK 348, IDPK 349							
33.5~33.9	KRUZ 335P FL70 FSLK		293	233			IDFK 350, IDFK 351, IDFK 352, IDFK 353, IDFK 354 IDPK 350, IDPK 351, IDPK 352, IDPK 353, IDPK 354							
34.0~34.4	KRUZ 340P FL80 FSLK	307	237	IDFK 355, IDFK 356, IDFK 357, IDFK 358, IDFK 359 IDPK 355, IDPK 356, IDPK 357, IDPK 358, IDPK 359	IDFK 360, IDFK 361, IDFK 362, IDFK 363, IDFK 364 IDPK 360, IDPK 361, IDPK 362, IDPK 363, IDPK 364	IDFK 365, IDFK 366, IDFK 367, IDFK 368, IDFK 369 IDPK 365, IDPK 366, IDPK 367, IDPK 368, IDPK 369	CS 360 -395 SL							
34.5~34.9	KRUZ 345P FL80 FSLK	310	240	IDFK 370, IDFK 371, IDFK 372, IDFK 373, IDFK 374 IDPK 370, IDPK 371, IDPK 372, IDPK 373, IDPK 374										
35.0~35.4	KRUZ 350P FL80 FSLK	313	243	IDFK 375, IDFK 376, IDFK 377, IDFK 378, IDFK 379 IDPK 375, IDPK 376, IDPK 377, IDPK 378, IDPK 379										
35.5~35.9	KRUZ 355P FL80 FSLK	317	247	IDFK 380, IDFK 381, IDFK 382, IDFK 383, IDFK 384 IDPK 380, IDPK 381, IDPK 382, IDPK 383, IDPK 384										
36.0~36.4	KRUZ 360P FL80 FSLK	320	250	IDFK 385, IDFK 386, IDFK 387, IDFK 388, IDFK 389 IDPK 385, IDPK 386, IDPK 387, IDPK 388, IDPK 389	IDFK 390, IDFK 391, IDFK 392, IDFK 393, IDFK 394 IDPK 390, IDPK 391, IDPK 392, IDPK 393, IDPK 394	IDFK 395, IDFK 396, IDFK 397, IDFK 398, IDFK 399 IDPK 395, IDPK 396, IDPK 397, IDPK 398, IDPK 399		CS 400 -445 SL						
36.5~36.9	KRUZ 365P FL80 FSLK	324	254	IDFK 400, IDFK 401, IDFK 402, IDFK 403, IDFK 404 IDPK 400, IDPK 401, IDPK 402, IDPK 403, IDPK 404										
37.0~37.4	KRUZ 370P FL80 FSLK	327	257	IDFK 405, IDFK 406, IDFK 407, IDFK 408, IDFK 409 IDPK 405, IDPK 406, IDPK 407, IDPK 408, IDPK 409										
37.5~37.9	KRUZ 375P FL80 FSLK	330	260	IDFK 410, IDFK 411, IDFK 412, IDFK 413, IDFK 414 IDPK 410, IDPK 411, IDPK 412, IDPK 413, IDPK 414										
38.0~38.4	KRUZ 380P FL80 FSLK	334	264	IDFK 415, IDFK 416, IDFK 417, IDFK 418, IDFK 419 IDPK 415, IDPK 416, IDPK 417, IDPK 418, IDPK 419	IDFK 420, IDFK 421, IDFK 422, IDFK 423, IDFK 424 IDPK 420, IDPK 421, IDPK 422, IDPK 423, IDPK 424	IDFK 425, IDFK 426, IDFK 427, IDFK 428, IDFK 429 IDPK 425, IDPK 426, IDPK 427, IDPK 428, IDPK 429	CS 450 -500 SL							
38.5~38.9	KRUZ 385P FL80 FSLK	337	267	IDFK 430, IDFK 431, IDFK 432, IDFK 433, IDFK 434 IDPK 430, IDPK 431, IDPK 432, IDPK 433, IDPK 434										
39.0~39.4	KRUZ 390P FL80 FSLK	341	271	IDFK 435, IDFK 436, IDFK 437, IDFK 438, IDFK 439 IDPK 435, IDPK 436, IDPK 437, IDPK 438, IDPK 439										
39.5~39.9	KRUZ 395P FL80 FSLK	344	274	IDFK 440, IDFK 441, IDFK 442, IDFK 443, IDFK 444 IDPK 440, IDPK 441, IDPK 442, IDPK 443, IDPK 444										
40.0~40.4	KRUZ 400P FL80 FSLK	347	277	IDFK 445, IDFK 446, IDFK 447, IDFK 448, IDFK 449 IDPK 445, IDPK 446, IDPK 447, IDPK 448, IDPK 449	IDFK 450, IDFK 451, IDFK 452, IDFK 453, IDFK 454 IDPK 450, IDPK 451, IDPK 452, IDPK 453, IDPK 454	IDFK 455, IDFK 456, IDFK 457, IDFK 458, IDFK 459 IDPK 455, IDPK 456, IDPK 457, IDPK 458, IDPK 459		M6x12	3.0mm					
40.5~40.9	KRUZ 405P FL80 FSLK	351	281	IDFK 460, IDFK 461, IDFK 462, IDFK 463, IDFK 464 IDPK 460, IDPK 461, IDPK 462, IDPK 463, IDPK 464										
41.0~41.4	KRUZ 410P FL80 FSLK	354	284	IDFK 465, IDFK 466, IDFK 467, IDFK 468, IDFK 469 IDPK 465, IDPK 466, IDPK 467, IDPK 468, IDPK 469										
41.5~41.9	KRUZ 415P FL80 FSLK	358	288	IDFK 470, IDFK 471, IDFK 472, IDFK 473, IDFK 474 IDPK 470, IDPK 471, IDPK 472, IDPK 473, IDPK 474										
42.0~42.4	KRUZ 420P FL80 FSLK	361	291	IDFK 475, IDFK 476, IDFK 477, IDFK 478, IDFK 479 IDPK 475, IDPK 476, IDPK 477, IDPK 478, IDPK 479	IDFK 480, IDFK 481, IDFK 482, IDFK 483, IDFK 484 IDPK 480, IDPK 481, IDPK 482, IDPK 483, IDPK 484	IDFK 485, IDFK 486, IDFK 487, IDFK 488, IDFK 489 IDPK 485, IDPK 486, IDPK 487, IDPK 488, IDPK 489	Torque 5.0Nm (Max)							
42.5~42.9	KRUZ 425P FL80 FSLK	364	294	IDFK 490, IDFK 491, IDFK 492, IDFK 493, IDFK 494 IDPK 490, IDPK 491, IDPK 492, IDPK 493, IDPK 494										
43.0~43.4	KRUZ 430P FL80 FSLK	368	298	IDFK 495, IDFK 496, IDFK 497, IDFK 498, IDFK 499 IDPK 495, IDPK 496, IDPK 497, IDPK 498, IDPK 499										
43.5~43.9	KRUZ 435P FL80 FSLK	371	301	IDFK 500, IDFK 501, IDFK 502, IDFK 503, IDFK 504 IDPK 500, IDPK 501, IDPK 502, IDPK 503, IDPK 504										
44.0~44.4	KRUZ 440P FL80 FSLK	375	305	80	54	IDFK 445, IDFK 446, IDFK 447, IDFK 448, IDFK 449 IDPK 445, IDPK 446, IDPK 447, IDPK 448, IDPK 449		CS 320 -355 SL						
44.5~44.9	KRUZ 445P FL80 FSLK	378	308			IDFK 450, IDFK 451, IDFK 452, IDFK 453, IDFK 454 IDPK 450, IDPK 451, IDPK 452, IDPK 453, IDPK 454								
45.0~45.4	KRUZ 450P FL80 FSLK	381	311			IDFK 455, IDFK 456, IDFK 457, IDFK 458, IDFK 459 IDPK 455, IDPK 456, IDPK 457, IDPK 458, IDPK 459								
45.5~45.9	KRUZ 455P FL80 FSLK	385	315			IDFK 460, IDFK 461, IDFK 462, IDFK 463, IDFK 464 IDPK 460, IDPK 461, IDPK 462, IDPK 463, IDPK 464								
46.0~46.4	KRUZ 460P FL80 FSLK	388	318			IDFK 465, IDFK 466, IDFK 467, IDFK 468, IDFK 469 IDPK 465, IDPK 466, IDPK 467, IDPK 468, IDPK 469								
46.5~46.9	KRUZ 465P FL80 FSLK	392	322	90	90	IDFK 470, IDFK 471, IDFK 472, IDFK 473, IDFK 474 IDPK 470, IDPK 471, IDPK 472, IDPK 473, IDPK 474	CS 360 -395 SL							
47.0~47.4	KRUZ 470P FL80 FSLK	395	325			IDFK 475, IDFK 476, IDFK 477, IDFK 478, IDFK 479 IDPK 475, IDPK 476, IDPK 477, IDPK 478, IDPK 479								
47.5~47.9	KRUZ 475P FL80 FSLK	398	328			IDFK 480, IDFK 481, IDFK 482, IDFK 483, IDFK 484 IDPK 480, IDPK 481, IDPK 482, IDPK 483, IDPK 484								
48.0~48.4	KRUZ 480P FL90 FSLK	402	332			IDFK 485, IDFK 486, IDFK 487, IDFK 488, IDFK 489 IDPK 485, IDPK 486, IDPK 487, IDPK 488, IDPK 489								
48.5~48.9	KRUZ 485P FL90 FSLK	405	335			IDFK 490, IDFK 491, IDFK 492, IDFK 493, IDFK 494 IDPK 490, IDPK 491, IDPK 492, IDPK 493, IDPK 494								
49.0~49.4	KRUZ 490P FL90 FSLK	409	339	90	90	IDFK 495, IDFK 496, IDFK 497, IDFK 498, IDFK 499 IDPK 495, IDPK 496, IDPK 497, IDPK 498, IDPK 499	CS 400 -445 SL							
49.5~49.9	KRUZ 495P FL90 FSLK	412	342			IDFK 500, IDFK 501, IDFK 502, IDFK 503, IDFK 504 IDPK 500, IDPK 501, IDPK 502, IDPK 503, IDPK 504								
50.0~50.4	KRUZ 500P FL90 FSLK	415	345			IDFK 505, IDFK 506, IDFK 507, IDFK 508, IDFK 509 IDPK 505, IDPK 506, IDPK 507, IDPK 508, IDPK 509								



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



KRUZ-FSLK

IDFK

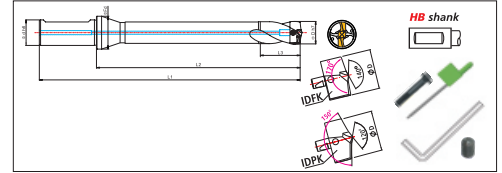
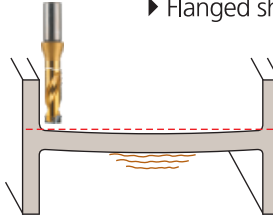


for beam, angle, single plate

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

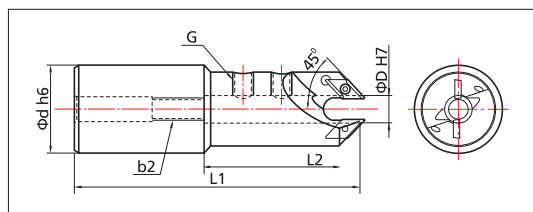
Hole (Φ) mm	Body Code	Shank Φd (L)	Dimension			Flanged dia.(ΦFd)	Insert IDFK	Insert IDPK	Cap Screw	Torx driver	Set Screw	L-wrench																																																							
			L1	L2	L3																																																														
12.0~12.4	KRUZ 120H FL50 FSLK	16 (48)	157	109	21	21	IDFK 120, IDFK 121, IDFK 122, IDFK 123, IDFK 124 IDPK 120, IDPK 121, IDPK 122, IDPK 123, IDPK 124	IDFK 125, IDFK 126, IDFK 127, IDFK 128, IDFK 129 IDPK 125, IDPK 126, IDPK 127, IDPK 128, IDPK 129	CS 120 -135 SL	 T6 Torque 0.6Nm (Max)	M2.5x4	1.3mm																																																							
12.5~12.9	KRUZ 125H FL50 FSLK		161	113																																																															
13.0~13.4	KRUZ 130H FL50 FSLK		166	118																																																															
13.5~13.9	KRUZ 135H FL50 FSLK		170	122																																																															
14.0~14.4	KRUZ 140H FL50 FSLK		175	127																																																															
14.5~14.9	KRUZ 145H FL50 FSLK	20 (50)	181	131	27	27	IDFK 145, IDFK 146, IDFK 147, IDFK 148, IDFK 149 IDPK 145, IDPK 146, IDPK 147, IDPK 148, IDPK 149	IDFK 150, IDFK 151, IDFK 152, IDFK 153, IDFK 154 IDPK 150, IDPK 151, IDPK 152, IDPK 153, IDPK 154	CS 140 -155 SL	 T7 Torque 0.9Nm (Max)	M2.5x4	1.3mm																																																							
15.0~15.4	KRUZ 150H FL50 FSLK		187	137																																																															
15.5~15.9	KRUZ 155H FL50 FSLK		192	142																																																															
16.0~16.4	KRUZ 160H FL50 FSLK		196	146																																																															
16.5~16.9	KRUZ 165H FL50 FSLK		201	151																																																															
17.0~17.4	KRUZ 170H FL50 FSLK		205	155																																																															
17.5~17.9	KRUZ 175H FL50 FSLK		209	159																																																															
18.0~18.4	KRUZ 180H FL50 FSLK		214	164																																																															
18.5~18.9	KRUZ 185H FL50 FSLK		218	168																																																															
19.0~19.4	KRUZ 190H FL50 FSLK		223	173																																																															
19.5~19.9	KRUZ 195H FL50 FSLK	227	177	50	32	IDFK 180, IDFK 181, IDFK 182, IDFK 183, IDFK 184 IDPK 180, IDPK 181, IDPK 182, IDPK 183, IDPK 184	IDFK 185, IDFK 186, IDFK 187, IDFK 188, IDFK 189 IDPK 185, IDPK 186, IDPK 187, IDPK 188, IDPK 189	CS 160 -175 SL																																																											
20.0~20.4	KRUZ 200H FL50 FSLK	237	181																																																																
20.5~20.9	KRUZ 205H FL50 FSLK	242	186																																																																
21.0~21.4	KRUZ 210H FL50 FSLK	246	190																																																																
21.5~21.9	KRUZ 215H FL50 FSLK	251	195																																																																
22.0~22.4	KRUZ 220H FL50 FSLK	255	199																																																																
22.5~22.9	KRUZ 225H FL50 FSLK	259	203																																																																
23.0~23.4	KRUZ 230H FL50 FSLK	264	208																																																																
23.5~23.9	KRUZ 235H FL50 FSLK	268	212																																																																
24.0~24.4	KRUZ 240H FL50 FSLK	25 (56)	277			217						32	32	IDFK 195, IDFK 196, IDFK 197, IDFK 198, IDFK 199 IDPK 195, IDPK 196, IDPK 197, IDPK 198, IDPK 199	IDFK 200, IDFK 201, IDFK 202, IDFK 203, IDFK 204 IDPK 200, IDPK 201, IDPK 202, IDPK 203, IDPK 204	CS 180 -195 SL	 T8 Torque 1.5Nm (Max)	M3x6	1.5mm																																																
24.5~24.9	KRUZ 245H FL50 FSLK		281	221																																																															
25.0~25.4	KRUZ 250H FL50 FSLK		285	225																																																															
25.5~25.9	KRUZ 255H FL50 FSLK		290	230																																																															
26.0~26.4	KRUZ 260H FL50 FSLK		294	234																																																															
26.5~26.9	KRUZ 265H FL50 FSLK		299	239																																																															
27.0~27.4	KRUZ 270H FL50 FSLK		303	243																																																															
27.5~27.9	KRUZ 275H FL50 FSLK		307	247																																																															
28.0~28.4	KRUZ 280H FL50 FSLK		312	252																																																															
28.5~28.9	KRUZ 285H FL50 FSLK		316	256	39	39	IDFK 205, IDFK 206, IDFK 207, IDFK 208, IDFK 209 IDPK 205, IDPK 206, IDPK 207, IDPK 208, IDPK 209	IDFK 210, IDFK 211, IDFK 212, IDFK 213, IDFK 214 IDPK 210, IDPK 211, IDPK 212, IDPK 213, IDPK 214	CS 200 -215 SL																																																										
29.0~29.4	KRUZ 290H FL50 FSLK	321	261																																																																
29.5~29.9	KRUZ 295H FL50 FSLK	325	265																																																																
				39			39					IDFK 215, IDFK 216, IDFK 217, IDFK 218, IDFK 219 IDPK 215, IDPK 216, IDPK 217, IDPK 218, IDPK 219	IDFK 220, IDFK 221, IDFK 222, IDFK 223, IDFK 224 IDPK 220, IDPK 221, IDPK 222, IDPK 223, IDPK 224		CS 220 -235 SL																																																				
												39							39	IDFK 225, IDFK 226, IDFK 227, IDFK 228, IDFK 229 IDPK 225, IDPK 226, IDPK 227, IDPK 228, IDPK 229	IDFK 230, IDFK 231, IDFK 232, IDFK 233, IDFK 234 IDPK 230, IDPK 231, IDPK 232, IDPK 233, IDPK 234	CS 240 -255 SL																																													
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					39	39		IDFK 285, IDFK 286, IDFK 287, IDFK 288, IDFK 289 IDPK 285, IDPK 286, IDPK 287, IDPK 288, IDPK 289	IDFK 290, IDFK 291, IDFK 292, IDFK 293, IDFK 294 IDPK 290, IDPK 291, IDPK 292, IDPK 293, IDPK 294																																																										
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☞ Size not shown on above is available upon request.

Exclusively designed for Structural machining

Hole (Φ) mm	Body Code	Shank Φd (L)	Dimension			Flanged dia.(ΦFd)	Insert IDFK	Insert IDPK	Cap Screw	Torx driver	Set Screw	L-wrench	
			L1	L2	L3								
30.0~30.4	KRUZ 300H FL70 FSLK	32 (60)	329	269	70	39	IDFK 300, IDFK 301, IDFK 302, IDFK 303, IDFK 304 IDPK 300, IDPK 301, IDPK 302, IDPK 303, IDPK 304	IDFK 305, IDFK 306, IDFK 307, IDFK 308, IDFK 309 IDPK 305, IDPK 306, IDPK 307, IDPK 308, IDPK 309	CS 300 -315 SL		M4x8	2.0mm	
30.5~30.9	KRUZ 305H FL70 FSLK		334	274			IDFK 310, IDFK 311, IDFK 312, IDFK 313, IDFK 314 IDPK 310, IDPK 311, IDPK 312, IDPK 313, IDPK 314	IDFK 315, IDFK 316, IDFK 317, IDFK 318, IDFK 319 IDPK 315, IDPK 316, IDPK 317, IDPK 318, IDPK 319					
31.0~31.4	KRUZ 310H FL70 FSLK		338	278			IDFK 320, IDFK 321, IDFK 322, IDFK 323, IDFK 324 IDPK 320, IDPK 321, IDPK 322, IDPK 323, IDPK 324	IDFK 325, IDFK 326, IDFK 327, IDFK 328, IDFK 329 IDPK 325, IDPK 326, IDPK 327, IDPK 328, IDPK 329					
31.5~31.9	KRUZ 315H FL70 FSLK		343	283			IDFK 330, IDFK 331, IDFK 332, IDFK 333, IDFK 334 IDPK 330, IDPK 331, IDPK 332, IDPK 333, IDPK 334	IDFK 335, IDFK 336, IDFK 337, IDFK 338, IDFK 339 IDPK 335, IDPK 336, IDPK 337, IDPK 338, IDPK 339					
32.0~32.4	KRUZ 320H FL70 FSLK		347	287			IDFK 340, IDFK 341, IDFK 342, IDFK 343, IDFK 344 IDPK 340, IDPK 341, IDPK 342, IDPK 343, IDPK 344	IDFK 345, IDFK 346, IDFK 347, IDFK 348, IDFK 349 IDPK 345, IDPK 346, IDPK 347, IDPK 348, IDPK 349					
32.5~32.9	KRUZ 325H FL70 FSLK		351	291			IDFK 350, IDFK 351, IDFK 352, IDFK 353, IDFK 354 IDPK 350, IDPK 351, IDPK 352, IDPK 353, IDPK 354	IDFK 355, IDFK 356, IDFK 357, IDFK 358, IDFK 359 IDPK 355, IDPK 356, IDPK 357, IDPK 358, IDPK 359					
33.0~33.4	KRUZ 330H FL70 FSLK		356	296			IDFK 360, IDFK 361, IDFK 362, IDFK 363, IDFK 364 IDPK 360, IDPK 361, IDPK 362, IDPK 363, IDPK 364	IDFK 365, IDFK 366, IDFK 367, IDFK 368, IDFK 369 IDPK 365, IDPK 366, IDPK 367, IDPK 368, IDPK 369					
33.5~33.9	KRUZ 335H FL70 FSLK		360	300			IDFK 370, IDFK 371, IDFK 372, IDFK 373, IDFK 374 IDPK 370, IDPK 371, IDPK 372, IDPK 373, IDPK 374	IDFK 375, IDFK 376, IDFK 377, IDFK 378, IDFK 379 IDPK 375, IDPK 376, IDPK 377, IDPK 378, IDPK 379					
34.0~34.4	KRUZ 340H FL80 FSLK	40 (70)	375	305	80	54	IDFK 340, IDFK 341, IDFK 342, IDFK 343, IDFK 344 IDPK 340, IDPK 341, IDPK 342, IDPK 343, IDPK 344	IDFK 345, IDFK 346, IDFK 347, IDFK 348, IDFK 349 IDPK 345, IDPK 346, IDPK 347, IDPK 348, IDPK 349	CS 320 -355 SL	T20 	Torque 5.0Nm (Max)	M5x10	2.5mm
34.5~34.9	KRUZ 345H FL80 FSLK		379	309			IDFK 350, IDFK 351, IDFK 352, IDFK 353, IDFK 354 IDPK 350, IDPK 351, IDPK 352, IDPK 353, IDPK 354	IDFK 355, IDFK 356, IDFK 357, IDFK 358, IDFK 359 IDPK 355, IDPK 356, IDPK 357, IDPK 358, IDPK 359					
35.0~35.4	KRUZ 350H FL80 FSLK		383	313			IDFK 360, IDFK 361, IDFK 362, IDFK 363, IDFK 364 IDPK 360, IDPK 361, IDPK 362, IDPK 363, IDPK 364	IDFK 365, IDFK 366, IDFK 367, IDFK 368, IDFK 369 IDPK 365, IDPK 366, IDPK 367, IDPK 368, IDPK 369					
35.5~35.9	KRUZ 355H FL80 FSLK		388	318			IDFK 370, IDFK 371, IDFK 372, IDFK 373, IDFK 374 IDPK 370, IDPK 371, IDPK 372, IDPK 373, IDPK 374	IDFK 375, IDFK 376, IDFK 377, IDFK 378, IDFK 379 IDPK 375, IDPK 376, IDPK 377, IDPK 378, IDPK 379					
36.0~36.4	KRUZ 360H FL80 FSLK		392	322			IDFK 380, IDFK 381, IDFK 382, IDFK 383, IDFK 384 IDPK 380, IDPK 381, IDPK 382, IDPK 383, IDPK 384	IDFK 385, IDFK 386, IDFK 387, IDFK 388, IDFK 389 IDPK 385, IDPK 386, IDPK 387, IDPK 388, IDPK 389					
36.5~36.9	KRUZ 365H FL80 FSLK		397	327			IDFK 390, IDFK 391, IDFK 392, IDFK 393, IDFK 394 IDPK 390, IDPK 391, IDPK 392, IDPK 393, IDPK 394	IDFK 395, IDFK 396, IDFK 397, IDFK 398, IDFK 399 IDPK 395, IDPK 396, IDPK 397, IDPK 398, IDPK 399					
37.0~37.4	KRUZ 370H FL80 FSLK		401	331			IDFK 400, IDFK 401, IDFK 402, IDFK 403, IDFK 404 IDPK 400, IDPK 401, IDPK 402, IDPK 403, IDPK 404	IDFK 405, IDFK 406, IDFK 407, IDFK 408, IDFK 409 IDPK 405, IDPK 406, IDPK 407, IDPK 408, IDPK 409					
37.5~37.9	KRUZ 375H FL80 FSLK		405	335			IDFK 410, IDFK 411, IDFK 412, IDFK 413, IDFK 414 IDPK 410, IDPK 411, IDPK 412, IDPK 413, IDPK 414	IDFK 415, IDFK 416, IDFK 417, IDFK 418, IDFK 419 IDPK 415, IDPK 416, IDPK 417, IDPK 418, IDPK 419					
38.0~38.4	KRUZ 380H FL80 FSLK		410	340			IDFK 420, IDFK 421, IDFK 422, IDFK 423, IDFK 424 IDPK 420, IDPK 421, IDPK 422, IDPK 423, IDPK 424	IDFK 425, IDFK 426, IDFK 427, IDFK 428, IDFK 429 IDPK 425, IDPK 426, IDPK 427, IDPK 428, IDPK 429					
38.5~38.9	KRUZ 385H FL80 FSLK		414	344			IDFK 430, IDFK 431, IDFK 432, IDFK 433, IDFK 434 IDPK 430, IDPK 431, IDPK 432, IDPK 433, IDPK 434	IDFK 435, IDFK 436, IDFK 437, IDFK 438, IDFK 439 IDPK 435, IDPK 436, IDPK 437, IDPK 438, IDPK 439					
39.0~39.4	KRUZ 390H FL80 FSLK		419	349			IDFK 440, IDFK 441, IDFK 442, IDFK 443, IDFK 444 IDPK 440, IDPK 441, IDPK 442, IDPK 443, IDPK 444	IDFK 445, IDFK 446, IDFK 447, IDFK 448, IDFK 449 IDPK 445, IDPK 446, IDPK 447, IDPK 448, IDPK 449					
39.5~39.9	KRUZ 395H FL80 FSLK		423	353			IDFK 450, IDFK 451, IDFK 452, IDFK 453, IDFK 454 IDPK 450, IDPK 451, IDPK 452, IDPK 453, IDPK 454	IDFK 455, IDFK 456, IDFK 457, IDFK 458, IDFK 459 IDPK 455, IDPK 456, IDPK 457, IDPK 458, IDPK 459					
40.0~40.4	KRUZ 400H FL80 FSLK		427	357			IDFK 460, IDFK 461, IDFK 462, IDFK 463, IDFK 464 IDPK 460, IDPK 461, IDPK 462, IDPK 463, IDPK 464	IDFK 465, IDFK 466, IDFK 467, IDFK 468, IDFK 469 IDPK 465, IDPK 466, IDPK 467, IDPK 468, IDPK 469					
40.5~40.9	KRUZ 405H FL80 FSLK		432	362			IDFK 470, IDFK 471, IDFK 472, IDFK 473, IDFK 474 IDPK 470, IDPK 471, IDPK 472, IDPK 473, IDPK 474	IDFK 475, IDFK 476, IDFK 477, IDFK 478, IDFK 479 IDPK 475, IDPK 476, IDPK 477, IDPK 478, IDPK 479					
41.0~41.4	KRUZ 410H FL80 FSLK		436	366			IDFK 480, IDFK 481, IDFK 482, IDFK 483, IDFK 484 IDPK 480, IDPK 481, IDPK 482, IDPK 483, IDPK 484	IDFK 485, IDFK 486, IDFK 487, IDFK 488, IDFK 489 IDPK 485, IDPK 486, IDPK 487, IDPK 488, IDPK 489					
41.5~41.9	KRUZ 415H FL80 FSLK		441	371			IDFK 490, IDFK 491, IDFK 492, IDFK 493, IDFK 494 IDPK 490, IDPK 491, IDPK 492, IDPK 493, IDPK 494	IDFK 495, IDFK 496, IDFK 497, IDFK 498, IDFK 499 IDPK 495, IDPK 496, IDPK 497, IDPK 498, IDPK 499					
42.0~42.4	KRUZ 420H FL80 FSLK	445	375	IDFK 500, IDFK 501, IDFK 502, IDFK 503, IDFK 504 IDPK 500, IDPK 501, IDPK 502, IDPK 503, IDPK 504	IDFK 505, IDFK 506, IDFK 507, IDFK 508, IDFK 509 IDPK 505, IDPK 506, IDPK 507, IDPK 508, IDPK 509								
42.5~42.9	KRUZ 425H FL80 FSLK	449	379	IDFK 510, IDFK 511, IDFK 512, IDFK 513, IDFK 514 IDPK 510, IDPK 511, IDPK 512, IDPK 513, IDPK 514	IDFK 515, IDFK 516, IDFK 517, IDFK 518, IDFK 519 IDPK 515, IDPK 516, IDPK 517, IDPK 518, IDPK 519								
43.0~43.4	KRUZ 430H FL80 FSLK	454	384	IDFK 520, IDFK 521, IDFK 522, IDFK 523, IDFK 524 IDPK 520, IDPK 521, IDPK 522, IDPK 523, IDPK 524	IDFK 525, IDFK 526, IDFK 527, IDFK 528, IDFK 529 IDPK 525, IDPK 526, IDPK 527, IDPK 528, IDPK 529								
43.5~43.9	KRUZ 435H FL80 FSLK	458	388	IDFK 530, IDFK 531, IDFK 532, IDFK 533, IDFK 534 IDPK 530, IDPK 531, IDPK 532, IDPK 533, IDPK 534	IDFK 535, IDFK 536, IDFK 537, IDFK 538, IDFK 539 IDPK 535, IDPK 536, IDPK 537, IDPK 538, IDPK 539								
44.0~44.4	KRUZ 440H FL80 FSLK	463	393	IDFK 540, IDFK 541, IDFK 542, IDFK 543, IDFK 544 IDPK 540, IDPK 541, IDPK 542, IDPK 543, IDPK 544	IDFK 545, IDFK 546, IDFK 547, IDFK 548, IDFK 549 IDPK 545, IDPK 546, IDPK 547, IDPK 548, IDPK 549								
44.5~44.9	KRUZ 445H FL80 FSLK	467	397	IDFK 550, IDFK 551, IDFK 552, IDFK 553, IDFK 554 IDPK 550, IDPK 551, IDPK 552, IDPK 553, IDPK 554	IDFK 555, IDFK 556, IDFK 557, IDFK 558, IDFK 559 IDPK 555, IDPK 556, IDPK 557, IDPK 558, IDPK 559								
45.0~45.4	KRUZ 450H FL80 FSLK	471	401	IDFK 560, IDFK 561, IDFK 562, IDFK 563, IDFK 564 IDPK 560, IDPK 561, IDPK 562, IDPK 563, IDPK 564	IDFK 565, IDFK 566, IDFK 567, IDFK 568, IDFK 569 IDPK 565, IDPK 566, IDPK 567, IDPK 568, IDPK 569								
45.5~45.9	KRUZ 455H FL80 FSLK	476	406	IDFK 570, IDFK 571, IDFK 572, IDFK 573, IDFK 574 IDPK 570, IDPK 571, IDPK 572, IDPK 573, IDPK 574	IDFK 575, IDFK 576, IDFK 577, IDFK 578, IDFK 579 IDPK 575, IDPK 576, IDPK 577, IDPK 578, IDPK 579								
46.0~46.4	KRUZ 460H FL80 FSLK	480	410	IDFK 580, IDFK 581, IDFK 582, IDFK 583, IDFK 584 IDPK 580, IDPK 581, IDPK 582, IDPK 583, IDPK 584	IDFK 585, IDFK 586, IDFK 587, IDFK 588, IDFK 589 IDPK 585, IDPK 586, IDPK 587, IDPK 588, IDPK 589								
46.5~46.9	KRUZ 465H FL80 FSLK	485	415	IDFK 590, IDFK 591, IDFK 592, IDFK 593, IDFK 594 IDPK 590, IDPK 591, IDPK 592, IDPK 593, IDPK 594	IDFK 595, IDFK 596, IDFK 597, IDFK 598, IDFK 599 IDPK 595, IDPK 596, IDPK 597, IDPK 598, IDPK 599								
47.0~47.4	KRUZ 470H FL80 FSLK	489	419	IDFK 600, IDFK 601, IDFK 602, IDFK 603, IDFK 604 IDPK 600, IDPK 601, IDPK 602, IDPK 603, IDPK 604	IDFK 605, IDFK 606, IDFK 607, IDFK 608, IDFK 609 IDPK 605, IDPK 606, IDPK 607, IDPK 608, IDPK 609								
47.5~47.9	KRUZ 475H FL80 FSLK	493	423	IDFK 610, IDFK 611, IDFK 612, IDFK 613, IDFK 614 IDPK 610, IDPK 611, IDPK 612, IDPK 613, IDPK 614	IDFK 615, IDFK 616, IDFK 617, IDFK 618, IDFK 619 IDPK 615, IDPK 616, IDPK 617, IDPK 618, IDPK 619								
48.0~48.4	KRUZ 480H FL90 FSLK	498	428	90		IDFK 480, IDFK 481, IDFK 482, IDFK 483, IDFK 484 IDPK 480, IDPK 481, IDPK 482, IDPK 483, IDPK 484	IDFK 485, IDFK 486, IDFK 487, IDFK 488, IDFK 489 IDPK 485, IDPK 486, IDPK 487, IDPK 488, IDPK 489	CS 450 -500 SL		M6x12	3.0mm		
48.5~48.9	KRUZ 485H FL90 FSLK	502	432			IDFK 490, IDFK 491, IDFK 492, IDFK 493, IDFK 494 IDPK 490, IDPK 491, IDPK 492, IDPK 493, IDPK 494	IDFK 495, IDFK 496, IDFK 497, IDFK 498, IDFK 499 IDPK 495, IDPK 496, IDPK 497, IDPK 498, IDPK 499						
49.0~49.4	KRUZ 490H FL90 FSLK	507	437			IDFK 500, IDFK 501, IDFK 502, IDFK 503, IDFK 504 IDPK 500, IDPK 501, IDPK 502, IDPK 503, IDPK 504	IDFK 505, IDFK 506, IDFK 507, IDFK 508, IDFK 509 IDPK 505, IDPK 506, IDPK 507, IDPK 508, IDPK 509						
49.5~49.9	KRUZ 495H FL90 FSLK	511	441			IDFK 510, IDFK 511, IDFK 512, IDFK 513, IDFK 514 IDPK 510, IDPK 511, IDPK 512, IDPK 513, IDPK 514	IDFK 515, IDFK 516, IDFK 517, IDFK 518, IDFK 519 IDPK 515, IDPK 516, IDPK 517, IDPK 518, IDPK 519						
50.0~50.4	KRUZ 500H FL90 FSLK	515	445			IDFK 520, IDFK 521, IDFK 522, IDFK 523, IDFK 524 IDPK 520, IDPK 521, IDPK 522, IDPK 523, IDPK 524	IDFK 525, IDFK 526, IDFK 527, IDFK 528, IDFK 529 IDPK 525, IDPK 526, IDPK 527, IDPK 528, IDPK 529						
												IDFK 530, IDFK 531, IDFK 532, IDFK 533, IDFK 534 IDPK 530, IDPK 531, IDPK 532, IDPK 533, IDPK 534	IDFK 535, IDFK 536, IDFK 537, IDFK 538, IDFK 539 IDPK 535, IDPK 536, IDPK 537, IDPK 538, IDPK 539

DMH



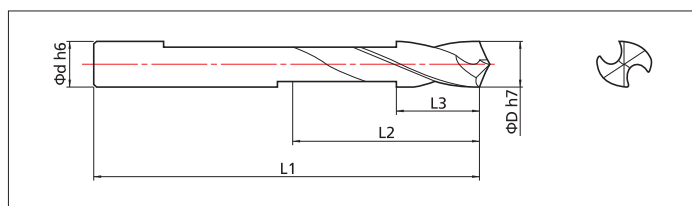
- Interchangeable carbide drillmill & XCGX insert mounted in the holder
- Specially designed carbide drillmill(TiAlN) with milling functioned flute
- Carbide chamfer insert XCGX 1102 with two corner edges
- Rigid heat-treated tool steel holder with side locking system
- Drilling, milling and chamfering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



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

- 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

XCGX

XCGX1102

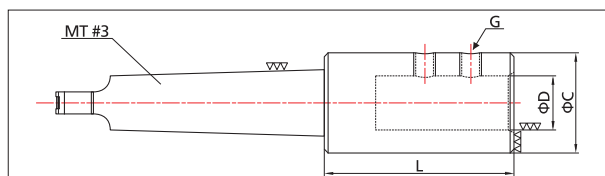
- Carbide insert with grinded edges
- Used two corners economically
- Hole chamfering application

MT shank side lock holder

MT



MTC



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

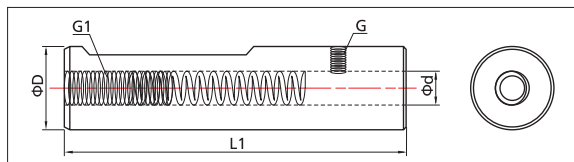
CODE No.	MT#	D(mm)	L(mm)	C(mm)	G
MT3S-SLA16-95	#3	16	95	33	M12
MT3S-SLA20-70		20	70	37	
MT3S-SLA25-70		25		40	
MT3S-SLA32-70		32		48	
MT3S-SLA40-80		40	80	56	

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



New

STH

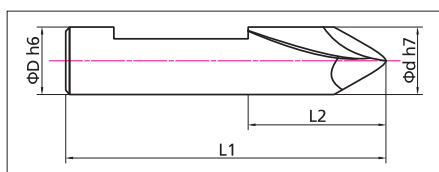


- Interchangeable carbide scribing drill mounted in the holder
- Rigid heat-treated tool steel holder
- Designed with spring system to retract drill for uneven surface.
- Extra function to use chamfer milling for hole edge

CODE No.	D(mm)	d(mm)	L1	G	G1
STH 080	20	8	83	M4x6	M8x20
STH-Spring	6		40		

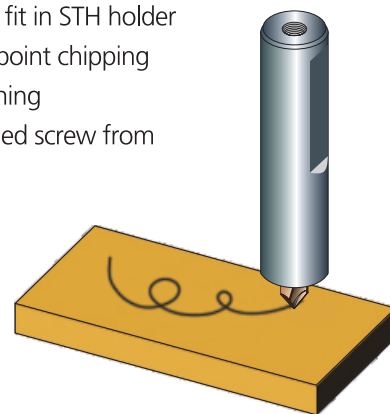
New

SD



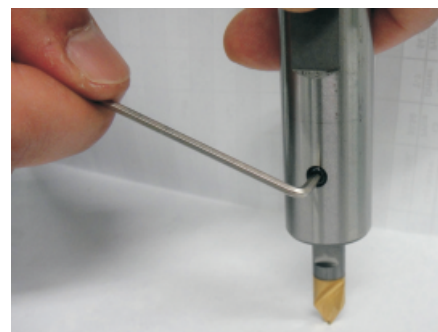
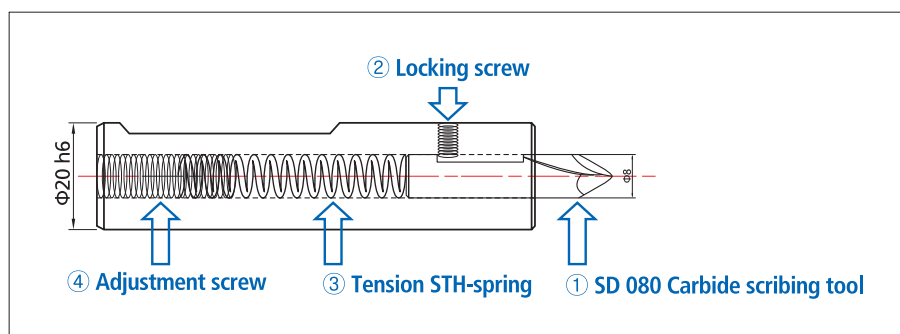
- TiN coated 90 degree drill point with dual angle for stable scribing
- Carbide flattened shank drill to fit in STH holder
- Dual angle point to prevent point chipping
- Locking by side screws fastening
- Adjustable tension by threaded screw from holder end

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



How to assemble scribing tool

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



How to dismantle scribing tool

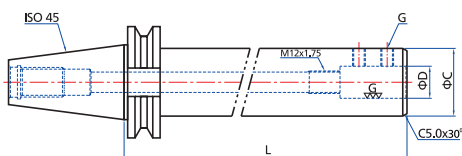
- Remove ④ Adjustment screw by left-hand direction.
- Take out ③ Tension STH-spring from tool body.
- Loose ② Locking screw.
- Take out ① SD 080 Scribing tool from tool body.

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

HSK



-



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

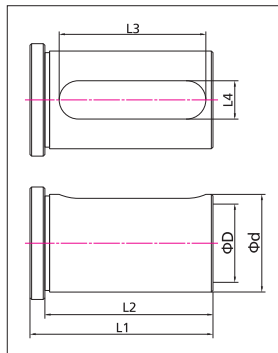
EXT



-

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	M14			
EXT25-SLA25-125			125				
EXT25-SLA25-150			150				
EXT25-SLA25-200			200				
EXT25-SLA25-250			250				
EXT32-SLA32-80	32	32	80			60	M14
EXT32-SLA32-125			125				
EXT32-SLA32-150			150				
EXT32-SLA32-200			200				
EXT32-SLA32-250			250				
EXT40-SLA40-80	40	40	80				
EXT40-SLA40-125			125				
EXT40-SLA40-150			150				
EXT40-SLA40-200			200				
EXT40-SLA40-250			250				

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	L4
RSL 32-16	32	16	65	59	50	15
RSL 32-20		20				16
RSL 32-25		25				16
RSL 40-32	40	32	75	69	60	16
RSL 1-1/4"-16	1-1/4"	16	65	59	50	15
RSL 1-1/4"-20		20				16
RSL 1-1/4"-25		25				16
RSL 1-1/2"-32	1-1/2"	32				16

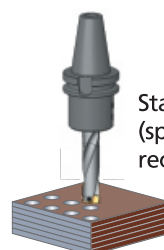
Technical tip for structural steel machining

Note that structural steel can not be clamped easily due to too big and longer work-piece shape than industrial smaller component parts.

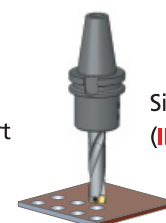
When the drilling spindle feed down toward the structural, the part will have a tendency of bending, deformation, chattering or vibrating that is not visible.

In order to achieve better drilling, we suggest you to consider following technical points.

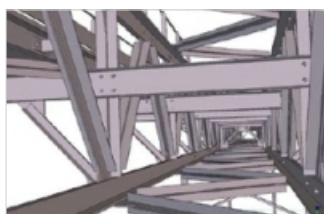
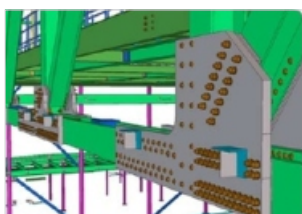
- ☞ Don't use excessive longer length to maximize performance. Select a drill as shorter length as it is available to avoid vibrating or chattering trouble.
- ☞ Structural steel is generally less than 50mm thickness only. KRUZ-SLK drill is properly designed with stubby length enough to run majority of structural steel.
- ☞ In case running with unnecessary longer drill like HSS MT shank length, it will be badly influenced on chattering, vibrating, distorted or oversize hole trouble etc. Of course, tool life could be decreased by above reasons.
- ☞ If you would like to use longer drill inevitably by interruption of flange height, recommend to select KRUZ-FSLK neck extended drill body that is designed to reduce chattering or vibrating trouble than conventional drill.
- ☞ If ISO holder and KRUZ-SLK drill length is insufficient, use Extension socket that can be compensated for shorter length.
- ☞ Reduction sleeve also helps to run current holder without new holder change. This sleeve can be used for reducing shank diameter if inner holder size is bigger than drill shank.
- ☞ The cutting parameter table is shown for recommendation only. Machine operator should find certain optimum value where runs smoothly without vibrating.
- ☞ Plate machining is to apply with different insert. (See the photos on right.)



Stacked plate
(special **IDPK** insert recommended)



Single plate
(**IDFK** recommended)

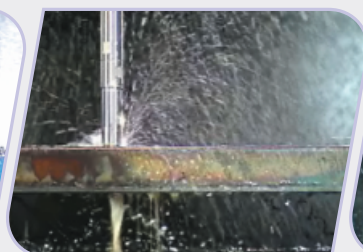
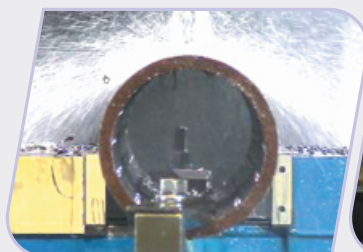




Cutting Parameter table (for structural steel)

KRUZ SLK body + Carbide IDFK insert

Step	Drill Dia		RPM	Feed rate		Surface speed		Forward speed/min.		Power (KW)	Thrust (KGF)	Stability	Tool life	Speed
	Metric	Inch		f(mm/rev.)	IPR(inch/rev.)	V(m/min.)	SFM(feet/min.)	F(mm)	IPM(inch)					
Step 1	12.0	31/64"	780	0.20	0.008	29	96	156	6.1	1.3	286	↑ <		



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