

NEW PRODUCT NEWS

SPADE•RUSH

expansion

D20.0-25.9 mm Head Exchangeable Drills for the SPADERUSH Line



KEY POINT

TaeguTec's high productivity head-exchangeable SPADERUSH line has been expanded to smaller diameter drill heads and holders.

The range of **SPADERUSH** head exchangeable drills has been extended with the introduction of 20.0-25.5 mm drill heads and 20.0-25.9 mm indexable drill holders as standard items. Therefore, the drill diameter range supplied to the **SPADERUSH** 3D and 5D holders is also expanded to 20.0-41.0 mm.

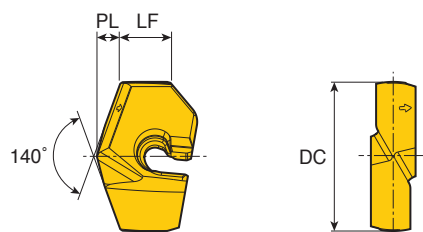
With this newly added expansion, the **SPADERUSH** family now provides the same high performance machining to a wider range of hole-making applications.

Features

- Unique quick change clamping system
 - no need to remove the insert screw from the holder when replacing the indexable drill head
- Two effective cutting edges for higher productivity
- Asymmetrical pocket design for error-proof mounting, high tolerance and excellent surface finish
- Higher productivity due to the unique screw clamp design which enhances rigidity
- Through-coolant hole system capable
- Drill diameter range: 20.0-41.0 mm
- Drilling depth (L/D): 3D, 5D
- Available as tailor made items

LCD...-P

Drill head



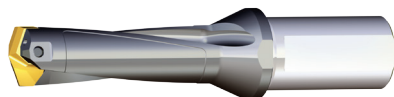
Designation	Dimension (mm)				Grade
	DC	PL	LF	SSC	
LCD - 200-P new	20.0	3.11	6.54	20	●
205-P new	20.5	3.20	6.45	20	●
210-P new	21.0	3.29	6.36	21	●
215-P new	21.5	3.38	6.27	21	●
220-P new	22.0	3.42	7.12	22	●
225-P new	22.5	3.51	7.03	22	●
230-P new	23.0	3.60	6.94	23	●
235-P new	23.5	3.69	6.85	23	●
240-P new	24.0	3.73	7.03	24	●
245-P new	24.5	3.82	6.94	24	●
250-P new	25.0	3.91	6.85	25	●
255-P new	25.5	4.00	6.76	25	●
260-P	26.0	4.04	7.51	26	●
265-P	26.5	4.13	7.42	26	●
270-P	27.0	4.22	7.33	27	●
275-P	27.5	4.31	7.24	27	●
280-P	28.0	4.35	7.39	28	●
285-P	28.5	4.44	7.30	28	●
290-P	29.0	4.53	7.21	29	●
295-P	29.5	4.62	7.12	29	●
300-P	30.0	4.67	9.47	30	●
305-P	30.5	4.76	9.38	30	●
310-P	31.0	4.85	9.29	31	●
315-P	31.5	4.94	9.20	31	●
320-P	32.0	4.98	9.55	32	●
325-P	32.5	5.07	9.46	32	●
330-P	33.0	5.16	9.37	33	●
335-P	33.5	5.25	9.28	33	●
340-P	34.0	5.34	9.19	34	●
345-P	34.5	5.44	9.10	34	●
350-P	35.0	5.44	11.12	35	●
355-P	35.5	5.53	11.03	35	●
360-P	36.0	5.62	10.94	36	●
365-P	36.5	5.71	10.85	36	●
370-P	37.0	5.80	10.76	37	●
375-P	37.5	5.90	10.67	37	●
380-P	38.0	5.91	11.09	38	●
385-P	38.5	6.00	11.00	38	●
390-P	39.0	6.09	10.91	39	●
395-P	39.5	6.18	10.82	39	●
400-P	40.0	6.27	10.73	40	●
405-P	40.5	6.37	10.64	40	●
410-P	41.0	6.46	10.54	40	●

● SSC : Seat size code

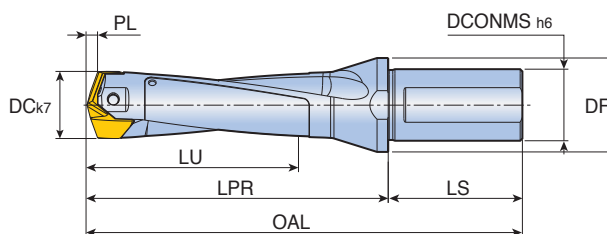
● : Standard items

LCD...T2-3D

Head changeable drill holder - Weldon type shank



- Drilling depth: 3xdiameter



Designation	Dimension (mm)							
	DC	DCONMS	DF	LU	LPR	LS	PL	SSC
LCD 200-209-25T2-3D new	20.0-20.9	25	32	63	92.1	56	3.11	20
210-219-25T2-3D new	21.0-21.9	25	32	66	95.3	56	3.29	21
220-229-25T2-3D new	22.0-22.9	25	32	69	98.4	56	3.42	22
230-239-25T2-3D new	23.0-23.9	25	32	73	101.6	56	3.60	23
240-249-32T2-3D new	24.0-24.9	32	40	76	110.7	60	3.73	24
250-259-32T2-3D new	25.0-25.9	32	40	79	113.9	60	3.91	25
260-269-32T2-3D	26.0-26.9	32	40	82	117.0	60	4.04	26
270-279-32T2-3D	27.0-27.9	32	40	85	120.2	60	4.22	27
280-289-32T2-3D	28.0-28.9	32	40	88	128.4	60	4.35	28
290-299-32T2-3D	29.0-29.9	32	40	92	131.5	60	4.53	29
300-309-32T2-3D	30.0-30.9	32	42	95	134.7	60	4.67	30
310-319-32T2-3D	31.0-31.9	32	42	98	137.9	60	4.85	31
320-329-40T2-3D	32.0-32.9	40	48	101	143.0	68	4.98	32
330-339-40T2-3D	33.0-33.9	40	48	104	146.2	68	5.16	33
340-349-40T2-3D	34.0-34.9	40	48	107	149.3	68	5.34	34
350-359-40T2-3D	35.0-35.9	40	48	110	152.4	68	5.44	35
360-369-40T2-3D	36.0-36.9	40	48	114	155.6	68	5.62	36
370-379-40T2-3D	37.0-37.9	40	48	117	158.8	68	5.80	37
380-389-40T2-3D	38.0-38.9	40	50	120	166.9	68	5.91	38
390-399-40T2-3D	39.0-39.9	40	50	123	170.1	68	6.09	39
400-410-40T2-3D	40.0-41.0	40	50	126	173.3	68	6.27	40

- OAL = LPR+LS
- SSC: Seat size code

Spare parts

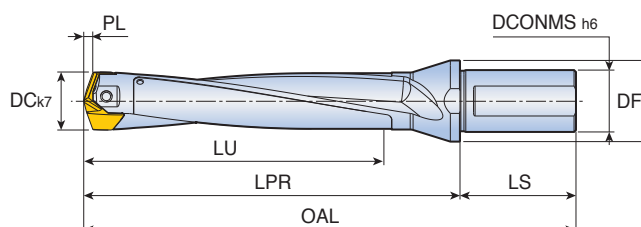
Designation	Screw	Wrench	
LCD 200-219-3D	TS 40178D25	BLD T20/S7	SW6-T-SH
LCD 220-239-3D	TS 40198D28	BLD T20/S7	SW6-T-SH
LCD 240-259-3D	TS 40210D3	BLD T20/S7	SW6-T-SH
LCD 260-279-3D	TS 50230D3	BLD T25/S7	SW6-T-SH
LCD 280-299-3D	TS 50250D35	BLD T25/S7	SW6-T-SH
LCD 300-319-3D	TS 60265D4	BLD T25/S7	SW6-T-SH
LCD 320-349-3D	TS 60285D42	BLD T25/S7	SW6-T-SH
LCD 350-379-3D	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



- Drilling depth: 5x diameter



Designation	Dimension (mm)							
	DC	DCONMS	DF	LU	LPR	LS	PL	SSC
LCD 200-209-25T2-5D (new)	20.0-20.9	25	32	103	132.1	56	3.11	20
210-219-25T2-5D (new)	21.0-21.9	25	32	108	137.3	56	3.29	21
220-229-25T2-5D (new)	22.0-22.9	25	32	113	142.4	56	3.42	22
230-239-25T2-5D (new)	23.0-23.9	25	32	119	147.6	56	3.60	23
240-249-32T2-5D (new)	24.0-24.9	32	40	124	158.7	60	3.73	24
250-259-32T2-5D (new)	25.0-25.9	32	40	129	163.9	60	3.91	25
260-269-32T2-5D	26.0-26.9	32	40	134	169.0	60	4.04	26
270-279-32T2-5D	27.0-27.9	32	40	139	174.2	60	4.22	27
280-289-32T2-5D	28.0-28.9	32	40	144	184.4	60	4.35	28
290-299-32T2-5D	29.0-29.9	32	40	150	189.5	60	4.53	29
300-309-32T2-5D	30.0-30.9	32	42	155	194.7	60	4.67	30
310-319-32T2-5D	31.0-31.9	32	42	160	199.9	60	4.85	31
320-329-40T2-5D	32.0-32.9	40	48	165	207.0	68	4.98	32
330-339-40T2-5D	33.0-33.9	40	48	170	212.2	68	5.16	33
340-349-40T2-5D	34.0-34.9	40	48	175	217.3	68	5.34	34
350-359-40T2-5D	35.0-35.9	40	48	180	222.4	68	5.44	35
360-369-40T2-5D	36.0-36.9	40	48	186	227.6	68	5.62	36
370-379-40T2-5D	37.0-37.9	40	48	191	232.8	68	5.80	37
380-389-40T2-5D	38.0-38.9	40	50	196	242.9	68	5.91	38
390-399-40T2-5D	39.0-39.9	40	50	201	248.1	68	6.09	39
400-410-40T2-5D	40.0-41.0	40	50	206	253.3	68	6.27	40

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Spare parts

Designation	Screw	Wrench	
			
LCD 200-219-5D	TS 40178D25	BLD T20/S7	SW6-T-SH
LCD 220-239-5D	TS 40198D28	BLD T20/S7	SW6-T-SH
LCD 240-259-5D	TS 40210D3	BLD T20/S7	SW6-T-SH
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Recommended Cutting Conditions

ISO	Material		Condition	Tensile strength (N/mm ²)	Hardness HB	Material No.	Cutting speed Vc (m/min)	Feed (mm/rev) vs. drill diameter			
								Ø20 - Ø25.9	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	0.30-0.50	0.35-0.55
		≥0.25%C	Annealed	650	190	2	80-130	0.30-0.50	0.30-0.50	0.30-0.50	0.35-0.55
		<0.55%C	Quenched and tempered	850	250	3	80-120	0.30-0.50	0.30-0.50	0.30-0.50	0.35-0.55
		≥0.55%C	Annealed	750	220	4	70-110	0.30-0.50	0.30-0.50	0.30-0.50	0.35-0.55
			Quenched and tempered	1000	300	5	50-90	0.30-0.50	0.30-0.50	0.30-0.50	0.35-0.55
	Low alloy steel and cast steel (Less than 5% of alloying elements)	Annealed		600	200	6	80-120	0.25-0.45	0.25-0.45	0.25-0.45	0.30-0.50
				930	275	7	70-110	0.25-0.45	0.25-0.45	0.25-0.45	0.30-0.50
		Quenched and tempered		1000	300	8	50-90	0.25-0.45	0.25-0.45	0.25-0.45	0.30-0.50
				1200	350	9	40-70	0.25-0.45	0.25-0.45	0.25-0.45	0.30-0.50
	High alloy steel, cast steel and tool steel	Annealed		680	200	10	50-90	0.25-0.35	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	0.25-0.35	0.30-0.40
M	Stainless steel and cast steel	Ferritic / martensitic		680	200	12	40-70	0.15-0.30	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	0.15-0.30	0.20-0.35
		Austenitic		600	180	14	30-70	0.15-0.30	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	0.35-0.55	0.40-0.60
		Pearlitic			250	16	80-140	0.35-0.55	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	0.35-0.55	0.40-0.60
		Pearlitic			260	18	80-140	0.35-0.55	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	0.35-0.55	0.40-0.60
		Pearlitic			230	20	80-140	0.35-0.55	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	0.40-0.60	0.50-0.70
		Cured			100	22	90-220	0.40-0.60	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	0.40-0.60	0.50-0.70
			Cured		90	24	90-220	0.40-0.60	0.40-0.60	0.40-0.60	0.50-0.70
		>12% Si	High temp.		130	25	80-160	0.40-0.60	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	0.40-0.60	0.50-0.70
	Copper alloys	Brass			90	27	90-220	0.40-0.60	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	0.40-0.60	0.50-0.70
	Non-metallic	Duroplastics, fiber plastics				29					
		Hard rubber				30					
S	High temp. alloys	Fe based	Annealed		200	31	30-60	0.10-0.20	0.10-0.20	0.15-0.25	0.15-0.25
			Cured		280	32	20-50	0.10-0.20	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	0.10-0.20	0.15-0.25	0.15-0.25
			Cured		350	34	20-50	0.10-0.20	0.10-0.20	0.15-0.25	0.15-0.25
			Cast		320	35	20-50	0.10-0.20	0.10-0.20	0.15-0.25	0.15-0.25
	Titanium, Ti alloys			Rm 400		36	20-50	0.10-0.20	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	0.10-0.20	0.15-0.25	0.15-0.25
H	Hardened steel	Hardened			55HRC	38	20-50	0.10-0.20	0.10-0.20	0.15-0.25	0.15-0.25
		Hardened			60HRC	39	20-50	0.10-0.20	0.10-0.20	0.15-0.25	0.15-0.25
	Chilled cast iron	Cast			400	40					
	Cast iron nodular	Hardened			55HRC	41					

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