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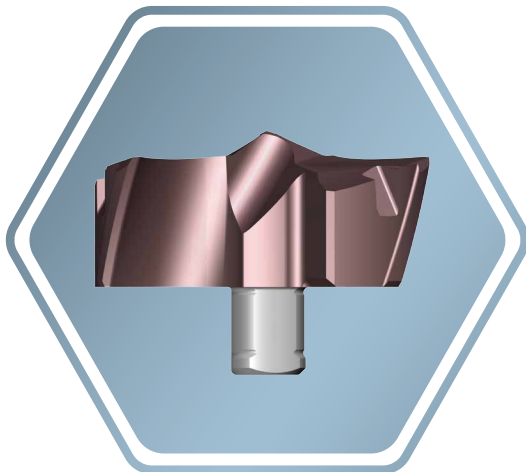
New Product News



DRILLSPEED

INDEXABLE 3 FLUTE

New 3-Flute Flat Head Type for Flat Bottom Hole Machining



KEY POINT

New head geometry for flat-bottom hole machining has been introduced to the highly productive 3-flute head changeable DRILL-SFEED product line.

New to the DRILL-SFEED family's unique 3-flute geometry flat head for flat-bottom hole machining.

The new DRILL-SFEED head line improves productivity and reduces costs by minimizing cycle times and reducing a two-step process to one for flat-bottom hole applications.

The flat head is especially suited for drilling cavities for bolts and guarantees excellent performance in cast iron as well as steel applications.

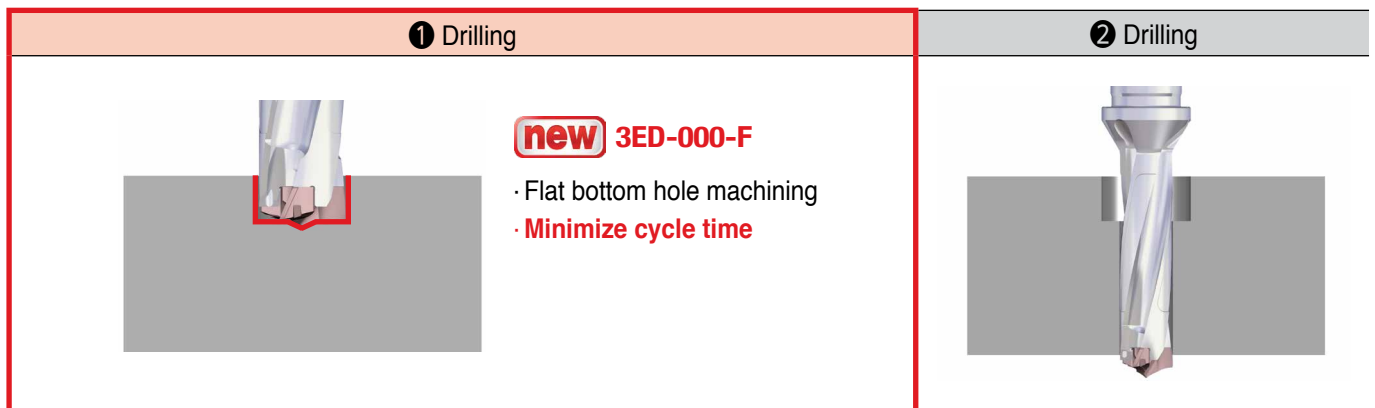
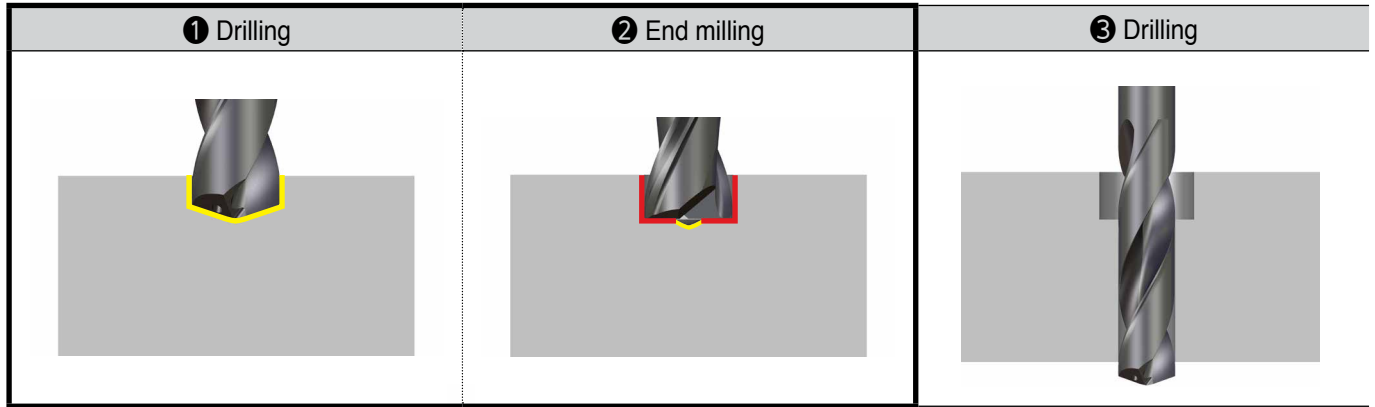
For further information, please contact the product manager.

Features

- Excellent hole accuracy and surface finish in flat-bottom hole applications
- Improved productivity and cost reduction by reducing a two-step process to one
- New flat head type is compatible with the current DRILL-SFEED holders in the same size
- Head diameter range: Ø12.0-25.5 mm (0.5 mm increments)
- 3-flute head changeable drill
- Centering point geometry for high tolerance hole precision
- TT5130 grade multilayered coating provides high wear resistance, chipping resistance and prolonged tool life

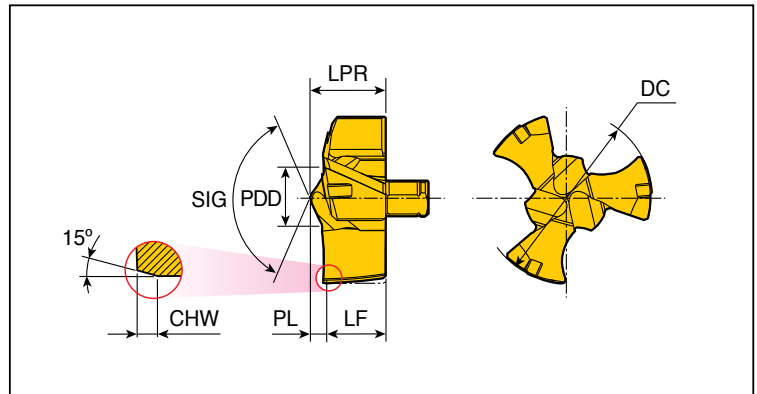


Reduce a two-step process to one



3ED...-F

3 flute drill heads for flat bottom hole



Designation	Dimension (mm)								Grade TT5130
	DC	LPR	PL	LF	PDD	SIG	CHW	SSC	
3ED- 120-F	12.0	5.14	1.18	3.96	3.38	133	0.4	12	●
125-F	12.5	5.14	1.20	3.94	3.38	133	0.4	12	●
130-F	13.0	5.61	1.22	4.39	3.58	132	0.4	13	●
135-F	13.5	5.61	1.24	4.37	3.58	132	0.4	13	●
140-F	14.0	6.01	1.28	4.73	4.01	133	0.4	14	●
145-F	14.5	6.01	1.30	4.71	4.01	133	0.4	14	●
150-F	15.0	6.38	1.32	5.06	4.16	133	0.4	15	●
155-F	15.5	6.38	1.34	5.04	4.16	133	0.4	15	●
160-F	16.0	6.86	1.38	5.48	4.52	134	0.4	16	●
165-F	16.5	6.86	1.40	5.46	4.52	134	0.4	16	●
170-F	17.0	7.22	1.45	5.77	4.79	134	0.4	17	●
175-F	17.5	7.22	1.47	5.75	4.79	134	0.4	17	●
180-F	18.0	7.93	1.75	6.18	5.96	133	0.4	18	●
185-F	18.5	7.93	1.77	6.16	5.96	133	0.4	18	●
190-F	19.0	8.41	1.83	6.58	6.32	133	0.4	19	●
195-F	19.5	8.41	1.85	6.56	6.32	133	0.4	19	●
200-F	20.0	8.89	1.90	6.99	6.61	133	0.4	20	●
205-F	20.5	8.89	1.92	6.97	6.61	133	0.4	20	●
210-F	21.0	9.17	1.99	7.18	7.01	133	0.4	21	●
215-F	21.5	9.17	2.01	7.16	7.01	133	0.4	21	●
220-F	22.0	9.72	2.10	7.62	7.30	133	0.4	22	●
225-F	22.5	9.72	2.12	7.60	7.30	133	0.4	22	●
230-F	23.0	9.96	2.18	7.78	7.49	132	0.4	23	●
235-F	23.5	9.96	2.20	7.76	7.49	132	0.4	23	●
240-F	24.0	10.46	2.24	8.22	7.81	132	0.4	24	●
245-F	24.5	10.46	2.26	8.20	7.81	132	0.4	24	●
250-F	25.0	11.03	2.31	8.72	8.16	132	0.4	25	●
255-F	25.5	11.03	2.33	8.70	8.16	132	0.4	25	●

► SSC: Seat size code

●: Standard items

Recommended Cutting Conditions

ISO	Material	Condition	Tensile Strength (N/mm ²)	Hardness HB	Material Group No	Cutting Speed Vc (m/min)	Feed vs. Drill Diameter (mm/rev)			
							Ø12-Ø13.9	Ø14-Ø15.9	Ø16-Ø19.9	Ø20-Ø25.9
P	Non-alloy steel and cast steel, free cutting steel	<0.25%C Annealed	420	125	1	80-140	0.25-0.45	0.30-0.50	0.35-0.55	0.40-0.60
		>=0.25%C Annealed	650	190	2	80-130	0.25-0.45	0.30-0.50	0.35-0.55	0.40-0.60
		<0.55%C Quenched and tempered	850	250	3	80-120	0.25-0.45	0.30-0.50	0.35-0.55	0.40-0.60
		>=0.55%C Annealed	750	220	4	70-110	0.25-0.45	0.30-0.50	0.35-0.55	0.40-0.60
		Quenched and tempered	1000	300	5	50-90	0.25-0.45	0.30-0.50	0.35-0.55	0.40-0.60
	Low alloy steel and cast steel (less than 5% of alloying elements)	Annealed	600	200	6	80-120	0.20-0.40	0.25-0.45	0.30-0.50	0.35-0.55
		Quenched and tempered	930	275	7	70-110	0.20-0.40	0.25-0.45	0.30-0.50	0.35-0.55
			1000	300	8	50-90	0.20-0.40	0.25-0.45	0.30-0.50	0.35-0.55
			1200	350	9	40-70	0.20-0.40	0.25-0.45	0.30-0.50	0.35-0.55
	High alloy steel, cast steel and tool steel	Annealed	680	200	10	50-90	0.20-0.35	0.25-0.40	0.30-0.45	0.35-0.50
Quenched and tempered		1100	325	11	40-80	0.20-0.35	0.25-0.40	0.30-0.45	0.35-0.50	
K	Grey cast iron (GG)	Ferritic		160	15	90-160	0.35-0.50	0.40-0.60	0.45-0.65	0.50-0.70
		Pearlitic		250	16	80-140	0.35-0.50	0.40-0.60	0.45-0.65	0.50-0.70
	Cast iron nodular (GGG)	Ferritic		180	17	90-180	0.30-0.45	0.35-0.55	0.40-0.60	0.45-0.65
		Pearlitic		260	18	80-140	0.30-0.45	0.35-0.55	0.40-0.60	0.45-0.65
	Malleable cast iron	Ferritic		130	19	90-160	0.30-0.45	0.35-0.55	0.40-0.60	0.45-0.65
		Pearlitic		230	20	80-140	0.30-0.45	0.35-0.55	0.40-0.60	0.45-0.65

■ Steel ■ Cast iron