

PIVERT



**HIGH TECH CUTTERS
MADE IN FRANCE**

DISTRIBUTOR AREA





PIVERT

The FOP company - FABRICATION OF PIVERT - established since 1970 is located near LYON, i.e. in the heart of the main French city for mechanic industry and microtechnologies.

We have selected, among its famous line of cutting tools and milling cutters, specific tools particularly adapted to the demand of the most exacting customers.

PIVERT means woodpecker : a tire-less worker. So using a PIVERT top quality tool will offer you performance and long tool life to improve your machining process.

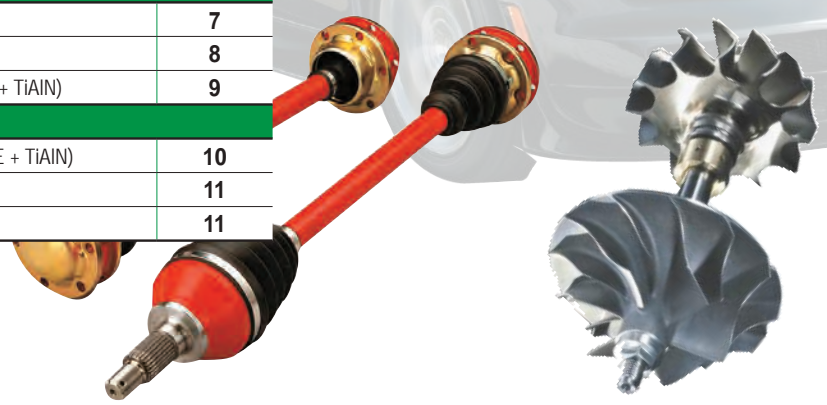
HIGH TECH CUTTERS MADE IN FRANCE

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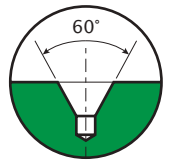
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**SPECIALIST IN TOOLS
FOR AUTOMOTIV INDUSTRIES**



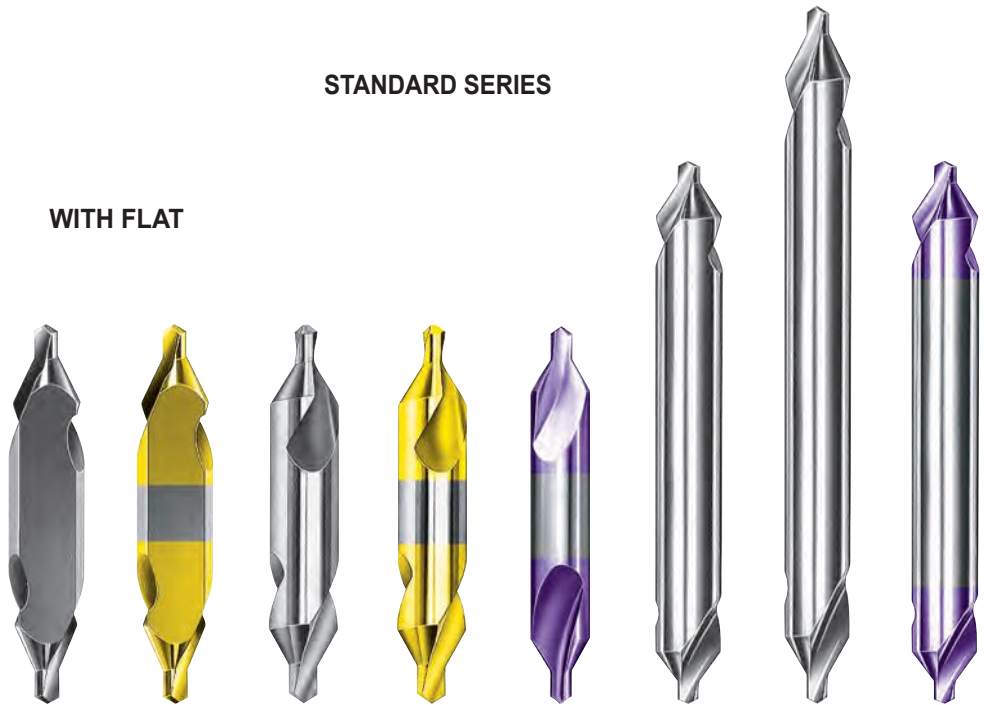
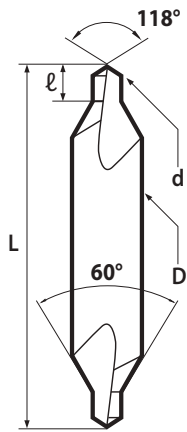
60° centre drills



LONG AND EXTRA-LONG

STANDARD SERIES

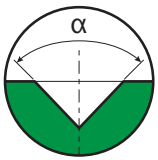
WITH FLAT



CODE				A1	A2	A3	A4	A5	A6	A7	A8
									L ≙ 100 mm	L ≙ 150 mm	L ≙ 100 mm
d	D	L	ℓ mini	HSS-E*	HSS-E* + TiN	HSS-E*	HSS-E* + TiN	CARBIDE + TiAlN	HSS-E*	HSS-E*	CARBIDE + TiAlN
1,0	4,0	35	1,2			•	•	•	•	•	•
1,2	5,0	40	1,3			•	•	•			
1,5	5,0	40	1,5			•	•	•	•	•	
1,6	4,0	35	2,0	•	•	•	•	•			
2,0	5,0	40	2,5	•	•	•	•	•			
2,0	6,0	45	2,0			•	•	•	•	•	•
2,5	6,3	45	3,1	•	•	•	•	•			
2,5	7,7	50	2,5			•	•				
2,5	7,7	57	2,5			•	•				
2,5	8,0	50	3,1			•	•	•	•	•	
3,0	7,7	56	3,0			•	•				
3,0	8,0	50	3,9			•	•	•	•	•	•
3,0	10,0	55	3,9			•	•	•	•	•	
3,15	8,0	50	3,9	•	•	•	•	•	•	•	
3,2	7,7	57	3,2			•	•				
4,0	10,0	55	5,0	•	•	•	•	•			
4,0	10,0	65	4,5			•	•	•			
4,0	10,0	69	4,5			•	•	•	•	•	•
4,0	11,0	69	4,5			•	•				
5,0	11,0	69	5,5			•	•				
5,0	11,0	78	5,5			•	•				
5,0	12,0	63	6,3			•	•	•	•		
5,0	12,5	63	6,3	•	•	•	•	•			
6,0	16,0	90	7,0			•	•				
6,0	18,0	95	7,0			•	•				
6,3	16,0	71	8,0			•	•	•		•	

*HSS with 5% Cobalt = performances !

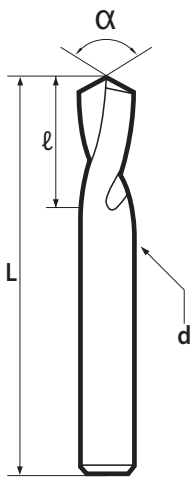




CNC drills

$\alpha = 90^\circ$

$\alpha = 120^\circ$



CODE			B1		B2		B3		B4		B5		B6	
d	L	ℓ	HSS-E*	HSS-E* + TiN	L	ℓ	CARBIDE + TiAlN	HSS-E*	HSS-E* + TiN	L	ℓ	CARBIDE + TiAlN	HSS-E*	HSS-E* + TiN
2,0	49	8	•	•	40	8	•	•	•	40	8	•	•	•
3,0	50	10	•	•	40	10	•	•	•	40	10	•	•	•
4,0	52	12	•	•	50	12	•	•	•	50	12	•	•	•
5,0	60	15	•	•	50	15	•	•	•	50	15	•	•	•
6,0	66	20	•	•	50	18	•	•	•	50	18	•	•	•
8,0	79	25	•	•	60	23	•	•	•	60	23	•	•	•
10,0	89	25	•	•	70	24	•	•	•	70	24	•	•	•
12,0	102	30	•	•	70	24	•	•	•	70	24	•	•	•
14,0	115	35	•	•	75	24	•	•	•	75	24	•	•	•
16,0	115	35	•	•	80	26	•	•	•	80	26	•	•	•
20,0	131	40	•	•	100	35	•	•	•	100	35	•	•	•
25,0	138	45	•	•				•	•				•	•

*HSS with 5% Cobalt = performances !

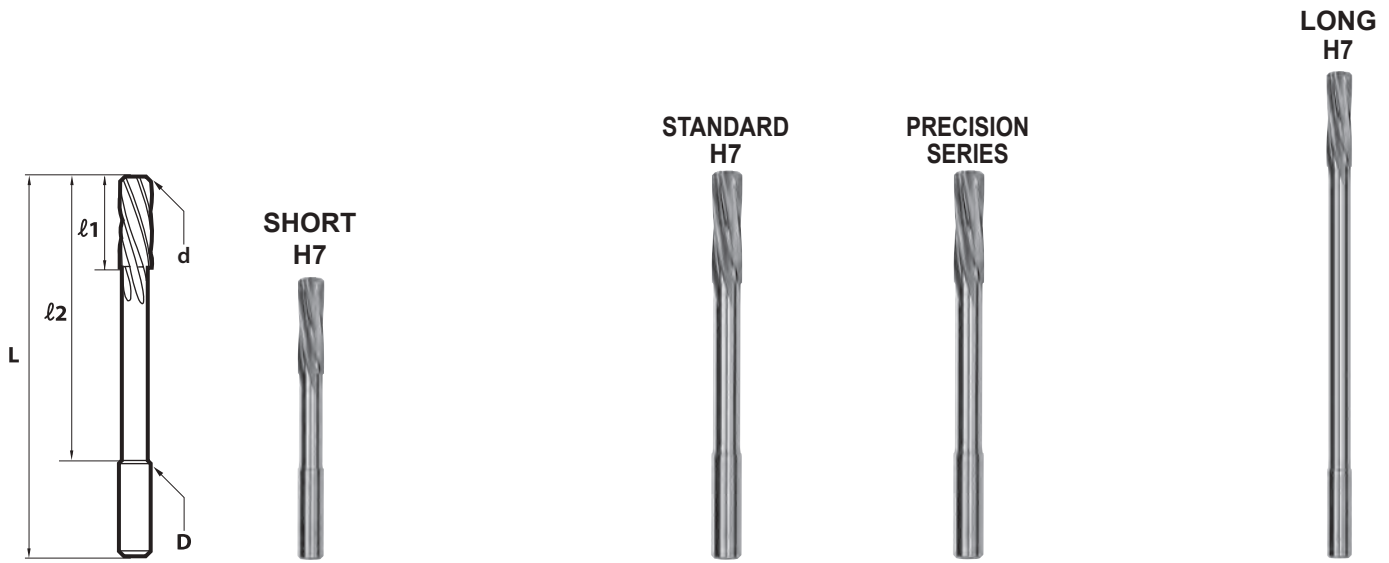
Special production

Combined drills and special step drills, made using the standard blanks available within a guaranteed three week shipment time.

We also manufacture special cutting tools to customers requirements and welcome your enquiries with the necessary drawing.



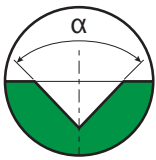
Carbide reamers



CODE					C1	C2					C3	C4								
d	L	l1	l2	D	€	d (0,1)	L	l1	l2	D	€	d* (0,01)	€	d	L	l1	l2	D	€	
						1,0	38	7	22	d	•	0,97~1,03	•							
						1,1~1,5	40	10	24	d	•	1,47~1,53	•							
						1,6~1,7	43	11	25	d	•									
						1,8~1,9	49	12	31	d	•									
						2,0	49	12	31	d	•	1,97~2,03	•							
						2,1~2,3	49	12	31	d	•									
						2,4~2,9	57	18	38	d	•	2,47~2,53	•							
						3,0	57	18	38	d	•	2,97~3,03	•	3,0	90	14	70	d	•	
						3,1~3,7	57	18	38	d	•	3,47~3,53	•	3,5	90	14	70	d	•	
						3,8~3,9	75	19	51	4	•									
4,0	60	16	35	4	•	4,0	75	19	51	4	•	3,97~4,03	•	4,0	105	16	80	4	•	
						4,1~4,2	75	19	51	4	•									
4,5	70	16	45	5	•	4,3~4,7	80	21	55	4,5	•	4,47~4,53	•	4,5	105	16	80	4,5	•	
						4,8~4,9	86	23	60	5	•									
5,0	70	16	45	5	•	5,0	86	23	60	5	•	4,97~5,03	•	5,0	115	16	90	5,0	•	
						5,1~5,3	86	23	60	5	•									
5,5	80	16	55	6	•	5,4~5,8	93	26	66	5,5	•	5,47~5,53	•	5,5	115	16	90	5,5	•	
						5,9	101	28	73	6	•									
6,0	80	16	55	6	•	6,0	101	28	73	6	•	5,97~6,03	•	6,0	130	16	100	6	•	
						6,1~6,7	101	28	73	6	•	6,47~6,53	•							
7,0	90	18	60	8	•	6,8~7,1	109	31	80	7	•	6,97~7,03	•	7,0	140	18	110	7	•	
						7,2~7,5	109	31	80	7	•	7,43~7,53	•							
						7,6~7,9	117	33	86	8	•									
8,0	90	18	60	8	•	8,0	117	33	86	8	•	7,97~8,03	•	8,0	160	18	130	8	•	
						8,1~8,5	117	33	86	8	•	8,47~8,53	•							
9,0	90	18	60	8	•	8,6~9,1	125	36	91	9	•	8,97~9,03	•	9,0	175	18	140	9	•	
						9,2~9,5	125	36	91	9	•	9,47~9,53	•							
						9,6~9,9	133	38	99	10	•									
10,0	115	20	75	10	•	10,0	133	38	99	10	•	9,97~10,03	•	10,0	190	20	150	10	•	
11,0	115	20	75	10	•	10,1~11,3	133	38	99	10	•	10,97~11,03	•	11,0	190	20	150	10	•	
						11,4~11,9	151	44	106	12	•									
12,0	130	20	80	12	•	12,0	151	44	106	12	•	11,97~12,03	•	12,0	220	22	170	12	•	
						12,5	151	44	106	12	•	12,47~12,53	•							
13,0	130	20	80	12	•	13,0	151	44	106	12	•	12,97~13,03	•	13,0	220	22	170	12	•	
14,0	130	20	80	12	•	14,0	160	47	110	14	•	13,97~14,03	•	14,0	220	22	170	12	•	
15,0	130	20	80	12	•	15,0	162	50	112	14	•	14,97~15,03	•	15,0	220	22	170	12	•	
16,0	140	25	90	16	•	16,0	170	52	117	16	•	15,97~16,06	•	16,0	230	25	180	16	•	
18,0	140	25	90	16	•	18,0	182	56	129	16	•	17,97~18,03	•	18,0	230	25	180	16	•	
20,0	140	25	90	16	•	20,0	195	60	142	16	•	19,97~20,03	•	20,0	230	25	180	16	•	

*Tolerance : 0 / +0.005



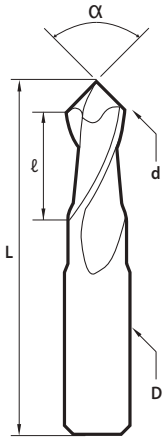


Multi purpose cutters

SOLID CARBIDE

$\alpha = 60^\circ$

$\alpha = 90^\circ$



The Multi-purpose cutter is designed to be used on machine centres and CNC processing machines.

The combination of different operations will offer you :

- 1 - reduction set-up machine time and less tools stocked !
- 2 - To combine several operations with the same tool :

Drilling - Centering - Spotting
 Chamfering - V-grooving - Countouring
 Interpolation Drilling - Engraving
 Longitudinal Chamfers

CODE				D1	D2
d	L	ℓ	D	CARBIDE + TiAlN	CARBIDE + TiAlN
1,0	39	2,0	3	•	•
1,2	39	2,4	3	•	•
1,5	39	3,0	3	•	•
1,8	39	3,6	3	•	•
2,0	39	4,0	3	•	•
2,5	39	5,0	3	•	•
3,0	50	6,0	4	•	•
4,0	50	8,0	5	•	•
5,0	50	10	6	•	•
6,0	60	12	8	•	•
8,0	70	16	10	•	•
10,0	70	18	12	•	•
12,0	70	20	12	•	•
16,0	80	26	16	•	•
20,0	100	32	20	•	•

TiAlN coating for abrasive materials, ceramics and pre-treated steels.

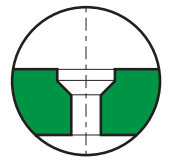


The rigours of inspections

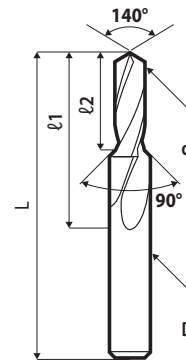
Systematic inspection during manufacture and the final examination of 100 per cent of production provide a guarantee that the tools so produced correspond to the strictest requirements in use.



90° step drills before threading



SOLID CARBIDE



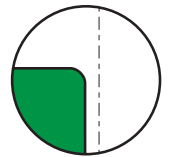
90°



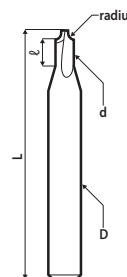
These integral carbide step drills are adapted to CNC machine applications, they realize boring and counterboring in one operation !

CODE						E1
screw	d	D	L	ℓ1	ℓ2	CARBIDE + TiAIN
M3	2,5	6,0	66	20	8,8	•
M4	3,3	6,0	66	24	11,4	•
M5	4,2	6,0	66	28	13,6	•
M6	5,0	8,0	79	31	16,5	•
M8	6,8	10,0	89	40	21,0	•
M10	8,5	12,0	102	47	25,5	•
M12	10,2	14,0	107	54	30,0	•

Round corner cutters



SOLID CARBIDE



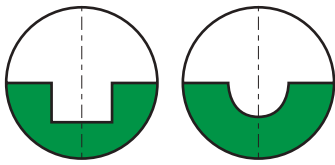
RADIUS



The Pivert round corner carbide cutters are designed to be used on CNC machines. It is possible to machine complex forms, slots and very small holes from 0.5 mm. Its geometry accepts many regrinds.

CODE					F1
radius	d	D	L	ℓ	CARBIDE + TiAIN
0,10	0,8	3	50	2,5	•
0,25	1,1	3	50	2,5	•
0,50	1,6	3	50	2,5	•
0,75	2,1	3	50	3	•
1,00	2,9	3	50	4	•
1,25	3,4	4	50	4	•
1,50	4,6	5	50	6	•
1,75	5,1	6	50	6	•
2,00	5,6	6	50	8	•
2,25	6,1	8	50	10	•
2,50	6,6	8	50	10	•
3,00	7,6	8	50	10	•
4,00	10,0	10	55		•
5,00	12,0	12	63		•
6,00	14,0	14	74		•





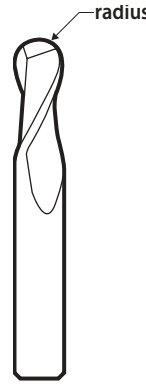
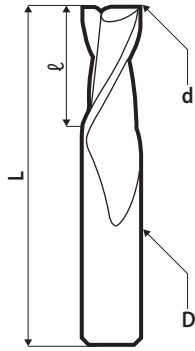
Micro end mills

SOLID CARBIDE



SQUARE END

BALL END



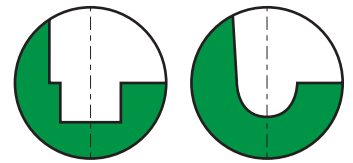
CODE				G1	G2	CODE	G3	G4
d*	L	ℓ	D	CARBIDE	CARBIDE + TiAlN	radius**	CARBIDE	CARBIDE + TiAlN
0,1	39	0,1	3	•	•	0,05	•	•
0,15	39	0,2	3	•	•	0,075	•	•
0,2	39	0,3	3	•	•	0,1	•	•
0,25	39	0,35	3	•	•	0,125	•	•
0,3	39	0,45	3	•	•	0,15	•	•
0,4	39	0,6	3	•	•	0,2	•	•
0,5	39	0,75	3	•	•	0,25	•	•
0,6	39	0,9	3	•	•	0,3	•	•
0,7	39	1,05	3	•	•	0,35	•	•
0,8	39	1,2	3	•	•	0,4	•	•
0,9	39	1,35	3	•	•	0,45	•	•
1,0	39	1,5	3	•	•	0,5	•	•
1,1	39	1,65	3	•	•	0,55	•	•
1,2	39	1,8	3	•	•	0,6	•	•
1,3	39	1,95	3	•	•			
1,4	39	2,1	3	•	•	0,7	•	•
1,5	39	2,25	3	•	•	0,75	•	•
1,6	39	2,4	3	•	•	0,8	•	•
1,7	39	2,55	3	•	•			
1,8	39	2,7	3	•	•			
1,9	39	2,85	3	•	•			
2,0	39	3,0	3	•	•	1,0	•	•

*Tolerance : Ø 0,1 : +/- 0,005 - Ø 0,15 ~2,0 : h7

**Tolerance : +/- 0,01

TiAlN coating for abrasive materials, ceramics and pre-treated steels.

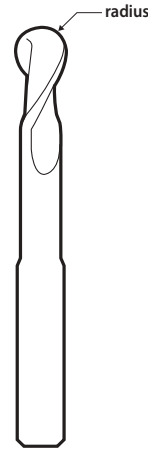
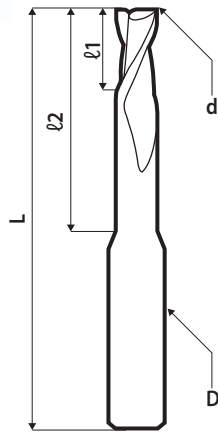
Long neck Micro end mills



SOLID CARBIDE

SQUARE END

BALL END

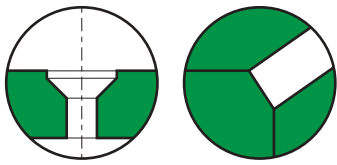


CODE					H1	H2	CODE		
d*	l2	l1	L	D	CARBIDE	CARBIDE + TiAIN	radius*	H3	H4
								CARBIDE	CARBIDE + TiAIN
0,4	2	0,40	39	3	•	•	0,2	•	•
0,5	2	0,55	39	3	•	•	0,25	•	•
0,5	4	0,55	39	3	•	•	0,25	•	•
0,5	6	0,55	60	3	•	•	0,25	•	•
0,6	4	0,70	39	3	•	•	0,30	•	•
0,7	4	0,85	39	3	•	•			
0,8	4	1,00	39	3	•	•	0,40	•	•
0,8	6	1,00	39	3	•	•	0,40	•	•
0,8	9	1,00	60	3	•	•	0,40	•	•
0,9	6	1,15	39	3	•	•			
1,0	4	1,30	39	3	•	•	0,50	•	•
1,0	6	1,30	39	3	•	•	0,50	•	•
1,0	9	1,30	39	3	•	•	0,50	•	•
1,0	12	1,30	60	3	•	•	0,50	•	•
1,2	6	1,60	39	3	•	•	0,60	•	•
1,2	9	1,60	39	3	•	•			
1,4	6	1,90	39	3	•	•			
1,4	9	1,90	39	3	•	•			
1,5	6	2,05	39	3	•	•	0,75	•	•
1,5	9	2,05	39	3	•	•	0,75	•	•
1,5	12	2,05	60	3	•	•	0,75	•	•
1,8	9	2,50	39	3	•	•			
1,8	12	2,50	39	3	•	•			
2,0	9	2,80	39	3	•	•	1,00	•	•
2,0	12	2,80	39	3	•	•	1,00	•	•
2,0	15	2,80	60	3	•	•	1,00	•	•
2,5	15	3,55	60	3	•	•	1,25	•	•

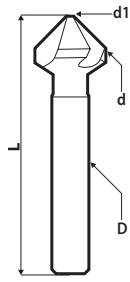
*Tolerance : -0,01

**Tolerance : +/- 0,01





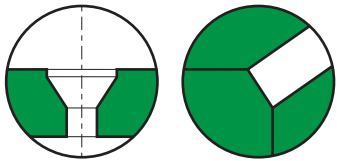
90° Three flutes countersinks



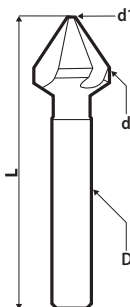
90°



CODE				i1	i2	i3
d	L	d1	D	HSS-E*	HSS-E* + TiN	CARBIDE + TiAlN
4.3	40	1.3	4	•	•	•
5.3	40	1.3	4	•	•	•
6.3	45	1.3	5	•	•	•
8.3	50	1.8	6	•	•	•
10.4	50	2.2	6	•	•	•
12.4	56	2.5	8	•	•	•
16.5	60	2.8	10	•	•	•
20.5	63	3.0	10	•	•	•
25.0	67	3.2	10	•	•	•
31.0	71	3.5	12	•	•	•



60° Three flutes countersinks



60°

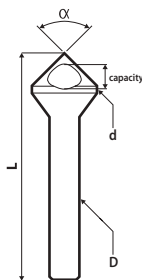
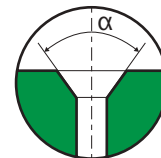
**3 FLUTES :
HIGH PRODUCTION
SERIES**

CODE				i4	i5	i6
d	L	d1	D	HSS-E*	HSS-E* + TiN	CARBIDE + TiAlN
6.3	47	1.3	5	•	•	•
8.3	52	1.8	6	•	•	•
10.4	53	2.2	6	•	•	•
12.4	60	2.5	8	•	•	•
16.5	65	2.8	10	•	•	•
20.5	69	3.0	10	•	•	•
25.0	75	3.2	10	•	•	•
31.0	81	3.5	12	•	•	•

*HSS with 5% Cobalt = performances !



Hole type countersinks



82°



90°

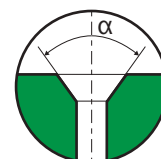


100°

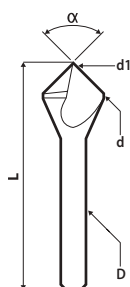


CODE				J1		J2		J3	
d	capacity	D	L	HSS-E*	L	HSS-E*	L	HSS-E*	
10	4 - 9	6	46	•	45	•	44	•	
15	6 - 14	8	56	•	55	•	54	•	
20	8 - 18	10	64	•	63	•	62	•	
25	10 - 23	12	74	•	67	•	70	•	
28	11 - 26	12			76	•			
30	12 - 28	12	80	•	78	•	76	•	
35	14 - 33	16	103	•	103	•	100	•	

Single flute countersinks



“EASY TO REGRIND”



60°



90°



CODE				J4		J5		J6	
d	d1	D	L	HSS-E*	L	HSS-E*	HSS-E* + TiN		
6	1	6	43	•	40	•	•		
8	1	6			40	•	•		
10	1	6	49	•	45	•	•		
12	2	8	53	•	50	•	•		
15	2	8	60	•	55	•	•		
20	2	10	72	•	63	•	•		
25	3	12	78	•	67	•	•		
30	3	12	84	•	71	•	•		
35	4	16			103	•	•		

*HSS with 5% Cobalt = performances !





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