

NEW PRODUCT NEWS *SPADE-RUSH*



High Productivity Head Changeable Drill for Large Diameter Hole making



SPADE RUSH

High Productivity Head Changeable Drill for Large Diameter Hole making

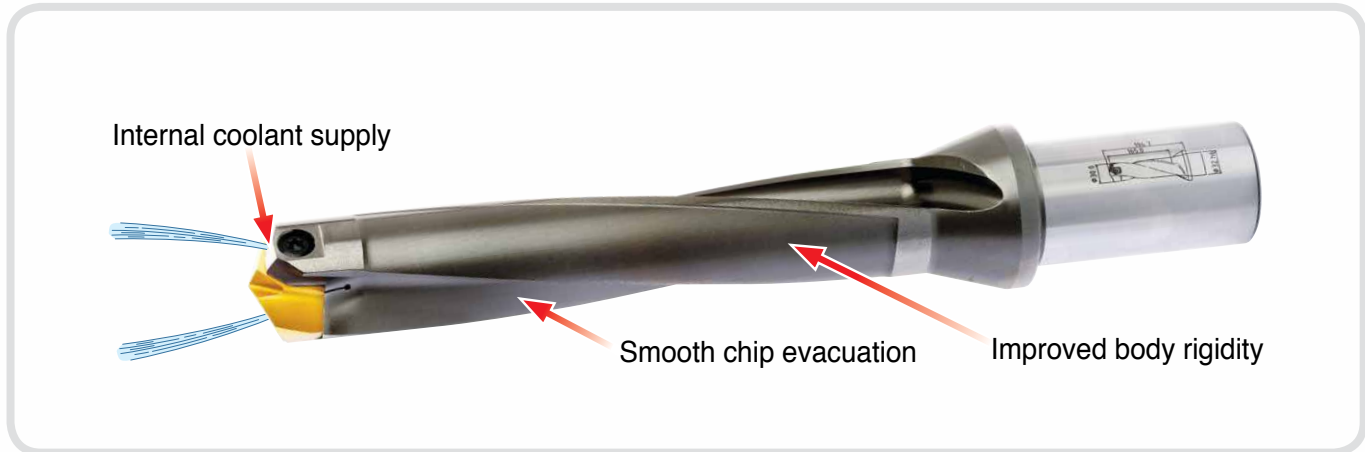
TaeguTec has introduced a new drilling line for large diameter hole applications. The SPADERUSH with an optimized cutting edge and unique rigid clamping generates higher productivity and outstanding performance.

Unique clamping technology enables customers to quickly change drill heads without removing the clamping screw, hence greatly reducing tool setting time and also machine down time. Furthermore, the asymmetrical bottom shape design means error proof insert setting, improved tool accuracy as well as repeatability.

The SPADERUSH is available as a standard drill in 3xD and 5xD for a diameter range from 26.0mm to 41.0mm.

FEATURES

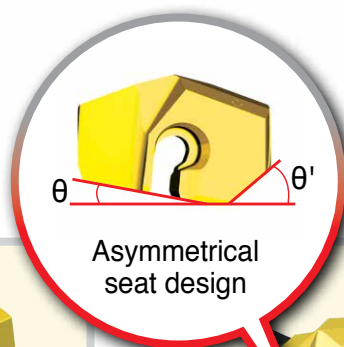
- **Unique quick change clamping system**
 - No need to remove the insert screw from the holder to change the head
- **2 effective cutting edges for higher productivity**
- **Self centering design means no need for pre-centering**
- **Easier replacement of the drill head in the machine**
- **Asymmetrical pocket design for error proof mounting, high tolerance and excellent surface finish**
- **Stronger rigidity of the unique screw clamp design means improved productivity**
- **Through coolant hole**
- **Drill diameter range : 26.0mm – 41.0mm (every 0.5mm)**
- **Drill Body(L/D) : 3xD, 5xD**
- **Also available tailor-made items**



Wide contact area



Standard helix angle



Asymmetrical seat design



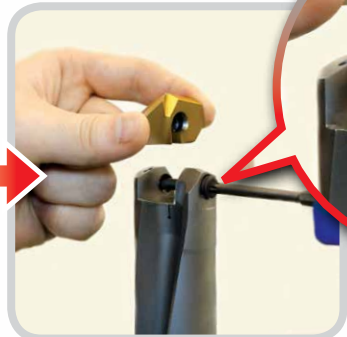
Error-proof



Drill head changing instructions

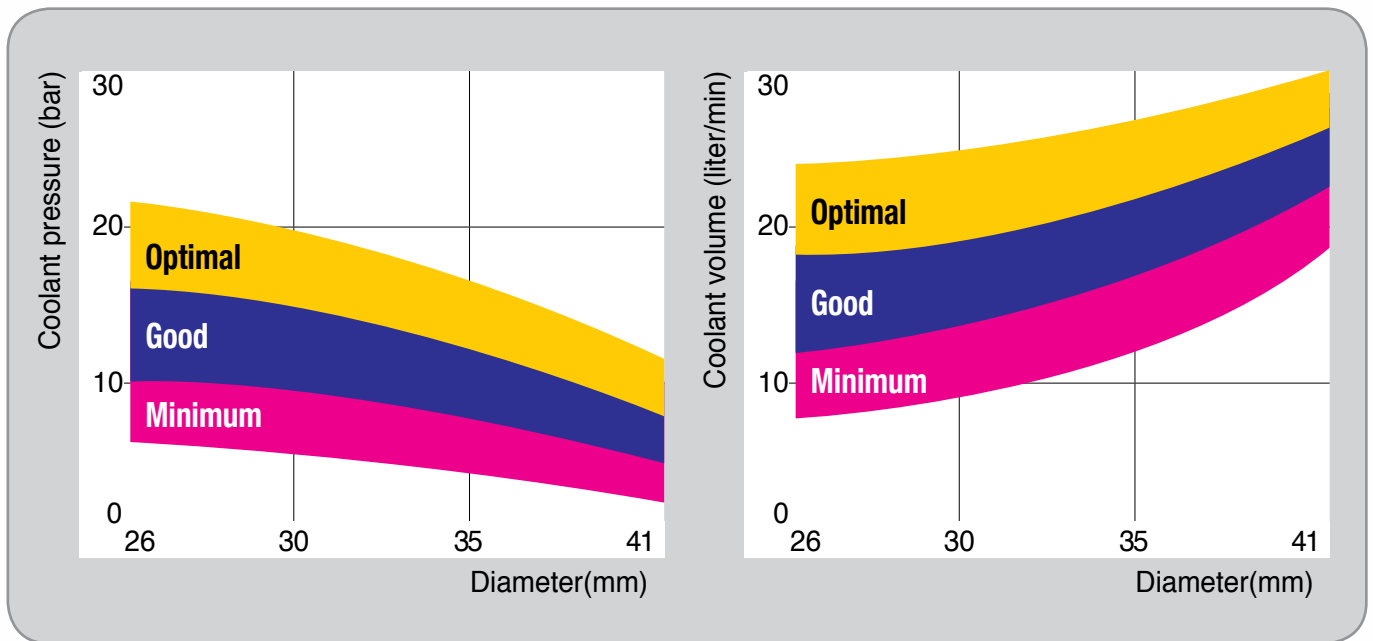


To unclamp, rotate the screw 3-5 times counter-clockwise



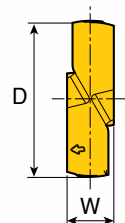
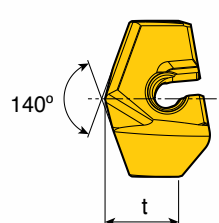
No need to remove the screw from the body

Recommended coolant pressure and volume



LCD...-P

Drill head

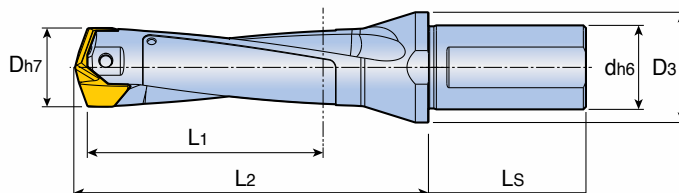


Designation	Dimension (mm)				Grade
	D	t	W	Pocket size	
LCD- 260-P	26.0	11.6	8.0	26	●
265-P	26.5	11.6	8.0	26	●
270-P	27.0	11.1	8.0	27	●
275-P	27.5	11.1	8.0	27	●
280-P	28.0	11.7	8.5	28	●
285-P	28.5	11.7	8.5	28	●
290-P	29.0	11.3	8.5	29	●
295-P	29.5	11.3	8.5	29	●
300-P	30.0	14.1	9.0	30	●
305-P	30.5	14.1	9.0	30	●
310-P	31.0	13.7	9.0	31	●
315-P	31.5	13.7	9.0	31	●
320-P	32.0	14.5	9.5	32	●
325-P	32.5	14.5	9.5	32	●
330-P	33.0	14.1	9.5	33	●
335-P	33.5	14.1	9.5	33	●
340-P	34.0	13.7	9.5	34	●
345-P	34.5	13.7	9.5	34	●
350-P	35.0	16.6	10.5	35	●
355-P	35.5	16.6	10.5	35	●
360-P	36.0	16.1	10.5	36	●
365-P	36.5	16.1	10.5	36	●
370-P	37.0	15.7	10.5	37	●
375-P	37.5	15.7	10.5	37	●
380-P	38.0	17.0	11.0	38	●
385-P	38.5	17.0	11.0	38	●
390-P	39.0	16.6	11.0	39	●
395-P	39.5	16.6	11.0	39	●
400-P	40.0	16.2	11.0	40	●
405-P	40.5	16.2	11.0	40	●
410-P	41.0	16.2	11.0	40	●

●: Standard item

LCD...T2-3D



Head changeable drill holder - weldon type shank (Metric)



- Drill depth: 3xD

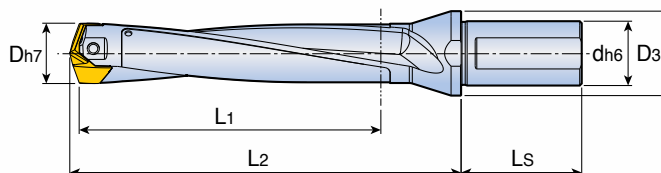
Designation	Dimension (mm)						
	D	d	D3	L1	L2	Ls	Pocket size
LCD 260-269-32T2-3D	26.0-26.9	32	40	78	117.0	60	26
270-279-32T2-3D	27.0-27.9	32	40	81	120.0	60	27
280-289-32T2-3D	28.0-28.9	32	40	84	128.4	60	28
290-299-32T2-3D	29.0-29.9	32	40	87	131.4	60	29
300-309-32T2-3D	30.0-30.9	32	42	90	134.7	60	30
310-319-32T2-3D	31.0-31.9	32	42	93	137.7	60	31
320-329-40T2-3D	32.0-32.9	40	48	96	143.0	68	32
330-339-40T2-3D	33.0-33.9	40	48	99	146.0	68	33
340-349-40T2-3D	34.0-34.9	40	48	102	149.0	68	34
350-359-40T2-3D	35.0-35.9	40	48	105	152.4	68	35
360-369-40T2-3D	36.0-36.9	40	48	108	155.4	68	36
370-379-40T2-3D	37.0-37.9	40	48	111	158.4	68	37
380-389-40T2-3D	38.0-38.9	40	50	114	166.9	68	38
390-399-40T2-3D	39.0-39.9	40	50	117	169.9	68	39
400-410-40T2-3D	40.0-41.0	40	50	120	172.9	68	40

Spare parts

Designation	Screw	Wrench		
				
LCD 260-270-3D	TS 50230D3	BLD T20/S7, SW6-T-SH		
LCD 280-290-3D	TS 50250D35	BLD T25/S7, SW6-T-SH		
LCD 300-310-3D	TS 60265D4	BLD T25/S7, SW6-T-SH		
LCD 320-340-3D	TS 60285D42	BLD T25/S7, SW6-T-SH		
LCD 350-370-3D	TS 60320D5	BLD T25/S7, SW6-T-SH		
LCD 380-400-3D	TS 80340D6	BLD T25/S7, SW6-T-SH		

LCD...T2-5D



Head changeable drill holder - weldon type shank (Metric)



- Drill depth: 5xD

Designation	Dimension (mm)						
	D	d	D3	L1	L2	Ls	Pocket size
LCD 260-269-32T2-5D	26.0-26.9	32	40	130	169.0	60	26
270-279-32T2-5D	27.0-27.9	32	40	135	174.0	60	27
280-289-32T2-5D	28.0-28.9	32	40	140	184.4	60	28
290-299-32T2-5D	29.0-29.9	32	40	145	189.4	60	29
300-309-32T2-5D	30.0-30.9	32	42	150	194.7	60	30
310-319-32T2-5D	31.0-31.9	32	42	155	199.7	60	31
320-329-40T2-5D	32.0-32.9	40	48	160	207.0	68	32
330-339-40T2-5D	33.0-33.9	40	48	165	212.0	68	33
340-349-40T2-5D	34.0-34.9	40	48	170	217.0	68	34
350-359-40T2-5D	35.0-35.9	40	48	175	222.4	68	35
360-369-40T2-5D	36.0-36.9	40	48	180	227.4	68	36
370-379-40T2-5D	37.0-37.9	40	48	185	232.4	68	37
380-389-40T2-5D	38.0-38.9	40	50	190	242.9	68	38
390-399-40T2-5D	39.0-39.9	40	50	195	247.9	68	39
400-410-40T2-5D	40.0-41.0	40	50	200	252.9	68	40

Spare parts

Designation	Screw	Wrench		
				
LCD 260-270-5D	TS 50230D3	BLD T20/S7, SW6-T-SH		
LCD 280-290-5D	TS 50250D35	BLD T25/S7, SW6-T-SH		
LCD 300-310-5D	TS 60265D4	BLD T25/S7, SW6-T-SH		
LCD 320-340-5D	TS 60285D42	BLD T25/S7, SW6-T-SH		
LCD 350-370-5D	TS 60320D5	BLD T25/S7, SW6-T-SH		
LCD 380-400-5D	TS 80340D6	BLD T25/S7, SW6-T-SH		

Recommended cutting conditions Machining data for SPADERUSH

ISO	Material	Condition	Tensile strength (N/mm ²)	Hardness HB	Material No.	Cutting speed Vc(m/min)	Feed vs. drill diameter (mm/rev)				
							Ø26-Ø29.9	Ø30-Ø34.9	Ø35-Ø41		
P	Non-alloy steel, cast steel, free cutting steel	<0.25%C Annealed	420	125	1	80-140	0.30-0.50	0.30-0.50	0.35-0.55		
		>=0.25%C Annealed	650	190	2	80-130	0.30-0.50	0.30-0.50	0.35-0.55		
		<0.55%C Quenched and tempered	850	250	3	80-120	0.30-0.50	0.30-0.50	0.35-0.55		
		>=0.55%C Annealed	750	220	4	70-110	0.30-0.50	0.30-0.50	0.35-0.55		
	Low alloy steel and cast steel (Less than 5% of alloying elements)	Quenched and tempered	1000	300	5	50-90	0.30-0.50	0.30-0.50	0.35-0.55		
		Annealed	600	200	6	80-120	0.25-0.45	0.25-0.45	0.30-0.50		
		Quenched and tempered	930	275	7	70-110	0.25-0.45	0.25-0.45	0.30-0.50		
			1000	300	8	50-90	0.25-0.45	0.25-0.45	0.30-0.50		
	High alloy steel, cast steel and tool steel	1200	350	9	40-70	0.25-0.45	0.25-0.45	0.30-0.50			
		Annealed	680	200	10	50-90	0.25-0.35	0.25-0.35	0.30-0.40		
	Quenched and tempered	1100	325	11	40-80	0.25-0.35	0.25-0.35	0.30-0.40			
	Stainless steel and cast steel	Ferritic / martensitic	680	200	12	40-70	0.15-0.30	0.15-0.30	0.20-0.35		
Martensitic		820	240	13	40-70	0.15-0.30	0.15-0.30	0.20-0.35			
Austenitic		600	180	14	30-70	0.15-0.30	0.15-0.30	0.20-0.35			
K	Gray cast iron (GG)	Ferritic		160	15	90-180	0.35-0.55	0.35-0.55	0.40-0.60		
		Pearlitic		250	16	80-140	0.35-0.55	0.35-0.55	0.40-0.60		
	Cast iron nodular (GGG)	Ferritic		180	17	90-165	0.35-0.55	0.35-0.55	0.40-0.60		
		Pearlitic		260	18	80-140	0.35-0.55	0.35-0.55	0.40-0.60		
Malleable cast iron	Ferritic		130	19	90-160	0.35-0.55	0.35-0.55	0.40-0.60			
	Pearlitic		230	20	80-140	0.35-0.55	0.35-0.55	0.40-0.60			
N	Aluminum - Wrought alloy	Not cureable		60	21	90-220	0.40-0.60	0.40-0.60	0.50-0.70		
		Cured		100	22	90-220	0.40-0.60	0.40-0.60	0.50-0.70		
	Aluminum-cast, alloyed	<=12% Si Not cureable		75	23	90-220	0.40-0.60	0.40-0.60	0.50-0.70		
		Cured		90	24	90-220	0.40-0.60	0.40-0.60	0.50-0.70		
	Copper alloys	>12% Si High temp.		130	25	80-160	0.40-0.60	0.40-0.60	0.50-0.70		
		>1% Pb Free cutting		110	26	90-220	0.40-0.60	0.40-0.60	0.50-0.70		
	Non-metallic	Brass		90	27	90-220	0.40-0.60	0.40-0.60	0.50-0.70		
		Electrolitic copper		100	28	90-220	0.40-0.60	0.40-0.60	0.50-0.70		
	S	High temp. alloys	Fe based	Annealed		200	31	30-60	0.10-0.20	0.15-0.25	0.15-0.25
				Cured		280	32	20-50	0.10-0.20	0.15-0.25	0.15-0.25
Ni or Co based			Annealed		250	33	20-50	0.10-0.20	0.15-0.25	0.15-0.25	
			Cured		350	34	20-50	0.10-0.20	0.15-0.25	0.15-0.25	
Titanium, Ti alloys		Cast		320	35	20-50	0.10-0.20	0.15-0.25	0.15-0.25		
			Rm 400		36	20-50	0.10-0.20	0.15-0.25	0.15-0.25		
		Alpha-beta alloys cured	Rm 1050		37	20-50	0.10-0.20	0.15-0.25	0.15-0.25		
H		Hardened steel	Hardened		55HRC	38	20-50	0.10-0.20	0.15-0.25	0.15-0.25	
	Hardened			60HRC	39	20-50	0.10-0.20	0.15-0.25	0.15-0.25		
	Chilled cast iron	Cast		400	40						
Cast iron nodular	Hardened		55HRC	41							

• For more information of material groups, see the Technical Guide "material conversion table".

■ Steel
 ■ Stainless steel
 ■ Cast iron
 ■ Nonferrous
 ■ High temp. alloys
 ■ Hardened steel