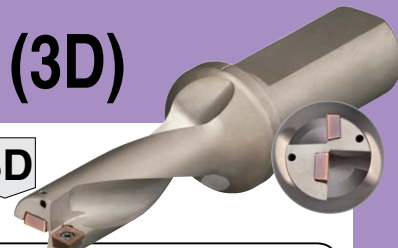


Carbon Steel	Alloy Steel	Tempered Steel	Hardened Steel	Stainless Steel	Ti-Alloy	Heat-resistant steels	Cast Iron	Ductile Cast Iron	Aluminum Alloy	Copper Alloy	Composite CFRP
Up to 0.28%	From 0.28%		Up to 45HRC	From 45HRC							

SumiDrill

WDX Type (3D)

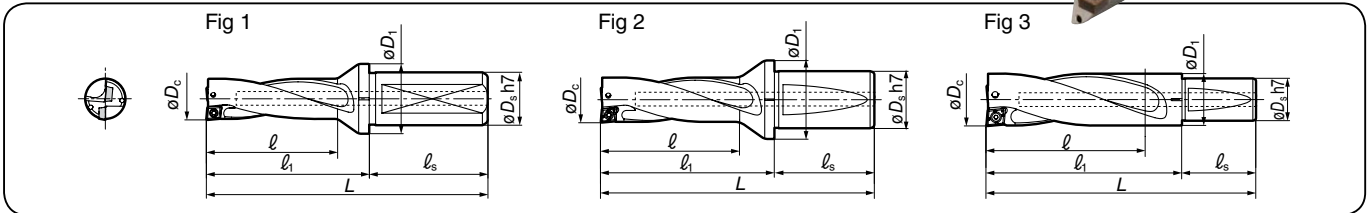


For 3D Boring Depth

Guide for machining tolerance: 0 to +0.20
Maximum depth $l \leq 3 \times \phi D_c$



Recommended Cutting Conditions **J62**



Holder Diameter $\phi 13.0$ to $\phi 45.0$ mm (Refer to J60) (mm)

Diameter ϕD_c	Shank Diameter ϕD_s	Cat. No.	Stock	L	l	l ₁	l _s	ϕD_1	Radial Offset (Max)	Applicable Insert	Fig
13.0	20	WDX 130D3S20	●	101.0	42.0	57.0			0.35		WDXT 042004
13.5		135D3S20	●	102.5	43.5	58.5			0.30		
14.0		140D3S20	●	104.0	45.0	60.0	44	28.0	0.25		
14.5		145D3S20	●	105.5	46.5	61.5			0.20		
15.0		150D3S20	●	107.0	48.0	63.0			0.15		
15.5	20	WDX 155D3S20	●	108.5	49.5	64.5			0.40		WDXT 052504
16.0		160D3S20	●	110.0	51.0	66.0			0.40		
16.5		165D3S20	●	111.5	52.5	67.5	44	30.0	0.35		
17.0		170D3S20	●	113.0	54.0	69.0			0.30		
17.5		175D3S25	●	126.5	55.5	70.5			0.25		
18.0	180D3S25	●	128.0	57.0	72.0	56	32.0	0.20		WDXT 063006	
18.5	25	WDX 185D3S25	●	129.5	58.5	73.5			0.50		
19.0		190D3S25	●	131.0	60.0	75.0			0.45		
19.5		195D3S25	●	132.5	61.5	76.5			0.40		
20.0		200D3S25	●	134.0	63.0	78.0			0.30		
20.5		205D3S25	●	135.5	64.5	79.5	56	33.0	0.30		
21.0	210D3S25	●	137.0	66.0	81.0			0.20			
21.5	215D3S25	●	138.5	67.5	82.5			0.15			
22.0	220D3S25	●	140.0	69.0	84.0			0.10			
22.5	225D3S25	●	141.5	70.5	85.5			0.05			
23.0	25	WDX 230D3S25	●	146.0	72.0	90.0			0.70		WDXT 073506
23.5		235D3S25	●	147.5	73.5	91.5			0.70		
24.0		240D3S25	●	149.0	75.0	93.0	56	37.0	0.60		
24.5		245D3S25	●	150.5	76.5	94.5			0.50		
25.0		250D3S25	●	152.0	78.0	96.0			0.50		
25.5	32	WDX 255D3S32	●	159.5	79.5	99.5			0.45		WDXT 094008
26.0		260D3S32	●	161.0	81.0	101.0			0.40		
26.5		265D3S32	●	162.5	82.5	102.5			0.35		
27.0		270D3S32	●	164.0	84.0	104.0	60	41.0	0.25		
27.5		275D3S32	●	165.5	85.5	105.5			0.20		
28.0	280D3S32	●	167.0	87.0	107.0			0.15			
28.5	285D3S32	●	168.5	88.5	108.5			0.10			
29.0	32	WDX 290D3S32	●	172.0	91.0	112.0		50.0	1.00		WDXT 125012
29.5		295D3S32	●	173.5	92.5	113.5			0.95		
30.0		300D3S32	●	178.0	94.0	118.0	60		0.90		
31.0		310D3S32	●	181.0	97.0	121.0			0.80		
32.0		320D3S32	●	184.0	100.0	124.0			0.70		
30.0	40	WDX 300D3S40	●	188.0	94.0	118.0			0.90		WDXT 094008
31.0		310D3S40	●	191.0	97.0	121.0			0.80		
32.0		320D3S40	●	194.0	100.0	124.0			0.70		
33.0		330D3S40	●	197.0	103.0	127.0	70		0.55		
34.0		340D3S40	●	200.0	106.0	130.0			0.45		
35.0	350D3S40	●	203.0	109.0	133.0			0.35			
36.0	360D3S40	●	206.0	112.0	136.0			0.20			
37.0	40	WDX 370D3S40	●	216.0	116.0	146.0			1.00		WDXT 125012
38.0		380D3S40	●	219.0	119.0	149.0			1.00		
39.0		390D3S40	●	222.0	122.0	152.0			0.90		
40.0		400D3S40	●	225.0	125.0	155.0			0.80		
41.0		410D3S40	●	228.0	128.0	158.0	70	49.5	0.70		
42.0	420D3S40	●	231.0	131.0	161.0			0.60			
43.0	430D3S40	●	234.0	134.0	164.0			0.50			
44.0	440D3S40	●	237.0	137.0	167.0			0.50			
45.0	450D3S40	●	240.0	140.0	170.0			0.40			

Diameters $\phi 30$, $\phi 31$, $\phi 32$ are available in stock with shank diameters $\phi 32$ and $\phi 40$.

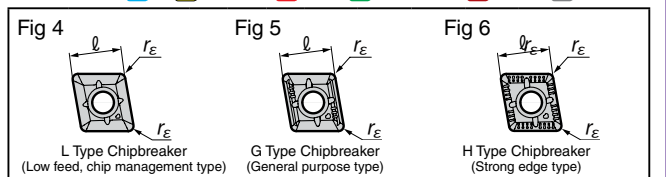
Spare Parts

Screw	Spanner	Spanner	Recommended Tightening Torque (N·m)	Applicable Holders
BFTX01604N	TRX06		0.3	WDX130D3S20 to WDX150D3S20
BFTX0204N	TRX06		0.5	WDX155D3S20 to WDX180D3S25
BFTY02206		TRD07	1.0	WDX185D3S25 to WDX225D3S25
BFTX02506N		TRD08	1.5	WDX230D3S25 to WDX285D3S32
BFTX03584		TRD15	3.5	WDX290D3S32 to WDX360D3S40
BFTX0511N		TRD20	5.0	WDX370D3S40 to WDX450D3S40
BFTX0615N		TRD25	5.0	WDX460D3S40 to WDX680D3S40

Holder Diameter $\phi 46.0$ to $\phi 68.0$ mm (Refer to J60) (mm)

Diameter ϕD_c	Shank Diameter ϕD_s	Cat. No.	Stock	L	l	l ₁	l _s	ϕD_1	Radial Offset (Max)	Applicable Insert	Fig
46.0	40	WDX 460D3S40	●	243.0	143.0	173.0			1.50		WDXT 156012
47.0		470D3S40	●	246.0	146.0	176.0			1.40		
48.0		480D3S40	●	249.0	149.0	179.0			1.30		
49.0		490D3S40	●	252.0	152.0	182.0			1.20		
50.0		500D3S40	●	255.0	155.0	185.0			1.10		
51.0		510D3S40	●	258.0	158.0	188.0			1.00		
52.0		520D3S40	●	261.0	161.0	191.0			0.90		
53.0		530D3S40	●	264.0	164.0	194.0			0.80		
54.0		540D3S40	●	267.0	167.0	197.0			0.70		
55.0		550D3S40	●	270.0	170.0	200.0			0.60		
56.0	40	WDX 560D3S40	●	278.0	176.0	208.0			2.00		WDXT 186012
57.0		570D3S40	●	281.0	179.0	211.0			1.80		
58.0		580D3S40	●	284.0	182.0	214.0			1.70		
59.0		590D3S40	●	287.0	185.0	217.0			1.60		
60.0		600D3S40	●	290.0	188.0	220.0			1.50		
61.0		610D3S40	●	293.0	191.0	223.0			1.40		
62.0		620D3S40	●	296.0	194.0	226.0			1.30		
63.0		630D3S40	●	299.0	197.0	229.0			1.20		
64.0		640D3S40	●	302.0	200.0	232.0			1.00		
65.0		650D3S40	●	305.0	203.0	235.0			0.90		
66.0	660D3S40	●	308.0	206.0	238.0			0.70			
67.0	670D3S40	●	311.0	209.0	241.0			0.60			
68.0	680D3S40	●	314.0	212.0	244.0			0.50			

Inserts P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metal S Exotic Alloy H Hardened Steel



Application	Grade	Coated Carbide			Fig	Dimensions (mm)			Applicable Holders
		ACP300	ACK300	DL1500		l	Thickness	r _E	
General Purpose	High Speed/Light			N	4	4.2	2.0	0.4	WDX130D3S20 to WDX150D3S20
	General Purpose	M			5				
	Roughing	M	K		6				
Cat. No.	WDXT 042004-L	●	●	●	4	5.0	2.5	0.4	WDX155D3S20 to WDX180D3S25
	042004-G	●	●	●	5				
	042004-H	●	●	●	6				
	WDXT 052504-L	●	●	●	4				
	052504-G	●	●	●	5				
	052504-H	●	●	●	6				
	WDXT 063006-L	●	●	●	4				
	063006-G	●	●	●	5				
	063006-H	●	●	●	6				
	WDXT 073506-L	●	●	●	4				
	073506-G	●	●	●	5				
	073506-H	●	●	●	6				
WDXT 094008-L	●	●	●	4					
094008-G	●	●	●	5					
094008-H	●	●	●	6					
WDXT 125012-L	●	●	●	4					
125012-G	●	●	●	5					
125012-H	●	●	●	6					
WDXT 156012-L	●	●	●	4					
156012-G	●	●	●	5					
156012-H	●	●	●	6					
WDXT 186012-L	●	●	●	4					
186012-G	●	●	●	5					
186012-H	●	●	●	6					

Insert Identification **J59**

Drilling
Solid
Special
Indexable
Reamer
Brazed
Others