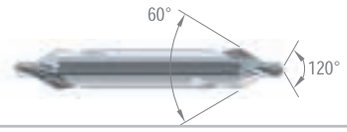
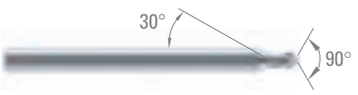
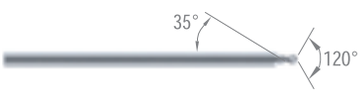
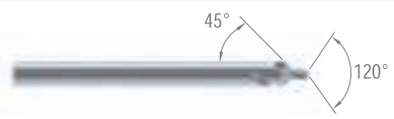
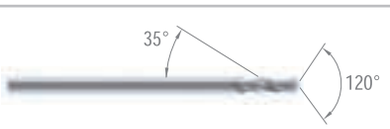
SELECTION OF DRILLS

✓ = item from stock

CENTRE AND SPOTTING DRILLS		Z	Page	Lc	CARBIDE	TiN	DICUT	TiAlN	
DIXI 1101 R Ø 0.80 - 4.00		2	10	DIN 333 A	✓				
DIXI 1106 R Ø 1.00 - 20.00		2	11		✓			✓	
DIXI 1106 L Ø 4.00 - 6.00		2	12		✓				
DIXI 1107 R Ø 1.00 - 20.00		2	12		✓				
DIXI 1108 R Ø 0.60 - 2.50		2	13	1 - 2 x Ø	✓	✓		✓	
DIXI 1109 R Ø 0.50 - 2.50		2	15	1 - 2 x Ø	✓		✓		
DIXI 1110 R Ø 0.80 - 1.45		2	16	1 - 2 x Ø	✓			✓	
HELICAL GUN DRILLS Z = 1									
DIXI 1111 R Ø 0.10 - 2.00		1	17	4 - 9 x Ø	✓				
TWIST DRILLS Z = 2									
DIXI 1126 R Ø 1.00 - 14.00		2	18	DIN 338 7 - 12 x Ø	✓	✓	✓		
DIXI 1130 R Ø 0.30 - 16.00		2	20	DIN 6539 2 - 16 x Ø	✓	✓	✓		
DIXI 1130 L Ø 0.30 - 8.00		2	23	4 - 16 x Ø	✓	✓	✓		
DIXI 1132 R Ø 0.40 - 2.00		2	26	4 - 15 x Ø	✓	✓	✓		

○ good ◎ excellent

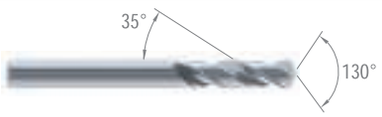
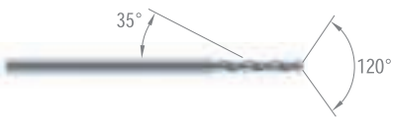
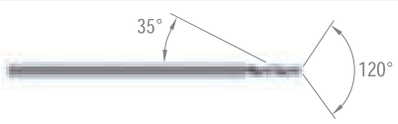
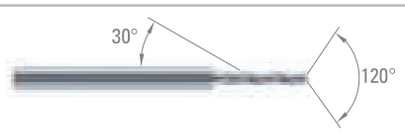
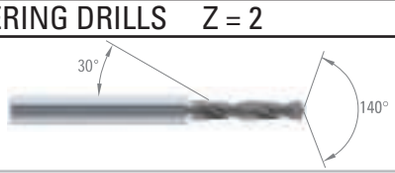
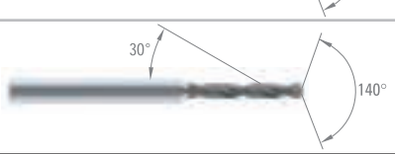
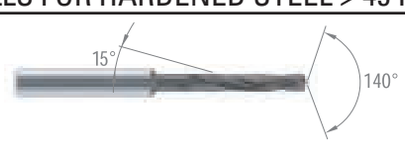
Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
◎	○	○	○		◎	○	○	◎	○	◎		◎
◎	◎	○	◎		◎	○	◎	◎	◎	◎		◎
◎	◎	○	◎		◎	○	◎	◎	◎	◎		◎
◎	◎	○	◎		◎	○	◎	◎	◎	◎		◎
◎	◎	○	◎		◎	○	◎	◎	◎	◎		◎
◎	◎	○	◎		◎	○	◎	◎	◎	◎		◎
◎	◎	○	◎		◎	○	◎	◎	◎	◎		◎

○								◎	○			

◎	○	○	○		◎	○	○	◎	○	○		○
◎	○				◎		○	◎	○	○		○
◎	○				◎		○	◎	○	○		○
◎	◎	○	◎		○	○	◎	○	◎	○		○

SELECTION OF DRILLS

✓ = item from stock

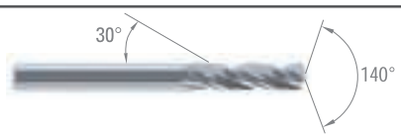
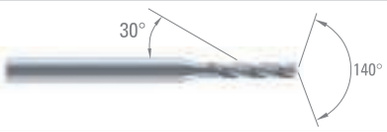
		Z	Page	Lc	CARBIDE	TiN	DICUT	TiAlN	DLC	XIDUR
TWIST DRILLS Z = 2										
DIXI 1133 R Ø 0.50 - 6.00		2	27	4 - 18 x Ø	✓	✓	✓			
TWIST DRILLS - REINFORCED SHANK Z = 2										
DIXI 1131 R Ø 0.05 - 2.45		2	29	DIN 1899 4 - 9 x Ø	✓	✓	✓		* ✓	
DIXI 1131 L Ø 0.10 - 2.45		2	34	DIN 1899 4 - 9 x Ø	✓	✓	✓			
DIXI 1134 R Ø 0.50 - 1.95		2	38	DIN 1899 6 - 9 x Ø	✓	✓	✓			
DIXI 1135 R Ø 0.20 - 2.49		2	40	3 - 8 x Ø	✓	✓	✓			
DIXI 1138 R Ø 0.05 - 2.80		2	45	4 - 9 x Ø	✓			✓		
SELF-CENTERING DRILLS Z = 2										
DIXI 1149 R Ø 2.00 - 14.00		2	47	DIN 6537K 3 - 4 x Ø				✓		
DIXI 1147 R Ø 0.50 - 10.00		2	49	6.5 x Ø				✓		
SELF-CENTERING DRILLS WITH THROUGH COOLANT Z = 2										
DIXI 1145 R Ø 0.70 - 14.00		2	51	DIN 6537L 5 - 7 x Ø				✓		
DIXI 1146 R Ø 0.80 - 10.00		2	53	10 x Ø				✓		
TWIST DRILLS FOR HARDENED STEEL > 45 HRC										
DIXI 1280 R Ø 0.25 - 12.00		2	55	3 - 7 x Ø						✓

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
○	○	○	○		○		○	◎	◎	◎		○
◎	○		○		◎	○	◎	◎	○	○	◎	○
◎	○		○		◎	○	◎	◎	○	○	○	○
◎	◎	○	◎		○	○	◎	○	◎	○		
◎	◎	○	◎		○	○	◎	○	◎	○		
◎	◎	○	◎		○	○	◎	○	◎	○		
○	○	◎	◎		◎	○	◎		○	○		
○	◎	◎	○		○	◎	○			○		
○	○	◎	◎		◎	○	◎		○			
○	◎	◎	○		○	◎	○					
				◎		○						

SELECTION OF DRILLS

✓ = item from stock

TWIST DRILLS Z = 3	Z	Page	Lc	☐ CARBIDE	TiN			
DIXI 1151 R Ø 1.00 - 14.00 	3	57	3 - 8 x Ø	✓	✓			
DIXI 1152 R Ø 0.15 - 2.90 	3	59	6 - 10 x Ø	✓				

DRILLS FOR COMPOSITE MATERIALS / KEVLAR®

DIXI 1290 R Ø 2.50 - 12.70 	2	61		✓				

TOOLS ON REQUEST

SPADE DRILLS

DIXI 1112 R+L Ø 0.08 - 5.99 	2	62						

HALF-MOON BITS

DIXI 1114 R+L Ø 0.08 - 5.99 	1	62						

STRAIGHT FLUTE SLOT DRILLS

DIXI 1118 R+L Ø 0.08 - 5.99 	2	62						

STEPPED TWIST DRILLS

DIXI 1501 R+L 	2	63						
DIXI 1502 R+L 	2	63						
DIXI 1503 R+L 	2	64						
DIXI 1504 R+L 	2	64						

○ good ◎ excellent

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Steel Hardened cast iron > 45 HRC	Cast iron	Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic
○	○				◎		◎	◎		○		
○	○				◎		◎	◎		○		

Kevlar®
◎

○					○			◎	○	○		○
○								◎	○			○
○					○			◎	○	○		○
◎	○	○	○		○	○	○	◎	○	◎		○
◎	○	○	○		○	○	○	◎	○	◎		○
◎	○	○	○		○	○	○	◎	○	◎		○
◎	○	○	○		○	○	○	◎	○	◎		○

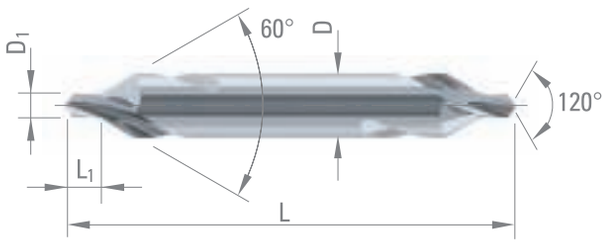
DIXI 1101 R 60°

CENTRE DRILLS

Z = 2

P. 66

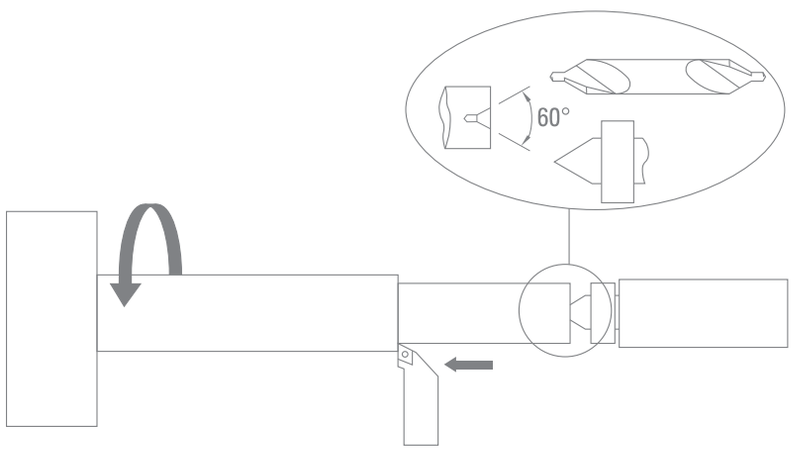
DIN 333 A



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D_1	L_1	D_{h6}	L	CARBIDE
0.80 $^{+0.14}_{0}$	1.30 ±0.1	3.15	31.50 ±2	☐
1.00 $^{+0.14}_{0}$	1.60 ±0.2	3.15	31.50 ±2	☐
1.25 $^{+0.14}_{0}$	1.90 ±0.2	3.15	31.50 ±2	☐
1.60 $^{+0.14}_{0}$	2.40 ±0.2	4.00	35.50 ±2	☐
2.00 $^{+0.14}_{0}$	2.90 ±0.2	5.00	40.00 ±2	☐
2.50 $^{+0.14}_{0}$	3.60 ±0.2	6.30	45.00 ±2	☐
* 3.15 $^{+0.18}_{0}$	4.40 ±0.3	8.00	50.00 ±2	☐
* 4.00 $^{+0.18}_{0}$	5.60 ±0.4	10.00	56.00 ±3	☐

* = With web thinning



DIXI 1106 R 90°

SPOTTING DRILLS

Z = 2

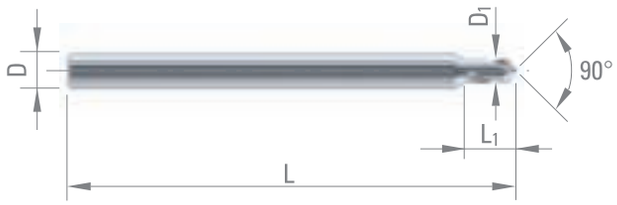
P. 66

Steel < 600MPa | Steel > 600MPa | High alloyed steel | DUPLEX stainless steel | Cast iron

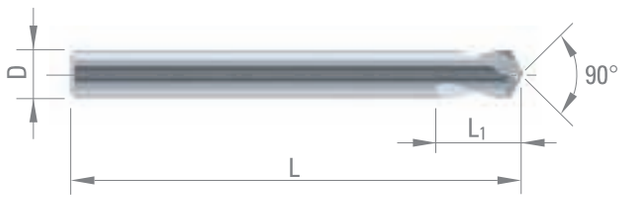
Refractory alloy | Titanium, titanium alloy | Cu alloy Silver Gold | Cu alloy difficult to machine | Al

Plastic

Ø 1.00 ≤ Ø 2.00



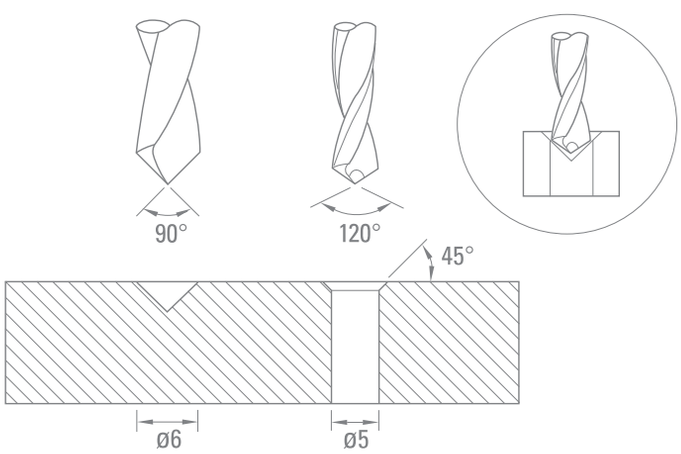
Ø 1.00 ≤ Ø 20.00



D_1	L_1	D_{h6}	L	CARBIDE	TiAlN
1.00	3	3	38	☐	■
1.50	5	3	38	☐	■
2.00	5	3	38	☐	■

D_{h6}	L_1	L	CARBIDE	TiAlN
1.00	3	32	☐	■
1.50	5	32	☐	■
2.00	5	32	☐	■
3.00	9	38	☐	■
4.00	10	50	☐	■
5.00	13	50	☐	■
* 6.00	13	57	☐	■
* 8.00	27	63	☐	■
* 10.00	30	72	☐	■
* 12.00	35	83	☐	■
* 16.00	46	92	☐	■
* 20.00	52	104	☐	■

* = With web thinning

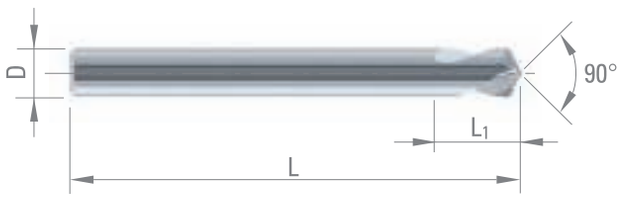


DIXI 1106 L 90°

LEFT HAND SPOTTING DRILLS

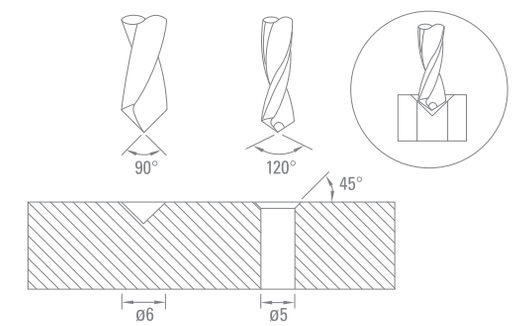
Z = 2

P. 66



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D_{h6}	L_1	L	CARBIDE
4.00	10	50	☐
5.00	13	50	☐
6.00	13	57	☐

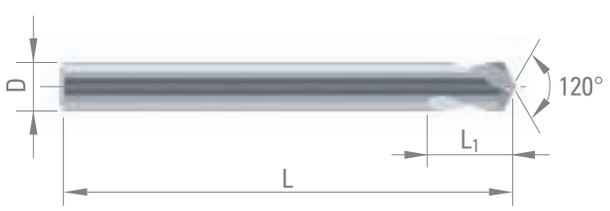


DIXI 1107 R 120°

SPOTTING DRILLS

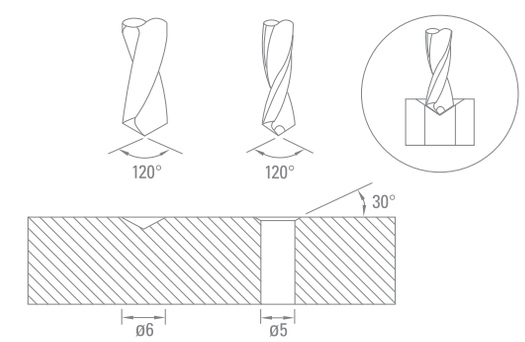
Z = 2

P. 66



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

D_{h6}	L_1	L	CARBIDE
1.00	3	38	☐
2.00	5	38	☐
3.00	9	38	☐
4.00	10	50	☐
6.00	13	57	☐
* 8.00	27	63	☐
* 10.00	30	72	☐
* 12.00	35	83	☐
* 16.00	46	92	☐
* 20.00	52	104	☐



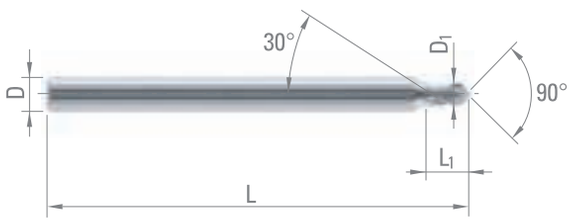
* = With web thinning

DIXI 1108 R 90°

SPOTTING DRILLS
REINFORCED SHANK

Z = 2

P. 66



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

$D_{1\ h6}$	L_1	D_{h6}	L	CARBIDE	TiN	TiAlN
0.60	1.0	3	38	☐		
0.65	1.0	3	38	☐		
0.70	1.0	3	38	☐		
0.75	1.0	3	38	☐		
0.80	1.5	3	38	☐	■	■
0.82	1.5	3	38	☐		■
0.85	1.5	3	38	☐		■
0.87	1.5	3	38	☐		■
0.90	1.5	3	38	☐	■	■
0.92	1.5	3	38	☐		■
0.95	1.5	3	38	☐		■
0.97	1.5	3	38	☐		■
1.00	1.5	3	38	☐	■	■
1.02	2.0	3	38	☐		■
1.05	2.0	3	38	☐		■
1.07	2.0	3	38	☐		■
1.10	2.0	3	38	☐	■	■
1.12	2.0	3	38	☐		■
1.15	2.0	3	38	☐		■
1.17	2.0	3	38	☐		■
1.20	2.0	3	38	☐	■	■
1.22	2.0	3	38	☐		■
1.25	2.0	3	38	☐		■
1.27	2.0	3	38	☐		■
1.30	2.0	3	38	☐	■	■
1.32	2.0	3	38	☐		■
1.35	2.0	3	38	☐		■
1.37	2.0	3	38	☐		■
1.40	2.0	3	38	☐	■	■
1.42	2.0	3	38	☐		■
1.45	2.0	3	38	☐		■
1.47	2.0	3	38	☐		■
1.50	2.0	3	38	☐	■	■
1.52	3.0	3	38	☐		■
1.55	3.0	3	38	☐		■
1.57	3.0	3	38	☐		■
1.60	3.0	3	38	☐	■	■
1.62	3.0	3	38	☐		■
1.65	3.0	3	38	☐		■
1.67	3.0	3	38	☐		■
1.70	3.0	3	38	☐	■	■

DIXI 1108 R 90°

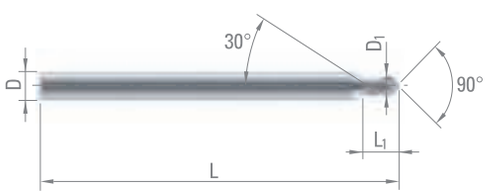
$D_{1\ h6}$	L_1	D_{h6}	L	CARBIDE	TiN	TiAlN
1.72	3.0	3	38	☐		■
1.75	3.0	3	38	☐		■
1.77	3.0	3	38	☐		■
1.80	3.0	3	38	☐	■	■
1.82	3.0	3	38	☐		■
1.85	3.0	3	38	☐		■
1.87	3.0	3	38	☐		■
1.90	3.0	3	38	☐	■	■
1.92	3.0	3	38	☐		■
1.95	3.0	3	38	☐		■
1.97	3.0	3	38	☐		■
2.00	3.0	3	38	☐	■	■
2.02	3.0	3	38	☐		■
2.05	3.0	3	38	☐		■
2.07	3.0	3	38	☐		■
2.10	3.0	3	38	☐	■	■
2.12	3.0	3	38	☐		■
2.15	3.0	3	38	☐		■
2.17	3.0	3	38	☐		■
2.20	3.0	3	38	☐	■	■
2.22	3.0	3	38	☐		■
2.25	3.0	3	38	☐		■
2.27	3.0	3	38	☐		■
2.30	3.0	3	38	☐	■	■
2.32	3.0	3	38	☐		■
2.35	3.0	3	38	☐		■
2.37	3.0	3	38	☐		■
2.40	3.0	3	38	☐	■	■
2.42	3.0	3	38	☐		■
2.45	3.0	3	38	☐		■
2.47	3.0	3	38	☐		■
2.50	3.0	3	38	☐	■	■

P. 66

Steel < 600MPa | Steel > 600MPa | High alloyed steel | DUPLEX stainless steel | Cast iron

Refractory alloy | Titanium, titanium alloy | Cu alloy Silver Gold | Cu alloy difficult to machine | Al

Plastic

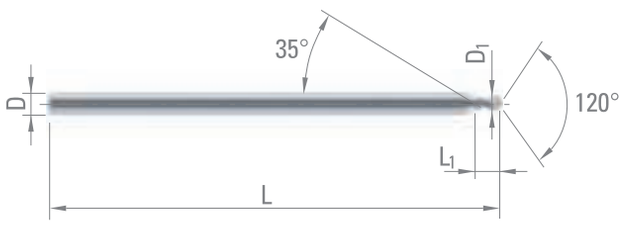


DIXI 1109 R 120°

SPOTTING DRILLS
REINFORCED SHANK

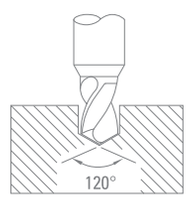
Z = 2

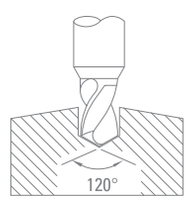
P. 66

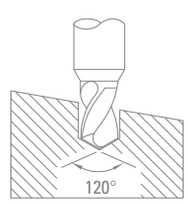


Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Plastic				

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	DICUT
0.50	1.0	1.5	30	☐	■
0.55	1.0	1.5	30	☐	■
0.60	1.2	1.5	30	☐	■
0.65	1.2	1.5	30	☐	■
0.70	1.5	1.5	30	☐	■
0.75	1.5	1.5	30	☐	■
0.80	2.0	1.5	30	☐	■
0.85	2.0	1.5	30	☐	■
0.90	2.0	1.5	30	☐	■
0.95	2.0	1.5	30	☐	■
1.00	2.0	1.5	30	☐	■
1.05	2.0	1.5	30	☐	■
1.10	2.0	1.5	30	☐	■
1.15	2.4	1.5	30	☐	■
1.20	2.4	1.5	30	☐	■
1.25	2.4	1.5	30	☐	■
1.30	2.4	1.5	30	☐	■
1.35	2.4	1.5	30	☐	■
1.40	2.4	1.5	30	☐	■
1.45	2.4	1.5	30	☐	■
1.50	3.0	2.0	32	☐	■
1.55	3.0	2.0	32	☐	■
1.60	3.0	2.0	32	☐	■
1.65	3.0	2.0	32	☐	■
1.70	3.0	2.0	32	☐	■
1.75	3.5	2.0	32	☐	■
1.80	3.5	2.0	32	☐	■
1.85	3.5	2.0	32	☐	■
1.90	3.5	2.0	32	☐	■
1.95	3.5	2.0	32	☐	■
2.00	4.0	2.5	32	☐	■
2.10	4.0	2.5	32	☐	■
2.20	4.0	2.5	32	☐	■
2.30	4.0	2.5	32	☐	■
2.40	4.0	2.5	32	☐	■
2.50	4.0	2.5	32	☐	■







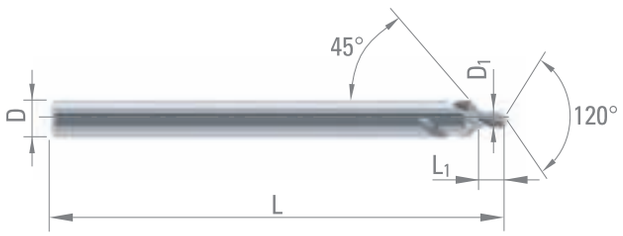
DIXI 1110 R 120°

SPOTTING AND CHAMFERING DRILLS

Z = 2

P. 66

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiAlN
0.80	2.0	3	38	☐	■
0.85	2.0	3	38	☐	■
0.90	2.0	3	38	☐	■
0.95	2.0	3	38	☐	■
1.00	2.0	3	38	☐	■
1.05	2.0	3	38	☐	■
1.10	2.0	3	38	☐	■
1.15	2.4	3	38	☐	■
1.20	2.4	3	38	☐	■
1.25	2.4	3	38	☐	■
1.30	2.4	3	38	☐	■
1.35	2.4	3	38	☐	■
1.40	2.4	3	38	☐	■
1.45	2.4	3	38	☐	■

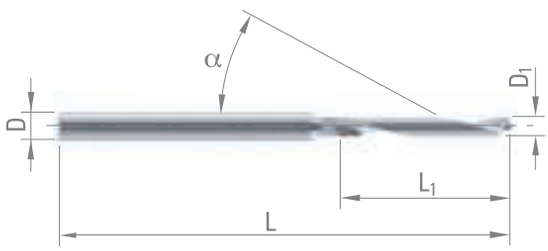
DIXI 1111 R

HELICAL GUN DRILLS

Z = 1

P. 68

Steel > 600MPa | Cu alloy Silver Gold | Al



$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE
0.10	0.7	1.0	30	☐
0.15	1.0	1.0	30	☐
0.20	1.0	1.0	30	☐
0.25	1.0	1.0	30	☐
0.30	1.5	1.0	30	☐
0.35	1.5	1.0	30	☐
0.40	2.0	1.0	30	☐
0.45	3.6	1.0	30	☐
0.50	4.0	1.0	30	☐
0.55	4.5	1.0	30	☐
0.60	4.5	1.0	30	☐
0.65	5.0	1.0	30	☐
0.70	5.6	1.0	30	☐
0.75	5.6	1.0	30	☐
0.80	6.3	1.5	30	☐
0.85	6.3	1.5	30	☐
0.90	7.1	1.5	30	☐
0.95	7.1	1.5	30	☐
1.00	9.0	1.5	30	☐
1.05	9.0	1.5	30	☐
1.10	9.0	1.5	30	☐
1.15	9.0	1.5	30	☐
1.20	10.0	1.5	30	☐
1.30	10.0	1.5	30	☐
1.40	10.0	1.5	30	☐
1.45	10.0	1.5	30	☐
1.50	12.0	2.0	38	☐
1.60	12.0	2.0	38	☐
1.65	12.0	2.0	38	☐
1.70	12.0	2.0	38	☐
1.75	12.0	2.0	38	☐
1.80	12.0	2.0	38	☐
2.00	12.0	2.5	43	☐

Other diameters until Ø 5.99 on request

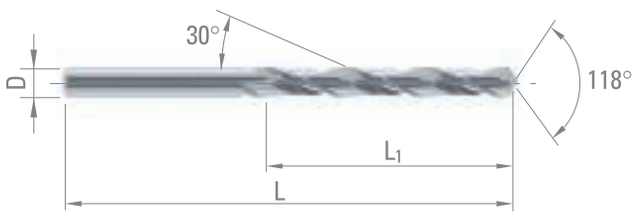
DIXI 1126 R

TWIST DRILLS

Z = 2

P. 65 P. 70

DIN 338



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Graphite	Plastic			

D_{h6}	L_1	L	CARBIDE	TiN	DICUT
1.00	12	34	☐	■	■
1.10	14	36	☐	■	■
1.20	16	38	☐	■	■
1.30	16	38	☐	■	■
1.40	18	40	☐	■	■
1.50	18	40	☐	■	■
1.60	20	43	☐	■	■
1.70	20	43	☐	■	■
1.80	22	46	☐	■	■
1.90	22	46	☐	■	■
2.00	24	49	☐	■	■
2.10	24	49	☐	■	■
2.20	27	53	☐	■	■
2.30	27	53	☐	■	■
2.40	30	57	☐	■	■
2.50	30	57	☐	■	■
2.60	30	57	☐	■	■
2.70	33	61	☐	■	■
2.80	33	61	☐	■	■
2.90	33	61	☐	■	■
3.00	33	61	☐	■	■
3.10	36	65	☐	■	■
3.20	36	65	☐	■	■
3.30	36	65	☐	■	■
3.40	39	70	☐	■	■
3.50	39	70	☐	■	■
3.60	39	70	☐	■	■
3.70	39	70	☐	■	■
3.80	43	75	☐	■	■
3.90	43	75	☐	■	■
4.00	43	75	☐	■	■
4.10	43	75	☐	■	■
4.20	43	75	☐	■	■
4.30	47	80	☐	■	■
4.40	47	80	☐	■	■
4.50	47	80	☐	■	■
4.60	47	80	☐	■	■
4.70	47	80	☐	■	■
4.80	52	86	☐	■	■
4.90	52	86	☐	■	■

DIXI 1126 R

D_{h6}	L_1	L	CARBIDE	TiN	DICUT
5.00	52	86	☐	■	■
5.10	52	86	☐	■	■
5.20	52	86	☐	■	■
5.30	52	86	☐	■	■
5.40	57	93	☐	■	■
5.50	57	93	☐	■	■
5.60	57	93	☐	■	■
5.70	57	93	☐	■	■
5.80	57	93	☐	■	■
5.90	57	93	☐	■	■
6.00	57	93	☐	■	■
6.10	63	101	☐	■	■
6.20	63	101	☐	■	■
6.30	63	101	☐	■	■
6.40	63	101	☐	■	■
6.50	63	101	☐	■	■
6.60	63	101	☐	■	■
6.70	63	101	☐	■	■
6.80	69	109	☐	■	■
6.90	69	109	☐	■	■
7.00	69	109	☐	■	■
7.50	69	109	☐	■	■
7.70	75	117	☐	■	■
7.80	75	117	☐	■	■
8.00	75	117	☐	■	■
8.50	75	117	☐	■	■
9.00	81	125	☐	■	■
9.50	81	125	☐	■	■
10.00	87	133	☐	■	■
10.20	87	133	☐	■	■
10.50	87	133	☐	■	■
11.00	94	142	☐	■	■
11.50	94	142	☐	■	■
12.00	101	151	☐	■	■
12.50	101	151	☐	■	■
13.00	101	151	☐	■	■
13.50	108	160	☐	■	■
14.00	108	160	☐	■	■

P. 65

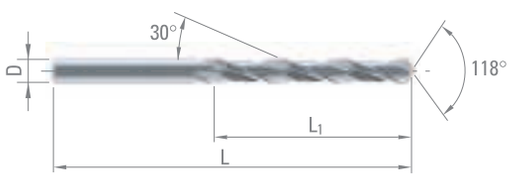
P. 70

DIN 338

Steel < 600MPa | Steel > 600MPa | High alloyed steel | DUPLEX stainless steel | Cast iron

Refractory alloy | Titanium, titanium alloy | Cu alloy Silver Gold | Cu alloy difficult to machine | Al

Graphite | Plastic



DIXI 1130 R

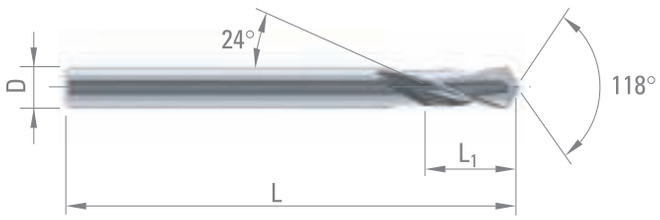
TWIST DRILLS

Z = 2

P. 65 P. 72

DIN 6539

Steel < 600MPa	Steel > 600MPa	High alloyed steel	Cast iron	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic



D_{h6}	L_1	L	CARBIDE	TiN	DICUT
0.30	5	30	☐	■	■
0.35	5	30	☐	■	■
0.40	6	30	☐	■	■
0.45	6	30	☐	■	■
0.50	6	30	☐	■	■
0.55	6	30	☐	■	■
0.60	6	30	☐	■	■
0.65	6	30	☐	■	■
0.70	6	30	☐	■	■
0.75	6	30	☐	■	■
0.80	7	30	☐	■	■
0.85	7	30	☐	■	■
0.90	7	30	☐	■	■
0.95	7	30	☐	■	■
1.00	7	30	☐	■	■
1.05	8	30	☐	■	■
1.10	8	30	☐	■	■
1.15	8	30	☐	■	■
1.20	8	30	☐	■	■
1.25	8	30	☐	■	■
1.30	8	30	☐	■	■
1.35	8	30	☐	■	■
1.40	8	30	☐	■	■
1.45	8	30	☐	■	■
1.50	8	30	☐	■	■
1.55	9	38	☐	■	■
1.60	9	38	☐	■	■
1.65	9	38	☐	■	■
1.70	9	38	☐	■	■
1.75	9	38	☐	■	■
1.80	9	38	☐	■	■
1.85	9	38	☐	■	■
1.90	9	38	☐	■	■
1.95	9	38	☐	■	■
2.00	9	38	☐	■	■
2.05	9	38	☐	■	■
2.10	9	38	☐	■	■
2.15	10	40	☐	■	■
2.20	10	40	☐	■	■

DIXI 1130 R

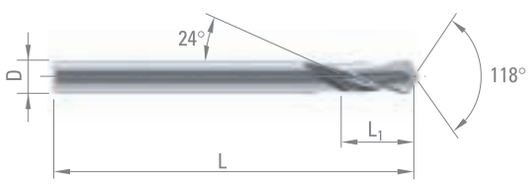
D_{h6}	L_1	L	CARBIDE	TiN	DICUT
2.25	10	40	☐	■	■
2.30	10	40	☐	■	■
2.35	10	40	☐	■	■
2.40	11	43	☐	■	■
2.45	11	43	☐	■	■
2.50	11	43	☐	■	■
2.55	11	43	☐	■	■
2.60	11	43	☐	■	■
2.65	11	43	☐	■	■
2.70	12	46	☐	■	■
2.75	12	46	☐	■	■
2.80	12	46	☐	■	■
2.85	12	46	☐	■	■
2.90	12	46	☐	■	■
2.95	12	46	☐	■	■
3.00	12	46	☐	■	■
3.05	14	49	☐	■	■
3.10	14	49	☐	■	■
3.15	14	49	☐	■	■
3.20	14	49	☐	■	■
3.25	14	49	☐	■	■
3.30	14	49	☐	■	■
3.35	14	49	☐	■	■
3.40	15	52	☐	■	■
3.45	15	52	☐	■	■
3.50	15	52	☐	■	■
3.55	15	52	☐	■	■
3.60	15	52	☐	■	■
3.65	15	52	☐	■	■
3.70	15	52	☐	■	■
3.75	15	52	☐	■	■
3.80	17	55	☐	■	■
3.85	17	55	☐	■	■
3.90	17	55	☐	■	■
3.95	17	55	☐	■	■
4.00	17	55	☐	■	■
4.05	17	55	☐	■	■
4.10	17	55	☐	■	■
4.15	17	55	☐	■	■
4.20	17	55	☐	■	■
4.25	17	55	☐	■	■
4.30	18	58	☐	■	■
4.35	18	58	☐	■	■
4.40	18	58	☐	■	■
4.45	18	58	☐	■	■
4.50	18	58	☐	■	■
4.55	18	58	☐	■	■
4.60	18	58	☐	■	■
4.65	18	58	☐	■	■
4.70	18	58	☐	■	■
4.75	18	58	☐	■	■
4.80	20	62	☐	■	■
4.85	20	62	☐	■	■
4.90	20	62	☐	■	■
4.95	20	62	☐	■	■

P. 65

P. 72

DIN 6539

Steel < 600MPa	Steel > 600MPa	High alloyed steel	Cast iron	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic



DIXI 1130 R

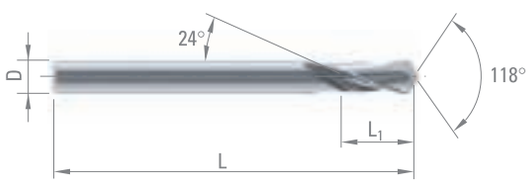
D_{h6}	L_1	L	CARBIDE	TiN	DICUT
5.00	20	62	☐	■	■
5.10	20	62	☐	■	■
5.20	20	62	☐	■	■
5.30	20	62	☐	■	■
5.40	21	66	☐	■	■
5.50	21	66	☐	■	■
5.60	21	66	☐	■	■
5.70	21	66	☐	■	■
5.80	21	66	☐	■	■
5.90	21	66	☐	■	■
6.00	21	66	☐	■	■
6.10	23	70	☐	■	■
6.20	23	70	☐	■	■
6.30	23	70	☐	■	■
6.40	23	70	☐	■	■
6.50	23	70	☐	■	■
6.60	23	70	☐	■	■
6.70	23	70	☐	■	■
6.80	25	74	☐	■	■
6.90	25	74	☐	■	■
7.00	25	74	☐	■	■
7.10	25	74	☐	■	■
7.20	25	74	☐	■	■
7.30	25	74	☐	■	■
7.40	25	74	☐	■	■
7.50	25	74	☐	■	■
7.60	27	79	☐	■	■
7.70	27	79	☐	■	■
7.80	27	79	☐	■	■
7.90	27	79	☐	■	■
8.00	27	79	☐	■	■
8.10	27	79	☐	■	■
8.20	27	79	☐	■	■
8.30	27	79	☐	■	■
8.40	27	79	☐	■	■
8.50	27	79	☐	■	■
8.80	29	84	☐	■	■
9.00	29	84	☐	■	■
9.20	29	84	☐	■	■
9.50	29	84	☐	■	■
9.80	31	89	☐	■	■
10.00	31	89	☐	■	■
10.20	31	89	☐	■	■
10.50	31	89	☐	■	■
11.00	33	95	☐	■	■
11.50	33	95	☐	■	■
12.00	35	102	☐	■	■
12.50	35	102	☐	■	■
13.00	35	102	☐	■	■
13.50	37	107	☐	■	■
14.00	37	107	☐	■	■
16.00	38	115	☐	■	■

P. 65

P. 72

DIN 6539

Steel < 600MPa	Steel > 600MPa	High alloyed steel	Cast iron	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic



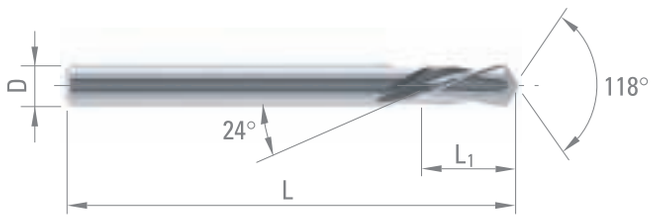
DIXI 1130 L

LEFT HAND TWIST DRILLS

Z = 2

P. 65 P. 72

Steel < 600MPa	Steel > 600MPa	High alloyed steel	Cast iron	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic



D_{h6}	L_1	L	CARBIDE	TiN	DICUT
0.30	5	30	☐	■	■
0.35	5	30	☐	■	■
0.40	6	30	☐	■	■
0.45	6	30	☐	■	■
0.50	6	30	☐	■	■
0.55	6	30	☐	■	■
0.60	6	30	☐	■	■
0.65	6	30	☐	■	■
0.70	6	30	☐	■	■
0.75	6	30	☐	■	■
0.80	8	30	☐	■	■
0.85	8	30	☐	■	■
0.90	8	30	☐	■	■
0.95	8	30	☐	■	■
1.00	8	30	☐	■	■
1.05	10	30	☐	■	■
1.10	10	30	☐	■	■
1.15	10	30	☐	■	■
1.20	10	30	☐	■	■
1.25	10	30	☐	■	■
1.30	10	30	☐	■	■
1.35	10	30	☐	■	■
1.40	10	30	☐	■	■
1.45	10	30	☐	■	■
1.50	10	30	☐	■	■
1.55	16	38	☐	■	■
1.60	16	38	☐	■	■
1.65	16	38	☐	■	■
1.70	16	38	☐	■	■
1.75	16	38	☐	■	■
1.80	16	38	☐	■	■
1.85	16	38	☐	■	■
1.90	16	38	☐	■	■
1.95	16	38	☐	■	■

DIXI 1130 L

D_{h6}	L_1	L	CARBIDE	TiN	DICUT
2.00	16	38	☐	■	■
2.05	16	38	☐	■	■
2.10	16	38	☐	■	■
2.15	16	40	☐	■	■
2.20	16	40	☐	■	■
2.25	16	40	☐	■	■
2.30	16	40	☐	■	■
2.35	16	40	☐	■	■
2.40	16	43	☐	■	■
2.45	16	43	☐	■	■
2.50	16	43	☐	■	■
2.55	16	43	☐	■	■
2.60	16	43	☐	■	■
2.65	16	43	☐	■	■
2.70	16	46	☐	■	■
2.75	16	46	☐	■	■
2.80	16	46	☐	■	■
2.85	16	46	☐	■	■
2.90	16	46	☐	■	■
2.95	16	46	☐	■	■
3.00	16	46	☐	■	■
3.05	18	49	☐	■	■
3.10	18	49	☐	■	■
3.15	18	49	☐	■	■
3.20	18	49	☐	■	■
3.25	18	49	☐	■	■
3.30	18	49	☐	■	■
3.35	18	49	☐	■	■
3.40	20	50	☐	■	■
3.45	20	50	☐	■	■
3.50	20	50	☐	■	■
3.55	20	50	☐	■	■
3.60	20	50	☐	■	■
3.65	20	50	☐	■	■
3.70	20	50	☐	■	■
3.75	20	50	☐	■	■
3.80	22	50	☐	■	■
3.85	22	50	☐	■	■
3.90	22	50	☐	■	■
3.95	22	50	☐	■	■
4.00	22	50	☐	■	■
4.05	22	50	☐	■	■
4.10	22	50	☐	■	■
4.15	22	50	☐	■	■
4.20	22	50	☐	■	■
4.25	22	50	☐	■	■
4.30	24	50	☐	■	■
4.35	24	50	☐	■	■
4.40	24	50	☐	■	■
4.45	24	50	☐	■	■

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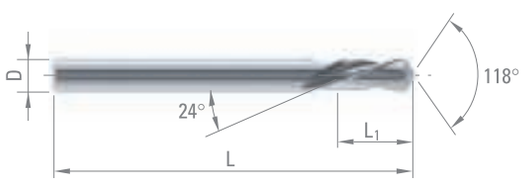
Steel < 600MPa	Steel > 600MPa	High alloyed steel	Cast iron	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic



DIXI 1130 L

D_{h6}	L_1	L	CARBIDE	TiN	DICUT
4.50	24	50	☐	■	■
4.55	24	50	☐	■	■
4.60	24	50	☐	■	■
4.65	24	50	☐	■	■
4.70	24	50	☐	■	■
4.75	24	50	☐	■	■
4.80	25	50	☐	■	■
4.85	25	50	☐	■	■
4.90	25	50	☐	■	■
4.95	25	50	☐	■	■
5.00	25	50	☐	■	■
5.10	25	50	☐	■	■
5.20	25	50	☐	■	■
5.30	25	50	☐	■	■
5.40	25	50	☐	■	■
5.50	25	50	☐	■	■
5.60	25	50	☐	■	■
5.70	25	50	☐	■	■
5.80	25	50	☐	■	■
5.90	25	50	☐	■	■
6.00	28	66	☐	■	■
6.10	31	70	☐	■	■
6.20	31	70	☐	■	■
6.30	31	70	☐	■	■
6.40	31	70	☐	■	■
6.50	31	70	☐	■	■
6.60	31	70	☐	■	■
6.70	31	70	☐	■	■
6.80	34	74	☐	■	■
6.90	34	74	☐	■	■
7.00	34	74	☐	■	■
7.50	34	74	☐	■	■
8.00	37	79	☐	■	■

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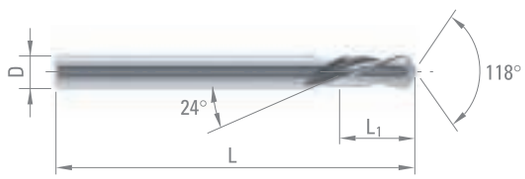
P. 72

Steel < 600MPa	Steel > 600MPa	High alloyed steel	Cast iron	Titanium, titanium alloy
Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Graphite	Plastic



DIXI 1132 R

TWIST DRILLS

Z = 2

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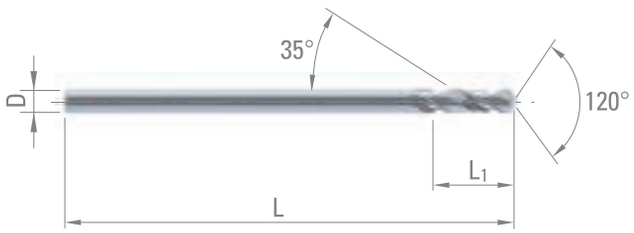

Steel < 600MPa | Steel > 600MPa | High alloyed steel | DUPLEX stainless steel | Cast iron

Refractory alloy | Titanium, titanium alloy | Cu alloy Silver Gold | Cu alloy difficult to machine | Al

Graphit | Plastic

D_{h6}	L_1	L	CARBIDE	TiN	DICUT
0.40	6	30	☐	■	■
0.45	6	30	☐	■	■
0.50	6	30	☐	■	■
0.55	6	30	☐	■	■
0.60	6	30	☐	■	■
0.65	6	30	☐	■	■
0.70	6	30	☐	■	■
0.75	6	30	☐	■	■
0.80	7	30	☐	■	■
0.85	7	30	☐	■	■
0.90	7	30	☐	■	■
0.95	7	30	☐	■	■
1.00	7	30	☐	■	■
1.05	8	30	☐	■	■
1.10	8	30	☐	■	■
1.15	8	30	☐	■	■
1.20	8	30	☐	■	■
1.25	8	30	☐	■	■
1.30	8	30	☐	■	■
1.35	8	30	☐	■	■
1.40	8	30	☐	■	■
1.45	8	30	☐	■	■
1.50	8	30	☐	■	■
1.55	9	38	☐	■	■
1.60	9	38	☐	■	■
1.65	9	38	☐	■	■
1.70	9	38	☐	■	■
1.75	9	38	☐	■	■
1.80	9	38	☐	■	■
1.85	9	38	☐	■	■
1.90	9	38	☐	■	■
1.95	9	38	☐	■	■
2.00	9	38	☐	■	■

DIXI 1133 R

TWIST DRILLS

Z = 2

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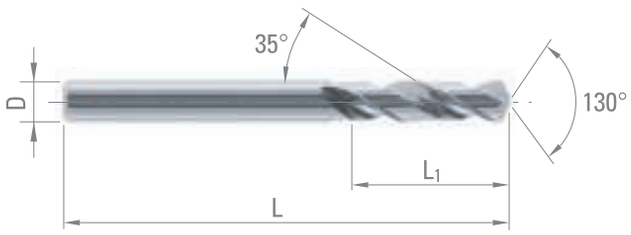

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic

D_{h6}	L_1	L	CARBIDE	TiN	DICUT
0.50	9	38	☐	■	■
0.55	9	38	☐	■	■
0.60	13	38	☐	■	■
0.65	13	38	☐	■	■
0.70	13	38	☐	■	■
0.75	13	38	☐	■	■
0.80	13	38	☐	■	■
0.85	13	38	☐	■	■
0.90	16	38	☐	■	■
0.95	16	38	☐	■	■
1.00	16	38	☐	■	■
1.05	16	38	☐	■	■
1.10	16	38	☐	■	■
1.15	16	38	☐	■	■
1.20	16	38	☐	■	■
1.25	16	38	☐	■	■
1.30	16	38	☐	■	■
1.35	16	38	☐	■	■
1.40	16	38	☐	■	■
1.45	16	38	☐	■	■
1.50	16	38	☐	■	■
1.55	16	38	☐	■	■
1.60	16	38	☐	■	■
1.65	16	38	☐	■	■
1.70	16	38	☐	■	■
1.75	16	38	☐	■	■
1.80	16	38	☐	■	■
1.85	16	38	☐	■	■
1.90	16	38	☐	■	■
1.95	16	38	☐	■	■

DIXI 1133 R

D_{h6}	L_1	L	CARBIDE	TiN	DICUT
2.00	16	38	☐	■	■
2.10	16	38	☐	■	■
2.20	16	40	☐	■	■
2.30	16	40	☐	■	■
2.40	16	43	☐	■	■
2.50	16	43	☐	■	■
2.60	16	43	☐	■	■
3.00	16	46	☐	■	■
3.30	18	49	☐	■	■
3.50	20	50	☐	■	■
4.00	22	55	☐	■	■
4.20	22	55	☐	■	■
4.50	24	58	☐	■	■
5.00	26	62	☐	■	■
5.50	28	66	☐	■	■
6.00	28	66	☐	■	■

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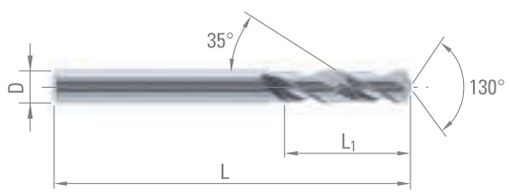
Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al	Plastic



DIXI 1131 R

TWIST DRILLS
REINFORCED SHANK

Z = 2

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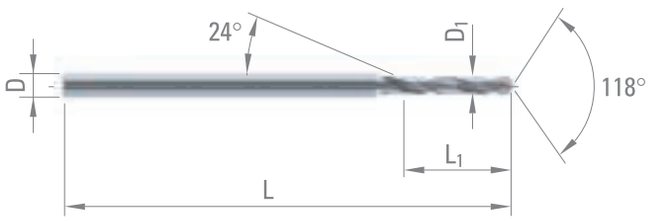
DIN 1899



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Grgaphite	Plastic			

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT	DLC
0.05	0.35	1.0	30	☐			
0.06	0.4	1.0	30	☐			
0.07	0.5	1.0	30	☐			
0.08	0.6	1.0	30	☐			
0.09	0.65	1.0	30	☐			
0.10	0.7	1.0	30	☐			
0.11	0.7	1.0	30	☐			
0.12	0.7	1.0	30	☐			
0.13	0.7	1.0	30	☐			
0.14	0.7	1.0	30	☐			
0.15	1.0	1.0	30	☐			
0.16	1.0	1.0	30	☐			
0.17	1.0	1.0	30	☐			
0.18	1.0	1.0	30	☐			
0.19	1.0	1.0	30	☐			
0.20	1.0	1.0	30	☐	■	■	■
0.21	1.0	1.0	30	☐	■	■	■
0.22	1.0	1.0	30	☐	■	■	■
0.23	1.0	1.0	30	☐	■	■	■
0.23 >	2.2	1.0	30	☐	■	■	■
0.24	1.0	1.0	30	☐	■	■	■
0.24 >	2.2	1.0	30	☐	■	■	■
0.25	1.0	1.0	30	☐	■	■	■
0.25 >	2.2	1.0	30	☐	■	■	■
0.26	1.0	1.0	30	☐	■	■	■
0.27	1.0	1.0	30	☐	■	■	■
0.28	1.0	1.0	30	☐	■	■	■
0.29	1.0	1.0	30	☐	■	■	■
0.30	1.5	1.0	30	☐	■	■	■
0.31	1.5	1.0	30	☐	■	■	■
0.32	1.5	1.0	30	☐	■	■	■
0.32 >	3.0	1.0	30	☐	■	■	■
0.33	1.5	1.0	30	☐	■	■	■
0.33 >	3.0	1.0	30	☐	■	■	■
0.34	1.5	1.0	30	☐	■	■	■
0.34 >	3.0	1.0	30	☐	■	■	■
0.35	1.5	1.0	30	☐	■	■	■
0.36	1.5	1.0	30	☐	■	■	■
0.37	1.5	1.0	30	☐	■	■	■
0.38	1.5	1.0	30	☐	■	■	■
0.39	1.5	1.0	30	☐	■	■	■

DIXI 1131 R

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT	DLC
0.40	2.0	1.0	30	☐	■	■	■
0.41	2.0	1.0	30	☐	■	■	■
0.42	2.0	1.0	30	☐	■	■	■
0.43	2.0	1.0	30	☐	■	■	■
0.44	2.0	1.0	30	☐	■	■	■
0.45	3.6	1.0	30	☐	■	■	■
0.46	3.6	1.0	30	☐	■	■	■
0.47	3.6	1.0	30	☐	■	■	■
0.48	3.6	1.0	30	☐	■	■	■
0.49	4.0	1.0	30	☐	■	■	■
0.50	4.0	1.0	30	☐	■	■	■
0.51	4.0	1.0	30	☐	■	■	■
0.52	4.0	1.0	30	☐	■	■	■
0.53	4.0	1.0	30	☐	■	■	■
0.54	4.5	1.0	30	☐	■	■	■
0.55	4.5	1.0	30	☐	■	■	■
0.56	4.5	1.0	30	☐	■	■	■
0.57	4.5	1.0	30	☐	■	■	■
0.58	4.5	1.0	30	☐	■	■	■
0.59	4.5	1.0	30	☐	■	■	■
0.60	4.5	1.0	30	☐	■	■	■
0.61	5.0	1.0	30	☐	■	■	■
0.62	5.0	1.0	30	☐	■	■	■
0.63	5.0	1.0	30	☐	■	■	■
0.64	5.0	1.0	30	☐	■	■	■
0.65	5.0	1.0	30	☐	■	■	■
0.66	5.0	1.0	30	☐	■	■	■
0.67	5.0	1.0	30	☐	■	■	■
0.68	5.6	1.0	30	☐	■	■	■
0.69	5.6	1.0	30	☐	■	■	■
0.70	5.6	1.0	30	☐	■	■	■
0.71	5.6	1.0	30	☐	■	■	■
0.72	5.6	1.0	30	☐	■	■	■
0.73	5.6	1.0	30	☐	■	■	■
0.74	5.6	1.0	30	☐	■	■	■
0.75	5.6	1.0	30	☐	■	■	■
0.76	6.3	1.0	30	☐	■	■	■
0.77	6.3	1.0	30	☐	■	■	■
0.78	6.3	1.0	30	☐	■	■	■
0.79	6.3	1.0	30	☐	■	■	■
0.80	6.3	1.5	30	☐	■	■	■
0.81	6.3	1.5	30	☐	■	■	■
0.82	6.3	1.5	30	☐	■	■	■
0.83	6.3	1.5	30	☐	■	■	■
0.84	6.3	1.5	30	☐	■	■	■
0.85	6.3	1.5	30	☐	■	■	■
0.86	7.1	1.5	30	☐	■	■	■
0.87	7.1	1.5	30	☐	■	■	■
0.88	7.1	1.5	30	☐	■	■	■
0.89	7.1	1.5	30	☐	■	■	■

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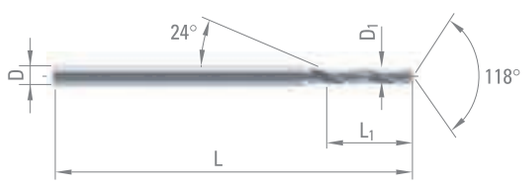
DIN 1899

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Graphite	Plastic			



DIXI 1131 R

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT	DLC
0.90	7.1	1.5	30	☐	■	■	■
0.91	7.1	1.5	30	☐	■	■	■
0.92	7.1	1.5	30	☐	■	■	■
0.93	7.1	1.5	30	☐	■	■	■
0.94	7.1	1.5	30	☐	■	■	■
0.95	7.1	1.5	30	☐	■	■	■
0.96	8.0	1.5	30	☐	■	■	■
0.97	8.0	1.5	30	☐	■	■	■
0.98	8.0	1.5	30	☐	■	■	■
0.99	8.0	1.5	30	☐	■	■	■
1.00	9.0	1.5	30	☐	■	■	■
1.01	9.0	1.5	30	☐	■	■	■
1.02	9.0	1.5	30	☐	■	■	■
1.03	9.0	1.5	30	☐	■	■	■
1.04	9.0	1.5	30	☐	■	■	■
1.05	9.0	1.5	30	☐	■	■	■
1.06	9.0	1.5	30	☐	■	■	■
1.07	9.0	1.5	30	☐	■	■	■
1.08	9.0	1.5	30	☐	■	■	■
1.09	9.0	1.5	30	☐	■	■	■
1.10	9.0	1.5	30	☐	■	■	■
1.11	9.0	1.5	30	☐	■	■	■
1.12	9.0	1.5	30	☐	■	■	■
1.13	9.0	1.5	30	☐	■	■	■
1.14	9.0	1.5	30	☐	■	■	■
1.15	9.0	1.5	30	☐	■	■	■
1.16	9.0	1.5	30	☐	■	■	■
1.17	9.0	1.5	30	☐	■	■	■
1.18	9.0	1.5	30	☐	■	■	■
1.19	10.0	1.5	30	☐	■	■	■
1.20	10.0	1.5	30	☐	■	■	■
1.21	10.0	1.5	30	☐	■	■	■
1.22	10.0	1.5	30	☐	■	■	■
1.23	10.0	1.5	30	☐	■	■	■
1.24	10.0	1.5	30	☐	■	■	■
1.25	10.0	1.5	30	☐	■	■	■
1.26	10.0	1.5	30	☐	■	■	■
1.27	10.0	1.5	30	☐	■	■	■
1.28	10.0	1.5	30	☐	■	■	■
1.29	10.0	1.5	30	☐	■	■	■
1.30	10.0	1.5	30	☐	■	■	■
1.31	10.0	1.5	30	☐	■	■	■
1.32	10.0	1.5	30	☐	■	■	■
1.33	11.2	1.5	30	☐	■	■	■
1.34	11.2	1.5	30	☐	■	■	■
1.35	11.2	1.5	30	☐	■	■	■
1.36	11.2	1.5	30	☐	■	■	■
1.37	11.2	1.5	30	☐	■	■	■
1.38	11.2	1.5	30	☐	■	■	■
1.39	11.2	1.5	30	☐	■	■	■

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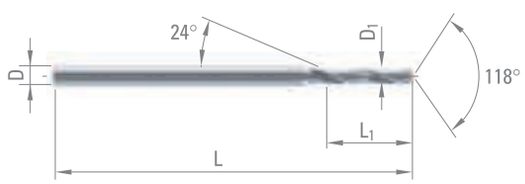
P. 74

DIN 1899

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Graphite	Plastic			



DIXI 1131 R

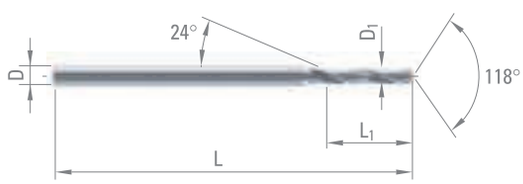
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT	DLC
1.40	11.2	1.5	30	☐	■	■	■
1.41	11.2	1.5	30	☐	■	■	■
1.42	11.2	1.5	30	☐	■	■	■
1.43	11.2	1.5	30	☐	■	■	■
1.44	11.2	1.5	30	☐	■	■	■
1.45	11.2	1.5	30	☐	■	■	■
1.46	11.2	1.5	30	☐	■	■	■
1.47	11.2	1.5	30	☐	■	■	■
1.48	11.2	1.5	30	☐	■	■	■
1.49	11.2	1.5	30	☐	■	■	■
1.50	11.2	2.0	38	☐	■	■	■
1.51	12.0	2.0	38	☐	■	■	■
1.52	12.0	2.0	38	☐	■	■	■
1.53	12.0	2.0	38	☐	■	■	■
1.54	12.0	2.0	38	☐	■	■	■
1.55	12.0	2.0	38	☐	■	■	■
1.56	12.0	2.0	38	☐	■	■	■
1.57	12.0	2.0	38	☐	■	■	■
1.58	12.0	2.0	38	☐	■	■	■
1.59	12.0	2.0	38	☐	■	■	■
1.60	12.0	2.0	38	☐	■	■	■
1.61	12.0	2.0	38	☐	■	■	■
1.62	12.0	2.0	38	☐	■	■	■
1.63	12.0	2.0	38	☐	■	■	■
1.64	12.0	2.0	38	☐	■	■	■
1.65	12.0	2.0	38	☐	■	■	■
1.66	12.0	2.0	38	☐	■	■	■
1.67	12.0	2.0	38	☐	■	■	■
1.68	12.0	2.0	38	☐	■	■	■
1.69	12.0	2.0	38	☐	■	■	■
1.70	12.0	2.0	38	☐	■	■	■
1.71	12.0	2.0	38	☐	■	■	■
1.72	12.0	2.0	38	☐	■	■	■
1.73	12.0	2.0	38	☐	■	■	■
1.74	12.0	2.0	38	☐	■	■	■
1.75	12.0	2.0	38	☐	■	■	■
1.76	12.0	2.0	38	☐	■	■	■
1.77	12.0	2.0	38	☐	■	■	■
1.78	12.0	2.0	38	☐	■	■	■
1.79	12.0	2.0	38	☐	■	■	■
1.80	12.0	2.0	38	☐	■	■	■
1.81	12.0	2.0	38	☐	■	■	■
1.82	12.0	2.0	38	☐	■	■	■
1.83	12.0	2.0	38	☐	■	■	■
1.84	12.0	2.0	38	☐	■	■	■
1.85	12.0	2.0	38	☐	■	■	■
1.86	12.0	2.0	38	☐	■	■	■
1.87	12.0	2.0	38	☐	■	■	■
1.88	12.0	2.0	38	☐	■	■	■
1.89	12.0	2.0	38	☐	■	■	■

P. 65

P. 74

DIN 1899

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Graphite	Plastic			



DIXI 1131 R

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT	DLC
1.90	12.0	2.0	38	☐	■	■	■
1.91	12.0	2.0	38	☐	■	■	■
1.92	12.0	2.0	38	☐	■	■	■
1.93	12.0	2.0	38	☐	■	■	■
1.94	12.0	2.0	38	☐	■	■	■
1.95	12.0	2.0	38	☐	■	■	■
1.96	12.0	2.0	38	☐	■	■	■
1.97	12.0	2.0	38	☐	■	■	■
1.98	12.0	2.0	38	☐	■	■	■
1.99	12.0	2.0	38	☐	■	■	■
2.00	12.0	2.5	43	☐	■	■	■
2.01	12.0	2.5	43	☐	■	■	■
2.02	12.0	2.5	43	☐	■	■	■
2.03	12.0	2.5	43	☐	■	■	■
2.04	12.0	2.5	43	☐	■	■	■
2.05	12.0	2.5	43	☐	■	■	■
2.10	12.0	2.5	43	☐	■	■	■
2.15	12.0	2.5	43	☐	■	■	■
2.20	12.0	2.5	43	☐	■	■	■
2.25	12.0	2.5	43	☐	■	■	■
2.30	12.0	2.5	43	☐	■	■	■
2.34	12.0	2.5	43	☐	■	■	■
2.35	12.0	2.5	43	☐	■	■	■
2.40	12.0	2.5	43	☐	■	■	■
2.45	12.0	2.5	43	☐	■	■	■

P. 65

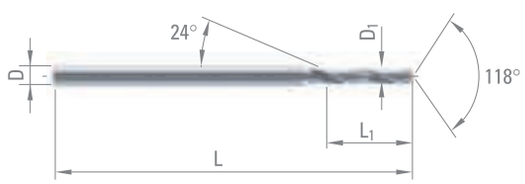
P. 74

DIN 1899

Steel < 600MPa | Steel > 600MPa | High alloyed steel | DUPLEX stainless steel | Cast iron

Refractory alloy | Titanium, titanium alloy | Cu alloy Silver Gold | Cu alloy difficult to machine | Al

Graphite | Plastic



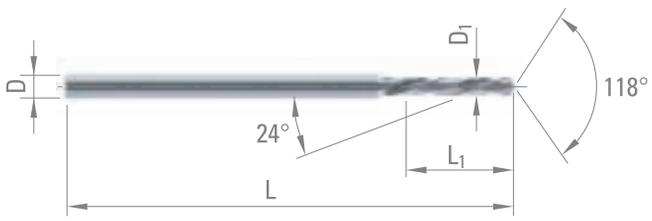
DIXI 1131 L

LEFT HAND TWIST DRILLS
REINFORCED SHANK

Z = 2

P. 65 P. 74

DIN 1899



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Graphite	Plastic			

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
0.10	0.7	1.0	30	☐		
0.11	0.7	1.0	30	☐		
0.12	0.7	1.0	30	☐		
0.13	0.7	1.0	30	☐		
0.14	0.7	1.0	30	☐		
0.15	1.0	1.0	30	☐		
0.16	1.0	1.0	30	☐		
0.17	1.0	1.0	30	☐		
0.18	1.0	1.0	30	☐		
0.19	1.0	1.0	30	☐		
0.20	1.0	1.0	30	☐	■	■
0.21	1.0	1.0	30	☐	■	■
0.22	1.0	1.0	30	☐	■	■
0.23	1.0	1.0	30	☐	■	■
0.24	1.0	1.0	30	☐	■	■
0.25	1.0	1.0	30	☐	■	■
0.26	1.0	1.0	30	☐	■	■
0.27	1.0	1.0	30	☐	■	■
0.28	1.0	1.0	30	☐	■	■
0.29	1.0	1.0	30	☐	■	■
0.30	1.5	1.0	30	☐	■	■
0.31	1.5	1.0	30	☐	■	■
0.32	1.5	1.0	30	☐	■	■
0.33	1.5	1.0	30	☐	■	■
0.34	1.5	1.0	30	☐	■	■
0.35	1.5	1.0	30	☐	■	■
0.36	1.5	1.0	30	☐	■	■
0.37	1.5	1.0	30	☐	■	■
0.38	1.5	1.0	30	☐	■	■
0.39	1.5	1.0	30	☐	■	■
0.40	2.0	1.0	30	☐	■	■
0.41	2.0	1.0	30	☐	■	■
0.42	2.0	1.0	30	☐	■	■
0.43	2.0	1.0	30	☐	■	■
0.44	2.0	1.0	30	☐	■	■
0.45	3.6	1.0	30	☐	■	■
0.46	3.6	1.0	30	☐	■	■
0.47	3.6	1.0	30	☐	■	■
0.48	3.6	1.0	30	☐	■	■
0.49	4.0	1.0	30	☐	■	■

DIXI 1131 L

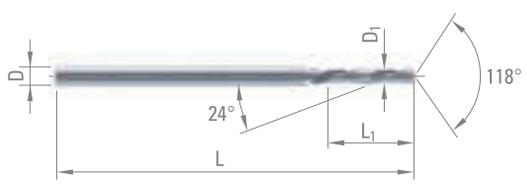
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
0.50	4.0	1.0	30	☐	■	■
0.51	4.0	1.0	30	☐	■	■
0.52	4.0	1.0	30	☐	■	■
0.53	4.0	1.0	30	☐	■	■
0.54	4.5	1.0	30	☐	■	■
0.55	4.5	1.0	30	☐	■	■
0.56	4.5	1.0	30	☐	■	■
0.57	4.5	1.0	30	☐	■	■
0.58	4.5	1.0	30	☐	■	■
0.59	4.5	1.0	30	☐	■	■
0.60	4.5	1.0	30	☐	■	■
0.61	5.0	1.0	30	☐	■	■
0.62	5.0	1.0	30	☐	■	■
0.63	5.0	1.0	30	☐	■	■
0.64	5.0	1.0	30	☐	■	■
0.65	5.0	1.0	30	☐	■	■
0.66	5.0	1.0	30	☐	■	■
0.67	5.0	1.0	30	☐	■	■
0.68	5.6	1.0	30	☐	■	■
0.69	5.6	1.0	30	☐	■	■
0.70	5.6	1.0	30	☐	■	■
0.71	5.6	1.0	30	☐	■	■
0.72	5.6	1.0	30	☐	■	■
0.73	5.6	1.0	30	☐	■	■
0.74	5.6	1.0	30	☐	■	■
0.75	5.6	1.0	30	☐	■	■
0.76	6.3	1.0	30	☐	■	■
0.77	6.3	1.0	30	☐	■	■
0.78	6.3	1.0	30	☐	■	■
0.79	6.3	1.0	30	☐	■	■
0.80	6.3	1.5	30	☐	■	■
0.81	6.3	1.5	30	☐	■	■
0.82	6.3	1.5	30	☐	■	■
0.83	6.3	1.5	30	☐	■	■
0.84	6.3	1.5	30	☐	■	■
0.85	6.3	1.5	30	☐	■	■
0.86	7.1	1.5	30	☐	■	■
0.87	7.1	1.5	30	☐	■	■
0.88	7.1	1.5	30	☐	■	■
0.89	7.1	1.5	30	☐	■	■
0.90	7.1	1.5	30	☐	■	■
0.91	7.1	1.5	30	☐	■	■
0.92	7.1	1.5	30	☐	■	■
0.93	7.1	1.5	30	☐	■	■
0.94	7.1	1.5	30	☐	■	■
0.95	7.1	1.5	30	☐	■	■
0.96	8.0	1.5	30	☐	■	■
0.97	8.0	1.5	30	☐	■	■
0.98	8.0	1.5	30	☐	■	■
0.99	8.0	1.5	30	☐	■	■
1.00	9.0	1.5	30	☐	■	■
1.01	9.0	1.5	30	☐	■	■
1.02	9.0	1.5	30	☐	■	■
1.03	9.0	1.5	30	☐	■	■
1.04	9.0	1.5	30	☐	■	■

P. 65

P. 74

DIN 1899

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Graphite	Plastic			



DIXI 1131 L

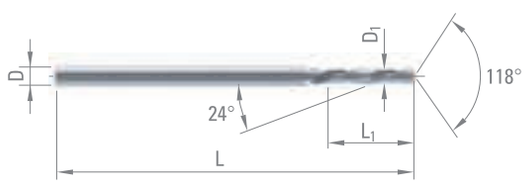
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
1.05	9.0	1.5	30	☐	■	■
1.06	9.0	1.5	30	☐	■	■
1.07	9.0	1.5	30	☐	■	■
1.08	9.0	1.5	30	☐	■	■
1.09	9.0	1.5	30	☐	■	■
1.10	9.0	1.5	30	☐	■	■
1.11	9.0	1.5	30	☐	■	■
1.12	9.0	1.5	30	☐	■	■
1.13	9.0	1.5	30	☐	■	■
1.14	9.0	1.5	30	☐	■	■
1.15	9.0	1.5	30	☐	■	■
1.16	9.0	1.5	30	☐	■	■
1.17	9.0	1.5	30	☐	■	■
1.18	9.0	1.5	30	☐	■	■
1.19	10.0	1.5	30	☐	■	■
1.20	10.0	1.5	30	☐	■	■
1.21	10.0	1.5	30	☐	■	■
1.22	10.0	1.5	30	☐	■	■
1.23	10.0	1.5	30	☐	■	■
1.24	10.0	1.5	30	☐	■	■
1.25	10.0	1.5	30	☐	■	■
1.26	10.0	1.5	30	☐	■	■
1.27	10.0	1.5	30	☐	■	■
1.28	10.0	1.5	30	☐	■	■
1.29	10.0	1.5	30	☐	■	■
1.30	10.0	1.5	30	☐	■	■
1.31	10.0	1.5	30	☐	■	■
1.32	10.0	1.5	30	☐	■	■
1.33	11.2	1.5	30	☐	■	■
1.34	11.2	1.5	30	☐	■	■
1.35	11.2	1.5	30	☐	■	■
1.36	11.2	1.5	30	☐	■	■
1.37	11.2	1.5	30	☐	■	■
1.38	11.2	1.5	30	☐	■	■
1.39	11.2	1.5	30	☐	■	■
1.40	11.2	1.5	30	☐	■	■
1.41	11.2	1.5	30	☐	■	■
1.42	11.2	1.5	30	☐	■	■
1.43	11.2	1.5	30	☐	■	■
1.44	11.2	1.5	30	☐	■	■
1.45	11.2	1.5	30	☐	■	■
1.46	11.2	1.5	30	☐	■	■
1.47	11.2	1.5	30	☐	■	■
1.48	11.2	1.5	30	☐	■	■
1.49	11.2	1.5	30	☐	■	■
1.50	11.2	2.0	38	☐	■	■
1.51	12.0	2.0	38	☐	■	■
1.52	12.0	2.0	38	☐	■	■
1.53	12.0	2.0	38	☐	■	■
1.54	12.0	2.0	38	☐	■	■
1.55	12.0	2.0	38	☐	■	■
1.56	12.0	2.0	38	☐	■	■
1.57	12.0	2.0	38	☐	■	■
1.58	12.0	2.0	38	☐	■	■
1.59	12.0	2.0	38	☐	■	■

P. 65

P. 74

DIN 1899

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Graphite	Plastic			



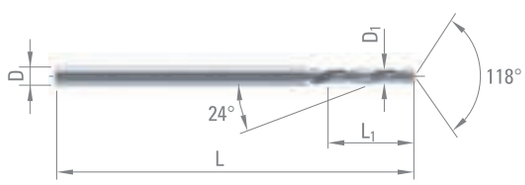
DIXI 1131 L

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
1.60	12.0	2.0	38	☐	■	■
1.61	12.0	2.0	38	☐	■	■
1.62	12.0	2.0	38	☐	■	■
1.63	12.0	2.0	38	☐	■	■
1.64	12.0	2.0	38	☐	■	■
1.65	12.0	2.0	38	☐	■	■
1.66	12.0	2.0	38	☐	■	■
1.67	12.0	2.0	38	☐	■	■
1.68	12.0	2.0	38	☐	■	■
1.69	12.0	2.0	38	☐	■	■
1.70	12.0	2.0	38	☐	■	■
1.71	12.0	2.0	38	☐	■	■
1.72	12.0	2.0	38	☐	■	■
1.73	12.0	2.0	38	☐	■	■
1.74	12.0	2.0	38	☐	■	■
1.75	12.0	2.0	38	☐	■	■
1.76	12.0	2.0	38	☐	■	■
1.77	12.0	2.0	38	☐	■	■
1.78	12.0	2.0	38	☐	■	■
1.79	12.0	2.0	38	☐	■	■
1.80	12.0	2.0	38	☐	■	■
1.81	12.0	2.0	38	☐	■	■
1.82	12.0	2.0	38	☐	■	■
1.83	12.0	2.0	38	☐	■	■
1.84	12.0	2.0	38	☐	■	■
1.85	12.0	2.0	38	☐	■	■
1.86	12.0	2.0	38	☐	■	■
1.87	12.0	2.0	38	☐	■	■
1.88	12.0	2.0	38	☐	■	■
1.89	12.0	2.0	38	☐	■	■
1.90	12.0	2.0	38	☐	■	■
1.91	12.0	2.0	38	☐	■	■
1.92	12.0	2.0	38	☐	■	■
1.93	12.0	2.0	38	☐	■	■
1.94	12.0	2.0	38	☐	■	■
1.95	12.0	2.0	38	☐	■	■
1.96	12.0	2.0	38	☐	■	■
1.97	12.0	2.0	38	☐	■	■
1.98	12.0	2.0	38	☐	■	■
1.99	12.0	2.0	38	☐	■	■
2.00	12.0	2.5	43	☐	■	■
2.01	12.0	2.5	43	☐	■	■
2.02	12.0	2.5	43	☐	■	■
2.03	12.0	2.5	43	☐	■	■
2.04	12.0	2.5	43	☐	■	■
2.05	12.0	2.5	43	☐	■	■
2.10	12.0	2.5	43	☐	■	■
2.12	12.0	2.5	43	☐	■	■
2.15	12.0	2.5	43	☐	■	■
2.45	12.0	2.5	43	☐	■	■

P. 65 P. 74

DIN 1899

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al
Graphite	Plastic			



DIXI 1134 R

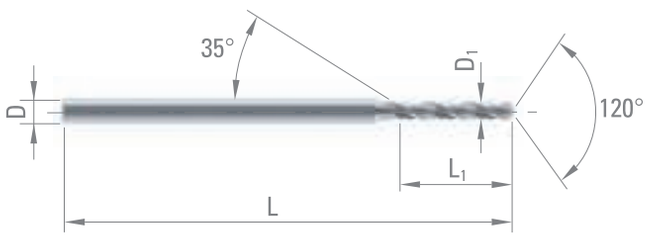
TWIST DRILLS
REINFORCED SHANK

Z = 2

P. 65 P. 76

DIN 1899

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
0.50	4.0	1.0	30	☐	■	■
0.55	4.5	1.0	30	☐	■	■
0.60	4.5	1.0	30	☐	■	■
0.65	5.0	1.0	30	☐	■	■
0.70	5.6	1.0	30	☐	■	■
0.75	5.6	1.0	30	☐	■	■
0.80	6.3	1.5	30	☐	■	■
0.81	6.3	1.5	30	☐	■	■
0.82	6.3	1.5	30	☐	■	■
0.83	6.3	1.5	30	☐	■	■
0.84	6.3	1.5	30	☐	■	■
0.85	6.3	1.5	30	☐	■	■
0.86	7.1	1.5	30	☐	■	■
0.87	7.1	1.5	30	☐	■	■
0.88	7.1	1.5	30	☐	■	■
0.89	7.1	1.5	30	☐	■	■
0.90	7.1	1.5	30	☐	■	■
0.91	7.1	1.5	30	☐	■	■
0.92	7.1	1.5	30	☐	■	■
0.93	7.1	1.5	30	☐	■	■
0.94	7.1	1.5	30	☐	■	■
0.95	7.1	1.5	30	☐	■	■
0.96	9.0	1.5	30	☐	■	■
0.97	9.0	1.5	30	☐	■	■
0.98	9.0	1.5	30	☐	■	■
0.99	9.0	1.5	30	☐	■	■
1.00	9.0	1.5	30	☐	■	■
1.01	9.0	1.5	30	☐	■	■
1.02	9.0	1.5	30	☐	■	■
1.03	9.0	1.5	30	☐	■	■
1.04	9.0	1.5	30	☐	■	■
1.05	9.0	1.5	30	☐	■	■
1.06	9.0	1.5	30	☐	■	■
1.07	9.0	1.5	30	☐	■	■
1.08	9.0	1.5	30	☐	■	■
1.09	9.0	1.5	30	☐	■	■

DIXI 1134 R

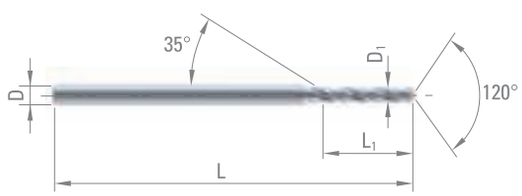
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
1.10	9.0	1.5	30	☐	■	■
1.11	9.0	1.5	30	☐	■	■
1.12	9.0	1.5	30	☐	■	■
1.13	9.0	1.5	30	☐	■	■
1.14	9.0	1.5	30	☐	■	■
1.15	9.0	1.5	30	☐	■	■
1.16	10.0	1.5	30	☐	■	■
1.17	10.0	1.5	30	☐	■	■
1.18	10.0	1.5	30	☐	■	■
1.19	10.0	1.5	30	☐	■	■
1.20	10.0	1.5	30	☐	■	■
1.21	10.0	1.5	30	☐	■	■
1.22	10.0	1.5	30	☐	■	■
1.23	10.0	1.5	30	☐	■	■
1.24	10.0	1.5	30	☐	■	■
1.25	10.0	1.5	30	☐	■	■
1.26	10.0	1.5	30	☐	■	■
1.27	10.0	1.5	30	☐	■	■
1.28	10.0	1.5	30	☐	■	■
1.29	10.0	1.5	30	☐	■	■
1.30	10.0	1.5	30	☐	■	■
1.31	11.2	1.5	30	☐	■	■
1.32	11.2	1.5	30	☐	■	■
1.33	11.2	1.5	30	☐	■	■
1.34	11.2	1.5	30	☐	■	■
1.35	11.2	1.5	30	☐	■	■
1.36	11.2	1.5	30	☐	■	■
1.37	11.2	1.5	30	☐	■	■
1.38	11.2	1.5	30	☐	■	■
1.39	11.2	1.5	30	☐	■	■
1.40	11.2	1.5	30	☐	■	■
1.45	11.2	1.5	30	☐	■	■
1.50	11.2	2.0	38	☐	■	■
1.55	12.0	2.0	38	☐	■	■
1.60	12.0	2.0	38	☐	■	■
1.65	12.0	2.0	38	☐	■	■
1.70	12.0	2.0	38	☐	■	■
1.75	12.0	2.0	38	☐	■	■
1.80	12.0	2.0	38	☐	■	■
1.85	12.0	2.0	38	☐	■	■
1.90	12.0	2.0	38	☐	■	■
1.95	12.0	2.0	38	☐	■	■

P. 65

P. 76

DIN 1899

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



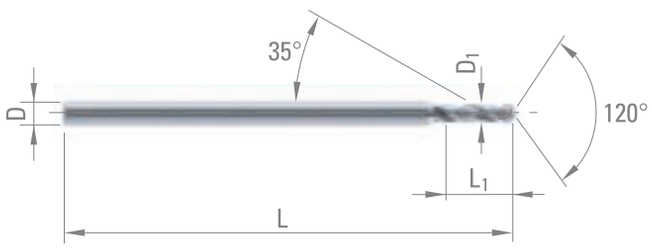
DIXI 1135 R

TWIST DRILLS
REINFORCED SHANK

Z = 2

P. 65 P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



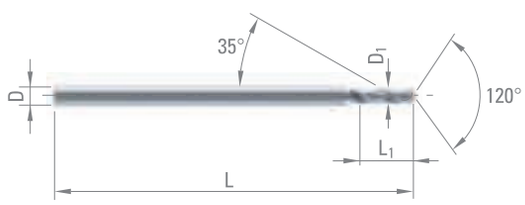
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
0.20	1.5	1.5	30	☐	■	■
0.21	1.5	1.5	30	☐	■	■
0.22	1.5	1.5	30	☐	■	■
0.23	1.5	1.5	30	☐	■	■
0.24	1.5	1.5	30	☐	■	■
0.25	2.0	1.5	30	☐	■	■
0.26	2.0	1.5	30	☐	■	■
0.27	2.0	1.5	30	☐	■	■
0.28	2.0	1.5	30	☐	■	■
0.29	2.0	1.5	30	☐	■	■
0.30	2.0	1.5	30	☐	■	■
0.31	2.5	1.5	30	☐	■	■
0.32	2.5	1.5	30	☐	■	■
0.33	2.5	1.5	30	☐	■	■
0.34	2.5	1.5	30	☐	■	■
0.35	2.5	1.5	30	☐	■	■
0.36	2.5	1.5	30	☐	■	■
0.37	2.5	1.5	30	☐	■	■
0.38	2.5	1.5	30	☐	■	■
0.39	3.0	1.5	30	☐	■	■
0.40	3.0	1.5	30	☐	■	■
0.41	3.0	1.5	30	☐	■	■
0.42	3.0	1.5	30	☐	■	■
0.43	3.0	1.5	30	☐	■	■
0.44	3.0	1.5	30	☐	■	■
0.45	3.0	1.5	30	☐	■	■
0.46	3.0	1.5	30	☐	■	■
0.47	3.0	1.5	30	☐	■	■
0.48	3.0	1.5	30	☐	■	■
0.49	3.0	1.5	30	☐	■	■
0.50	4.0	1.5	30	☐	■	■
0.51	4.0	1.5	30	☐	■	■
0.52	4.0	1.5	30	☐	■	■
0.53	4.0	1.5	30	☐	■	■
0.54	4.0	1.5	30	☐	■	■
0.55	4.0	1.5	30	☐	■	■
0.56	4.0	1.5	30	☐	■	■
0.57	4.0	1.5	30	☐	■	■
0.58	4.0	1.5	30	☐	■	■
0.59	4.0	1.5	30	☐	■	■

DIXI 1135 R

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
0.60	4.5	1.5	30	☐	■	■
0.61	4.5	1.5	30	☐	■	■
0.62	4.5	1.5	30	☐	■	■
0.63	4.5	1.5	30	☐	■	■
0.64	4.5	1.5	30	☐	■	■
0.65	4.5	1.5	30	☐	■	■
0.66	4.5	1.5	30	☐	■	■
0.67	4.5	1.5	30	☐	■	■
0.68	4.5	1.5	30	☐	■	■
0.69	4.5	1.5	30	☐	■	■
0.70	4.5	1.5	30	☐	■	■
0.71	4.5	1.5	30	☐	■	■
0.72	4.5	1.5	30	☐	■	■
0.73	4.5	1.5	30	☐	■	■
0.74	4.5	1.5	30	☐	■	■
0.75	4.5	1.5	30	☐	■	■
0.76	4.5	1.5	30	☐	■	■
0.77	4.5	1.5	30	☐	■	■
0.78	4.5	1.5	30	☐	■	■
0.79	4.5	1.5	30	☐	■	■
0.80	5.0	1.5	30	☐	■	■
0.81	5.0	1.5	30	☐	■	■
0.82	5.0	1.5	30	☐	■	■
0.83	5.0	1.5	30	☐	■	■
0.84	5.0	1.5	30	☐	■	■
0.85	5.0	1.5	30	☐	■	■
0.86	5.0	1.5	30	☐	■	■
0.87	5.0	1.5	30	☐	■	■
0.88	5.0	1.5	30	☐	■	■
0.89	5.0	1.5	30	☐	■	■
0.90	5.0	1.5	30	☐	■	■
0.91	5.0	1.5	30	☐	■	■
0.92	5.0	1.5	30	☐	■	■
0.93	5.0	1.5	30	☐	■	■
0.94	5.0	1.5	30	☐	■	■
0.95	5.0	1.5	30	☐	■	■
0.96	5.0	1.5	30	☐	■	■
0.97	5.0	1.5	30	☐	■	■
0.98	5.0	1.5	30	☐	■	■
0.99	5.0	1.5	30	☐	■	■
1.00	5.0	1.5	30	☐	■	■
1.01	5.0	1.5	30	☐	■	■
1.02	5.0	1.5	30	☐	■	■
1.03	5.0	1.5	30	☐	■	■
1.04	5.0	1.5	30	☐	■	■
1.05	5.0	1.5	30	☐	■	■
1.06	5.0	1.5	30	☐	■	■
1.07	5.0	1.5	30	☐	■	■
1.08	5.0	1.5	30	☐	■	■
1.09	5.0	1.5	30	☐	■	■
1.10	5.0	1.5	30	☐	■	■
1.11	5.0	1.5	30	☐	■	■
1.12	5.0	1.5	30	☐	■	■
1.13	5.0	1.5	30	☐	■	■
1.14	5.0	1.5	30	☐	■	■

P. 65 P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al

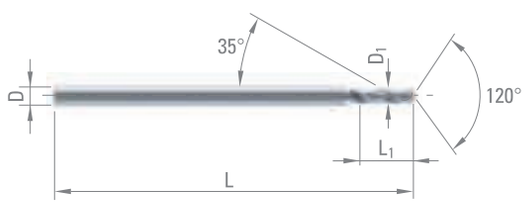


DIXI 1135 R

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
1.15	5.0	1.5	30	☐	■	■
1.16	5.0	1.5	30	☐	■	■
1.17	5.0	1.5	30	☐	■	■
1.18	5.0	1.5	30	☐	■	■
1.19	5.0	1.5	30	☐	■	■
1.20	6.0	1.5	30	☐	■	■
1.21	6.0	1.5	30	☐	■	■
1.22	6.0	1.5	30	☐	■	■
1.23	6.0	1.5	30	☐	■	■
1.24	6.0	1.5	30	☐	■	■
1.25	6.0	1.5	30	☐	■	■
1.26	6.0	1.5	30	☐	■	■
1.27	6.0	1.5	30	☐	■	■
1.28	6.0	1.5	30	☐	■	■
1.29	6.0	1.5	30	☐	■	■
1.30	6.0	1.5	30	☐	■	■
1.31	6.0	1.5	30	☐	■	■
1.32	6.0	1.5	30	☐	■	■
1.33	6.0	1.5	30	☐	■	■
1.34	6.0	1.5	30	☐	■	■
1.35	6.0	1.5	30	☐	■	■
1.36	6.0	1.5	30	☐	■	■
1.37	6.0	1.5	30	☐	■	■
1.38	6.0	1.5	30	☐	■	■
1.39	6.0	1.5	30	☐	■	■
1.40	6.0	1.5	30	☐	■	■
1.41	6.0	1.5	30	☐	■	■
1.42	6.0	1.5	30	☐	■	■
1.43	6.0	1.5	30	☐	■	■
1.44	6.0	1.5	30	☐	■	■
1.45	6.0	1.5	30	☐	■	■
1.46	6.0	1.5	30	☐	■	■
1.47	6.0	1.5	30	☐	■	■
1.48	6.0	1.5	30	☐	■	■
1.49	6.0	1.5	30	☐	■	■
1.50	7.0	2.0	38	☐	■	■
1.51	7.0	2.0	38	☐	■	■
1.52	7.0	2.0	38	☐	■	■
1.53	7.0	2.0	38	☐	■	■
1.54	7.0	2.0	38	☐	■	■
1.55	7.0	2.0	38	☐	■	■
1.56	7.0	2.0	38	☐	■	■
1.57	7.0	2.0	38	☐	■	■
1.58	7.0	2.0	38	☐	■	■
1.59	7.0	2.0	38	☐	■	■
1.60	7.0	2.0	38	☐	■	■
1.61	7.0	2.0	38	☐	■	■
1.62	7.0	2.0	38	☐	■	■
1.63	7.0	2.0	38	☐	■	■
1.64	7.0	2.0	38	☐	■	■
1.65	7.0	2.0	38	☐	■	■
1.66	7.0	2.0	38	☐	■	■
1.67	7.0	2.0	38	☐	■	■
1.68	7.0	2.0	38	☐	■	■
1.69	7.0	2.0	38	☐	■	■

P. 65 P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



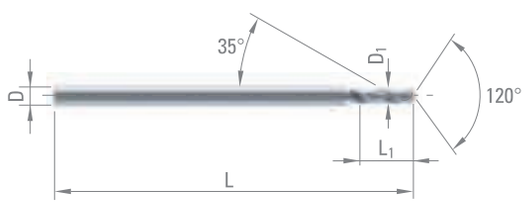
DIXI 1135 R

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
1.70	7.0	2.0	38	☐	■	■
1.71	7.0	2.0	38	☐	■	■
1.72	7.0	2.0	38	☐	■	■
1.73	7.0	2.0	38	☐	■	■
1.74	7.0	2.0	38	☐	■	■
1.75	7.0	2.0	38	☐	■	■
1.76	8.0	2.0	38	☐	■	■
1.77	8.0	2.0	38	☐	■	■
1.78	8.0	2.0	38	☐	■	■
1.79	8.0	2.0	38	☐	■	■
1.80	8.0	2.0	38	☐	■	■
1.81	8.0	2.0	38	☐	■	■
1.82	8.0	2.0	38	☐	■	■
1.83	8.0	2.0	38	☐	■	■
1.84	8.0	2.0	38	☐	■	■
1.85	8.0	2.0	38	☐	■	■
1.86	8.0	2.0	38	☐	■	■
1.87	8.0	2.0	38	☐	■	■
1.88	8.0	2.0	38	☐	■	■
1.89	8.0	2.0	38	☐	■	■
1.90	8.0	2.0	38	☐	■	■
1.91	8.0	2.0	38	☐	■	■
1.92	8.0	2.0	38	☐	■	■
1.93	8.0	2.0	38	☐	■	■
1.94	8.0	2.0	38	☐	■	■
1.95	8.0	2.0	38	☐	■	■
1.96	8.0	2.0	38	☐	■	■
1.97	8.0	2.0	38	☐	■	■
1.98	8.0	2.0	38	☐	■	■
1.99	8.0	2.0	38	☐	■	■
2.00	9.0	2.5	43	☐	■	■
2.01	9.0	2.5	43	☐	■	■
2.02	9.0	2.5	43	☐	■	■
2.03	9.0	2.5	43	☐	■	■
2.04	9.0	2.5	43	☐	■	■
2.05	9.0	2.5	43	☐	■	■
2.06	9.0	2.5	43	☐	■	■
2.07	9.0	2.5	43	☐	■	■
2.08	9.0	2.5	43	☐	■	■
2.09	9.0	2.5	43	☐	■	■
2.10	9.0	2.5	43	☐	■	■
2.11	9.0	2.5	43	☐	■	■
2.12	9.0	2.5	43	☐	■	■
2.13	9.0	2.5	43	☐	■	■
2.14	9.0	2.5	43	☐	■	■
2.15	9.0	2.5	43	☐	■	■
2.16	9.0	2.5	43	☐	■	■
2.17	9.0	2.5	43	☐	■	■
2.18	9.0	2.5	43	☐	■	■
2.19	9.0	2.5	43	☐	■	■
2.20	9.0	2.5	43	☐	■	■
2.21	9.0	2.5	43	☐	■	■
2.22	9.0	2.5	43	☐	■	■
2.23	9.0	2.5	43	☐	■	■
2.24	9.0	2.5	43	☐	■	■

P. 65

P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al

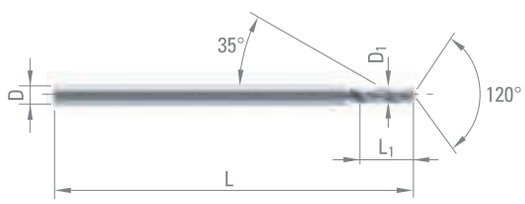


DIXI 1135 R

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE	TiN	DICUT
2.25	9.0	2.5	43	☐	■	■
2.26	9.0	2.5	43	☐	■	■
2.27	9.0	2.5	43	☐	■	■
2.28	9.0	2.5	43	☐	■	■
2.29	9.0	2.5	43	☐	■	■
2.30	9.0	2.5	43	☐	■	■
2.31	9.0	2.5	43	☐	■	■
2.32	9.0	2.5	43	☐	■	■
2.33	9.0	2.5	43	☐	■	■
2.34	9.0	2.5	43	☐	■	■
2.35	9.0	2.5	43	☐	■	■
2.36	9.0	2.5	43	☐	■	■
2.37	9.0	2.5	43	☐	■	■
2.38	9.0	2.5	43	☐	■	■
2.39	9.0	2.5	43	☐	■	■
2.40	9.0	2.5	43	☐	■	■
2.41	9.0	2.5	43	☐	■	■
2.42	9.0	2.5	43	☐	■	■
2.43	9.0	2.5	43	☐	■	■
2.44	9.0	2.5	43	☐	■	■
2.45	9.0	2.5	43	☐	■	■
2.46	9.0	2.5	43	☐	■	■
2.47	9.0	2.5	43	☐	■	■
2.48	9.0	2.5	43	☐	■	■
2.49	9.0	2.5	43	☐	■	■

P. 65 P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



DIXI 1138 R

TWIST DRILLS
REINFORCED SHANK

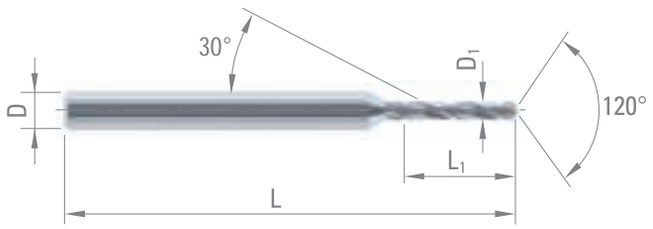
Z = 2

P. 65 P. 76

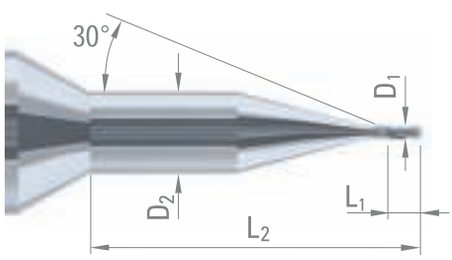
Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al

Ø 0.05 ≤ Ø 0.45

Ø 0.50 ≤ Ø 2.80



$D_{1\ h6}$	L_1	D_2	L_2	D_{h6}	L	CARBIDE	TiAlN
0.05	0.35	1.5	5.35	3	38	☐	
0.06	0.40	1.5	5.40	3	38	☐	
0.07	0.50	1.5	5.50	3	38	☐	
0.08	0.60	1.5	5.65	3	38	☐	
0.09	0.65	1.5	5.70	3	38	☐	
0.10	0.70	1.5	5.70	3	38	☐	■
0.15	1.00	1.5	6.00	3	38	☐	■
0.20	1.00	1.5	6.00	3	38	☐	■
0.25	1.00	1.5	6.00	3	38	☐	■
0.30	1.50	1.5	6.50	3	38	☐	■
0.35	1.50	1.5	6.50	3	38	☐	■
0.40	2.00	1.5	7.00	3	38	☐	■
0.45	3.60	1.5	8.60	3	38	☐	■



$D_{1\ h6}$	L_1	D_{h6}	L	CARBIDE	TiAlN
0.50	4.0	3	38	☐	■
0.53	4.5	3	38	☐	■
0.55	4.5	3	38	☐	■
0.60	4.5	3	38	☐	■
0.62	5.0	3	38	☐	■
0.65	5.0	3	38	☐	■
0.70	5.6	3	38	☐	■
0.71	5.6	3	38	☐	■
0.75	5.6	3	38	☐	■
0.80	6.3	3	38	☐	■
0.81	6.3	3	38	☐	■
0.82	6.3	3	38	☐	■
0.83	6.3	3	38	☐	■
0.84	6.3	3	38	☐	■
0.85	6.3	3	38	☐	■
0.86	7.1	3	38	☐	■
0.87	7.1	3	38	☐	■
0.88	7.1	3	38	☐	■
0.89	7.1	3	38	☐	■
0.90	7.1	3	38	☐	■
0.91	7.1	3	38	☐	■
0.92	7.1	3	38	☐	■
0.93	7.1	3	38	☐	■
0.94	7.1	3	38	☐	■
0.95	7.1	3	38	☐	■
0.96	9.0	3	38	☐	■
0.97	9.0	3	38	☐	■
0.98	9.0	3	38	☐	■
0.99	9.0	3	38	☐	■
1.00	9.0	3	38	☐	■
1.01	9.0	3	38	☐	■

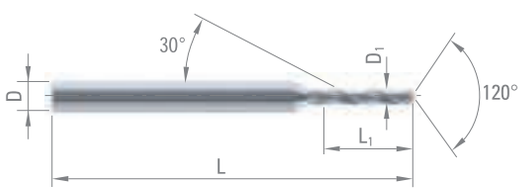
DIXI 1138 R

$D_{1\ h6}$	L_1	D_{h6}	L	CARBIDE	TiAlN
1.02	9.0	3	38	☐	■
1.03	9.0	3	38	☐	■
1.04	9.0	3	38	☐	■
1.05	9.0	3	38	☐	■
1.06	9.0	3	38	☐	■
1.07	9.0	3	38	☐	■
1.08	9.0	3	38	☐	■
1.09	9.0	3	38	☐	■
1.10	9.0	3	38	☐	■
1.11	9.0	3	38	☐	■
1.12	9.0	3	38	☐	■
1.13	9.0	3	38	☐	■
1.14	9.0	3	38	☐	■
1.15	9.0	3	38	☐	■
1.16	10.0	3	38	☐	■
1.17	10.0	3	38	☐	■
1.18	10.0	3	38	☐	■
1.19	10.0	3	38	☐	■
1.20	10.0	3	38	☐	■
1.21	10.0	3	38	☐	■
1.22	10.0	3	38	☐	■
1.23	10.0	3	38	☐	■
1.24	10.0.	3	38	☐	■
1.25	10.0	3	38	☐	■
1.26	10.0	3	38	☐	■
1.27	10.0	3	38	☐	■
1.28	10.0	3	38	☐	■
1.29	10.0	3	38	☐	■
1.30	10.0	3	38	☐	■
1.31	11.2	3	38	☐	■
1.32	11.2	3	38	☐	■
1.33	11.2	3	38	☐	■
1.34	11.2	3	38	☐	■
1.35	11.2	3	38	☐	■
1.36	11.2	3	38	☐	■
1.37	11.2	3	38	☐	■
1.38	11.2	3	38	☐	■
1.39	11.2	3	38	☐	■
1.40	11.2	3	38	☐	■
1.45	11.2	3	38	☐	■
1.50	11.2	3	38	☐	■
1.55	12.0	3	38	☐	■
1.60	12.0	3	38	☐	■
1.65	12.0	3	38	☐	■
1.70	12.0	3	38	☐	■
1.75	12.0	3	38	☐	■
1.80	12.0	3	38	☐	■
1.85	12.0	3	38	☐	■
1.90	12.0	3	38	☐	■
1.95	12.0	3	38	☐	■
2.00	12.0	3	38	☐	■
2.05	15.0	3	38	☐	■
2.10	15.0	3	38	☐	■
2.15	15.0	3	38	☐	■
2.20	15.0	3	38	☐	■
2.25	15.0	3	38	☐	■
2.30	15.0	3	38	☐	■
2.35	15.0	3	38	☐	■
2.40	15.0	3	38	☐	■
2.45	15.0	3	38	☐	■
2.50	15.0	3	38	☐	■
2.55	15.0	3	38	☐	■
2.80	16.0	3	38	☐	■

P. 65

P. 76

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy Silver Gold	Cu alloy difficult to machine	Al



DIXI 1149 R TiAIN

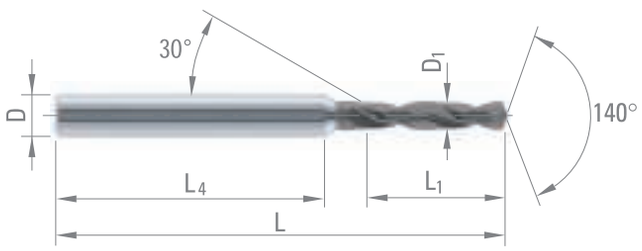
SELF-CENTERING TWIST DRILLS REINFORCED SHANK

Z = 2

P. 65 P. 78

DIN 6537K

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy difficult to machine	Al	



$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAIN
1.00	5	26	3	38	■
1.10	5	26	3	38	■
1.20	5	26	3	38	■
1.30	5	26	3	38	■
1.40	5	26	3	38	■
1.50	7	25	3	38	■
1.60	7	25	3	38	■
1.70	7	25	3	38	■
1.80	7	25	3	38	■
1.90	7	25	3	38	■
2.00	9	35	3	50	■
2.10	9	35	3	50	■
2.20	9	35	3	50	■
2.30	9	35	3	50	■
2.40	9	35	3	50	■
2.50	9	36	3	50	■
2.60	11	31	4	50	■
2.70	11	31	4	50	■
2.80	11	31	4	50	■
2.90	11	31	4	50	■
3.00	14	39	6	62	■
3.10	14	39	6	62	■
3.175	14	39	6	62	■
3.20	14	39	6	62	■
3.30	14	39	6	62	■
3.40	14	39	6	62	■
3.50	14	39	6	62	■
3.60	14	39	6	62	■
3.70	14	40	6	62	■
3.80	17	40	6	66	■
3.90	17	40	6	66	■
4.00	17	40	6	66	■
4.10	17	40	6	66	■
4.20	17	40	6	66	■
4.30	17	40	6	66	■
4.40	17	40	6	66	■
4.50	17	40	6	66	■
4.60	17	40	6	66	■
4.70	17	40	6	66	■

DIXI 1149 R TiAIN

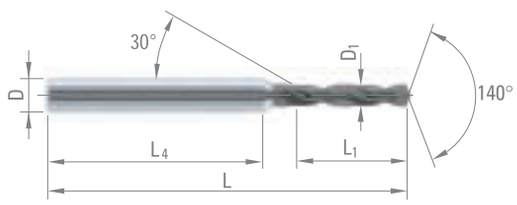
$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAIN
4.762	20	37	6	66	■
4.80	20	37	6	66	■
4.90	20	38	6	66	■
5.00	20	38	6	66	■
5.10	20	38	6	66	■
5.20	20	38	6	66	■
5.30	20	38	6	66	■
5.40	20	38	6	66	■
5.50	20	38	6	66	■
5.60	22	37	6	66	■
5.70	22	37	6	66	■
5.80	22	37	6	66	■
5.90	22	37	6	66	■
6.00	22	37	6	66	■
6.20	24	43	8	79	■
6.30	24	43	8	79	■
6.35	24	43	8	79	■
6.40	24	43	8	79	■
6.50	24	43	8	79	■
6.60	24	43	8	79	■
6.70	24	43	8	79	■
6.80	24	44	8	79	■
6.90	24	44	8	79	■
7.00	29	43	8	79	■
7.20	29	38	8	79	■
7.50	29	38	8	79	■
7.80	29	38	8	79	■
8.00	29	39	8	79	■
8.20	35	40	10	89	■
8.40	35	40	10	89	■
8.50	35	40	10	89	■
8.70	35	41	10	89	■
8.80	35	41	10	89	■
9.00	35	41	10	89	■
9.20	35	41	10	89	■
9.50	35	41	10	89	■
9.80	35	41	10	89	■
10.00	35	42	10	89	■
10.20	40	47	12	102	■
10.50	40	47	12	102	■
10.80	40	48	12	102	■
11.00	40	48	12	102	■
11.50	41	47	12	102	■
12.00	42	47	12	102	■
13.00	46	47	14	107	■
14.00	49	45	14	107	■

P. 65

P. 78

DIN 6537K

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy difficult to machine	Al	



DIXI 1147 R TiAIN

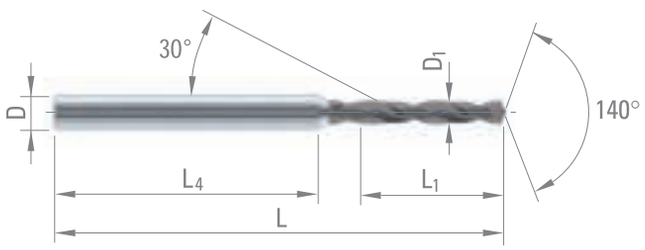
SELF-CENTERING TWIST DRILLS
REINFORCED SHANK

Z = 2

L_1 = 6.5 x D_1

P. 65 P. 80

Steel < 600MPa | Steel > 600MPa | High alloyed steel | DUPLEX stainless steel | Cast iron
Refractory alloy | Titanium, titanium alloy | Al



$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAIN
0.50	3.3	29	3	38	■
0.55	3.6	29	3	38	■
0.60	3.9	29	3	38	■
0.65	4.2	33	3	43	■
0.70	4.6	33	3	43	■
0.75	4.9	33	3	43	■
0.80	5.2	32	3	43	■
0.85	5.5	32	3	43	■
0.90	5.9	32	3	43	■
0.95	6.2	32	3	43	■
1.00	6.5	31	3	43	■
1.10	7.2	31	3	43	■
1.20	7.8	37	3	50	■
1.30	8.5	37	3	50	■
1.40	9.1	36	3	50	■
1.50	9.8	35	3	50	■
1.60	10.4	35	3	50	■
1.70	11.1	34	3	50	■
1.80	11.7	34	3	50	■
1.90	12.4	33	3	50	■
2.00	13.0	43	4	62	■
2.10	13.7	42	4	62	■
2.20	14.3	42	4	62	■
2.30	15.0	41	4	62	■
2.40	15.6	41	4	62	■
2.50	16.3	40	4	62	■
2.60	16.9	39	4	62	■
2.70	17.6	39	4	62	■
2.80	18.2	38	4	62	■
2.90	18.9	38	4	62	■
3.00	19.5	37	4	62	■
3.10	20.2	53	6	79	■
3.20	20.8	52	6	79	■
3.30	21.5	51	6	79	■
3.40	22.1	51	6	79	■
3.50	22.8	50	6	79	■
3.60	23.4	50	6	79	■
3.75	24.4	49	6	79	■
3.80	24.7	48	6	79	■
3.90	25.4	47	6	79	■

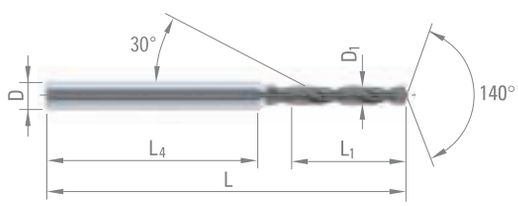
DIXI 1147 R TiAlN

$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAlN
4.00	26.0	47	6	79	■
4.10	26.7	46	6	79	■
4.20	27.3	45	6	79	■
4.30	28.0	45	6	79	■
4.40	28.6	44	6	79	■
4.50	29.3	43	6	79	■
4.60	29.9	43	6	79	■
4.70	30.6	42	6	79	■
4.80	31.2	42	6	79	■
4.90	31.9	41	6	79	■
5.00	32.5	50	6	89	■
5.10	33.2	49	6	89	■
5.20	33.8	49	6	89	■
5.30	33.5	48	6	89	■
5.40	35.1	48	6	89	■
5.50	35.8	47	6	89	■
5.60	36.4	46	6	89	■
5.70	37.1	46	6	89	■
5.80	37.7	45	6	89	■
5.90	38.4	44	6	89	■
6.00	39.0	44	6	89	■
6.10	39.7	54	8	102	■
6.20	40.3	53	8	102	■
6.30	41.0	53	8	102	■
6.35	41.3	53	8	102	■
6.40	41.6	52	8	102	■
6.50	42.3	51	8	102	■
6.60	42.9	51	8	102	■
6.70	43.6	50	8	102	■
6.80	44.2	50	8	102	■
6.90	44.9	49	8	102	■
7.00	45.5	48	8	102	■
7.20	46.8	47	8	102	■
7.50	48.8	45	8	102	■
7.80	50.7	43	8	102	■
8.00	52.0	42	8	102	■
8.20	53.3	54	10	118	■
8.40	54.0	54	10	118	■
8.50	55.3	52	10	118	■
8.80	57.2	51	10	118	■
9.00	58.5	49	10	118	■
9.50	61.8	46	10	118	■
9.80	63.7	44	10	118	■
10.00	65.0	43	10	118	■

P. 65 P. 80

Steel < 600MPa | Steel > 600MPa | High alloyed steel | DUPLEX stainless steel | Cast iron

Refractory alloy | Titanium, titanium alloy | Al



DIXI 1145 R TiAIN

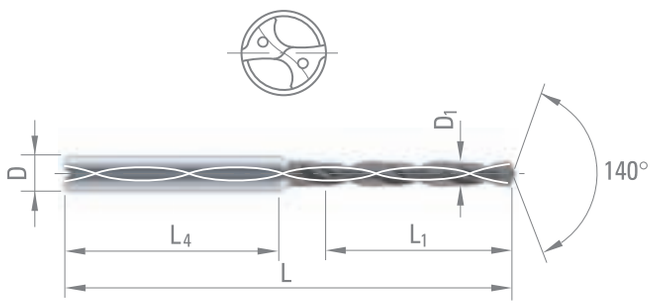
SELF-CENTERING TWIST DRILLS
REINFORCED SHANK
WITH THROUGH COOLANT

Z = 2

P. 65 P. 78

DIN 6537L

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy difficult to machine	Al	



$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAIN
0.70	5	26	3	38	■
0.80	5	26	3	38	■
0.90	5	27	3	38	■
1.00	7	24	3	38	■
1.10	7	24	3	38	■
1.20	7	24	3	38	■
1.30	7	24	3	38	■
1.40	7	25	3	38	■
1.50	11	20	3	38	■
1.60	11	20	3	38	■
1.70	11	20	3	38	■
1.80	11	20	3	38	■
1.90	11	20	3	38	■
2.00	15	18	3	38	■
2.10	15	18	3	38	■
2.20	15	18	3	38	■
2.30	15	26	4	50	■
2.40	15	27	4	50	■
2.50	18	24	4	50	■
2.60	18	24	4	50	■
2.70	18	24	4	50	■
2.80	18	24	4	50	■
2.90	23	35	6	66	■
3.00	23	35	6	66	■
3.10	23	35	6	66	■
3.20	23	35	6	66	■
3.30	23	35	6	66	■
3.40	23	35	6	66	■
3.50	23	35	6	66	■
3.60	29	35	6	74	■
3.70	29	35	6	74	■
3.75	29	36	6	74	■
3.80	29	36	6	74	■
3.90	29	36	6	74	■
4.00	29	36	6	74	■
4.10	29	36	6	74	■
4.20	29	36	6	74	■
4.30	29	36	6	74	■
4.40	29	36	6	74	■
4.50	35	38	6	82	■
4.60	35	38	6	82	■
4.70	35	38	6	82	■
4.80	35	38	6	82	■
4.90	35	38	6	82	■

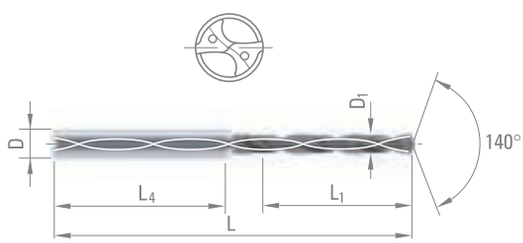
DIXI 1145 R TiAlN

$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAlN
5.00	35	39	6	82	■
5.10	35	39	6	82	■
5.20	35	39	6	82	■
5.30	35	39	6	82	■
5.40	35	39	6	82	■
5.50	35	39	6	82	■
5.60	35	39	6	82	■
5.70	35	39	6	82	■
5.80	35	39	6	82	■
5.90	35	39	6	82	■
6.00	35	40	6	82	■
6.10	43	36	8	91	■
6.20	43	36	8	91	■
6.30	43	36	8	91	■
6.35	43	36	8	91	■
6.40	43	36	8	91	■
6.50	43	36	8	91	■
6.60	43	36	8	91	■
6.70	43	36	8	91	■
6.80	43	36	8	91	■
6.90	43	36	8	91	■
7.00	43	36	8	91	■
7.20	43	36	8	91	■
7.30	43	36	8	91	■
7.40	43	36	8	91	■
7.50	43	36	8	91	■
7.60	43	36	8	91	■
7.80	43	36	8	91	■
8.00	43	-	8	91	■
8.10	49	40	10	103	■
8.20	49	40	10	103	■
8.30	49	40	10	103	■
8.40	49	40	10	103	■
8.50	49	40	10	103	■
8.60	49	40	10	103	■
8.80	49	40	10	103	■
9.00	49	41	10	103	■
9.20	49	41	10	103	■
9.40	49	41	10	103	■
9.50	49	41	10	103	■
9.525	49	41	10	103	■
9.60	49	41	10	103	■
9.70	49	41	10	103	■
9.80	49	41	10	103	■
10.00	49	-	10	103	■
10.10	56	47	12	118	■
10.20	56	47	12	118	■
10.30	56	47	12	118	■
10.50	56	47	12	118	■
10.60	56	47	12	118	■
10.80	56	47	12	118	■
11.00	56	48	12	118	■
11.30	58	46	12	118	■
11.50	58	46	12	118	■
12.00	60	45	12	118	■
13.00	65	45	14	124	■
14.00	70	-	14	124	■

P. 65 P. 78

DIN 6537L

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Cu alloy difficult to machine	Al	



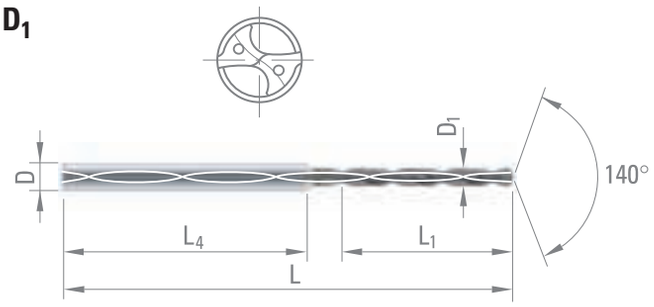
DIXI 1146 R TiAIN

SELF-CENTERING TWIST DRILLS
REINFORCED SHANK
WITH THROUGH COOLANT

Z = 2

P. 65 P. 80

L_1 = 10 x D_1



Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Al		

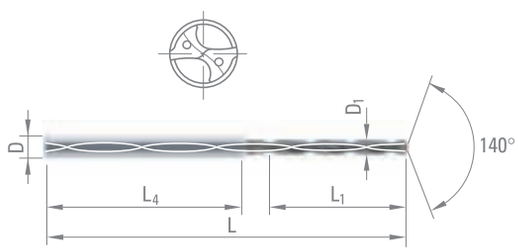
$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAIN
0.80	8.0	37	3	50	■
0.85	9.0	37	3	50	■
0.90	9.0	36	3	50	■
0.95	10.0	36	3	50	■
1.00	10.0	35	3	50	■
1.10	11.0	34	3	50	■
1.20	12.0	33	3	50	■
1.30	13.0	33	3	50	■
1.40	14.0	32	3	50	■
1.50	15.0	43	3	50	■
1.60	16.0	42	3	62	■
1.70	17.0	41	3	62	■
1.80	18.0	40	3	62	■
1.90	19.0	39	3	62	■
2.00	20.0	38	3	62	■
2.10	21.0	37	3	62	■
2.20	22.0	36	3	62	■
2.30	23.0	51	4	79	■
2.40	24.0	50	4	79	■
2.50	25.0	49	4	79	■
2.60	26.0	48	4	79	■
2.70	27.0	47	4	79	■
2.80	28.0	46	4	79	■
2.90	29.0	44	6	79	■
3.00	30.0	43	6	79	■
3.10	31.0	52	6	89	■
3.20	32.0	51	6	89	■
3.30	33.0	50	6	89	■
3.40	34.0	49	6	89	■
3.50	35.0	48	6	89	■
3.60	36.0	47	6	89	■
3.75	37.5	46	6	89	■
3.80	38.0	44	6	89	■
3.90	39.0	44	6	89	■
4.00	40.0	56	6	102	■
4.10	41.0	55	6	102	■
4.20	42.0	54	6	102	■
4.30	43.0	53	6	102	■
4.40	44.0	52	6	102	■
4.50	45.0	51	6	102	■

DIXI 1146 R TiAlN

$D_{1\ h6}$	L_1	L_4	D_{h6}	L	TiAlN
4.60	46.0	50	6	102	■
4.70	47.0	49	6	102	■
4.80	48.0	48	6	102	■
4.90	49.0	47	6	102	■
5.00	50.0	46	6	102	■
5.10	51.0	45	6	102	■
5.20	52.0	44	6	102	■
5.30	53.0	43	6	102	■
5.40	54.0	42	6	102	■
5.50	55.0	41	6	102	■
5.60	56.0	56	6	118	■
5.70	57.0	55	6	118	■
5.80	58.0	54	6	118	■
5.90	59.0	53	6	118	■
6.00	60.0	52	6	118	■
6.10	61.0	49	8	118	■
6.20	62.0	48	8	118	■
6.30	63.0	47	8	118	■
6.35	63.5	47	8	118	■
6.50	65.0	45	8	118	■
6.60	66.0	59	8	133	■
6.80	68.0	57	8	133	■
6.90	69.0	56	8	133	■
7.00	70.0	55	8	133	■
7.20	72.0	53	8	133	■
7.50	75.0	50	8	133	■
7.80	78.0	47	8	133	■
8.00	80.0	45	8	133	■
8.20	82.0	59	10	151	■
8.40	84.0	57	10	151	■
8.50	85.0	56	10	151	■
8.80	88.0	53	10	151	■
9.00	90.0	60	10	160	■
9.20	92.0	58	10	160	■
9.40	94.0	56	10	160	■
9.525	95.3	55	10	160	■
9.80	98.0	52	10	160	■
10.00	100.0	50	10	160	■

P. 65 P. 80

Steel < 600MPa	Steel > 600MPa	High alloyed steel	DUPLEX stainless steel	Cast iron
Refractory alloy	Titanium, titanium alloy	Al		



DIXI 1280 R XIDUR

TWIST DRILLS FOR HARDENED STEEL REINFORCED SHANK

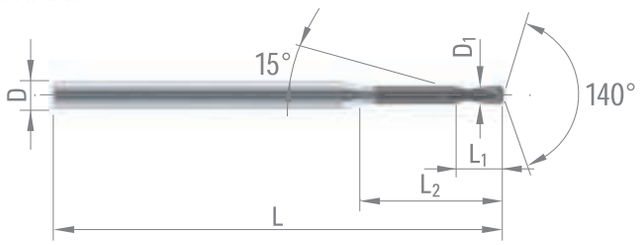
Z = 2

P. 65 P. 82

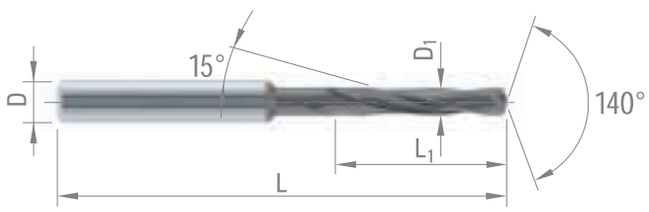
>45 HRC

High alloyed steel | Steel Cast iron > 45 HRC | Refractory alloy

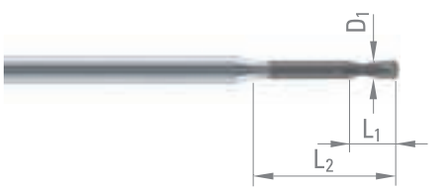
Ø 0.25 ≤ Ø 2.00



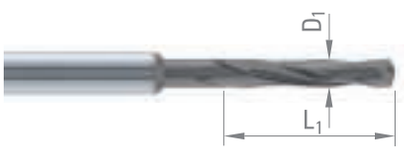
Ø 2.50 ≤ Ø 12.00



$D_{1\ h6}$	L_1	L_2	D_{h6}	L	XIDUR
0.25	0.75	2.0	3	38	
0.30	0.90	2.5	3	38	
0.40	1.20	3.2	3	38	
0.50	1.50	4.0	3	38	
0.60	1.80	4.8	3	38	
0.70	2.10	5.6	3	38	
0.80	2.40	6.5	3	38	
0.90	2.70	7.5	3	38	
1.00	3.00	8.0	3	38	
1.10	3.30	8.0	3	50	
1.20	3.60	10.0	3	50	
1.30	3.90	12.0	3	50	
1.40	4.20	12.0	3	50	
1.50	4.50	12.0	3	50	
1.60	4.80	15.0	3	50	
1.70	5.10	15.0	3	50	
1.80	5.40	15.0	3	50	
1.90	5.80	15.0	3	50	
2.00	6.00	16.0	3	50	



$D_{1\ h6}$	L_1	D_{h6}	L	XIDUR
2.50	15	3	62	
2.60	15	3	62	
2.70	15	3	62	
2.80	15	3	62	
2.90	15	3	62	
3.00	20	4	66	
3.175	20	4	66	
3.30	20	4	66	
3.40	20	4	66	
3.50	20	4	66	
3.57	20	4	66	
3.70	20	4	66	
3.80	20	4	66	
3.90	20	4	66	
4.00	30	6	66	
4.10	30	6	66	
4.20	30	6	66	
4.30	30	6	66	
4.365	30	6	66	
4.50	30	6	66	



DIXI 1280 R XIDUR

$D_{1\ h6}$	L_1	D_{h6}	L	XIDUR
4.60	30	6	66	■
4.70	30	6	66	■
4.762	30	6	66	■
4.90	30	6	66	■
5.00	30	6	66	■
5.10	30	6	66	■
5.16	30	6	66	■
5.50	30	6	66	■
5.80	30	6	66	■
6.00	40	8	79	■
6.35	40	8	79	■
6.50	40	8	79	■
6.80	40	8	79	■
7.00	40	8	79	■
7.14	40	8	79	■
7.50	40	8	79	■
7.80	40	8	79	■
8.00	50	10	89	■
8.33	50	10	89	■
8.50	50	10	89	■
8.73	50	10	89	■
9.00	50	10	89	■
9.525	50	10	89	■
9.80	50	10	89	■
10.00	60	12	102	■
10.20	60	12	102	■
10.50	60	12	102	■
10.80	60	12	102	■
11.00	60	12	102	■
11.50	60	12	102	■
12.00	60	12	102	■

P. 65

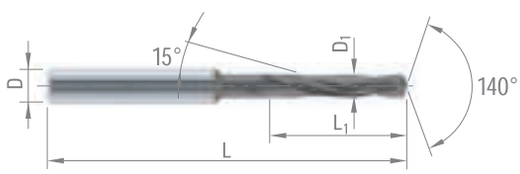
P. 82

>45 HRC

High alloyed steel

Steel Hardened cast iron

Refractory alloy



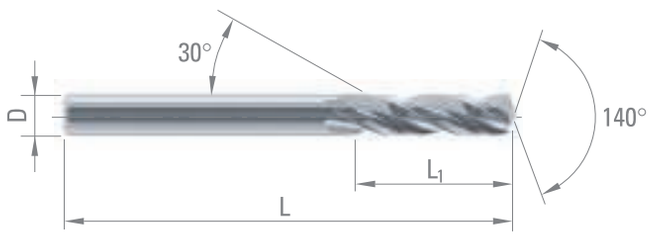
DIXI 1151 R

3 FLUTE TWIST DRILLS

Z = 3

P. 65 P. 82

Steel < 600MPa	Steel > 600MPa	Cast iron	Titanium, titanium alloy	Al



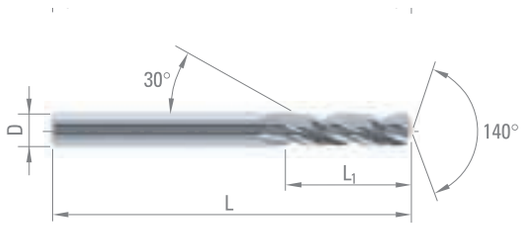
D_{h6}	L_1	L	CARBIDE	TiN
1.00	8	30	☐	■
1.05	8	30	☐	■
1.10	10	30	☐	■
1.15	10	30	☐	■
1.20	10	30	☐	■
1.25	10	30	☐	■
1.30	10	30	☐	■
1.35	10	30	☐	■
1.40	10	30	☐	■
1.45	10	30	☐	■
1.50	10	30	☐	■
1.55	12	38	☐	■
1.60	12	38	☐	■
1.65	12	38	☐	■
1.70	12	38	☐	■
1.75	12	38	☐	■
1.80	12	38	☐	■
1.85	12	38	☐	■
1.90	12	38	☐	■
1.95	12	38	☐	■
2.00	12	38	☐	■
2.10	12	38	☐	■
2.20	13	40	☐	■
2.30	13	40	☐	■
2.40	14	43	☐	■
2.50	14	43	☐	■
2.60	14	43	☐	■
2.70	16	46	☐	■
2.80	16	46	☐	■
2.90	16	46	☐	■
3.00	16	46	☐	■
3.10	18	49	☐	■
3.20	18	49	☐	■
3.30	18	49	☐	■
3.40	20	52	☐	■
3.50	20	52	☐	■
3.60	20	52	☐	■
3.70	20	52	☐	■
3.80	22	55	☐	■
3.90	22	55	☐	■

DIXI 1151 R

D_{h6}	L_1	L	CARBIDE	TiN
t 4.00	22	55	☐	■
4.10	22	55	☐	■
4.20	22	55	☐	■
4.30	24	58	☐	■
4.40	24	58	☐	■
4.50	24	58	☐	■
4.60	24	58	☐	■
4.70	24	58	☐	■
4.80	26	62	☐	■
4.90	26	62	☐	■
5.00	26	62	☐	■
5.10	26	62	☐	■
5.20	26	62	☐	■
5.30	26	62	☐	■
5.40	28	66	☐	■
5.50	28	66	☐	■
5.60	28	66	☐	■
5.70	28	66	☐	■
5.80	28	66	☐	■
5.90	28	66	☐	■
6.00	28	66	☐	■
6.10	31	70	☐	■
6.20	31	70	☐	■
6.30	31	70	☐	■
6.40	31	70	☐	■
6.50	31	70	☐	■
6.60	31	70	☐	■
6.70	31	70	☐	■
6.80	34	74	☐	■
6.90	34	74	☐	■
7.00	34	74	☐	■
7.50	34	74	☐	■
7.80	37	79	☐	■
8.00	37	79	☐	■
8.20	37	79	☐	■
8.50	37	79	☐	■
8.80	40	84	☐	■
9.00	40	84	☐	■
9.50	40	84	☐	■
9.80	43	89	☐	■
10.00	43	89	☐	■
10.20	43	89	☐	■
10.50	43	89	☐	■
11.00	47	95	☐	■
11.50	47	95	☐	■
12.00	51	102	☐	■
12.50	51	102	☐	■
13.00	51	102	☐	■
13.50	54	107	☐	■
14.00	54	107	☐	■

P. 65 P. 82

Steel < 600MPa	Steel > 600MPa	Cast iron	Titanium, titanium alloy	Al



DIXI 1152 R

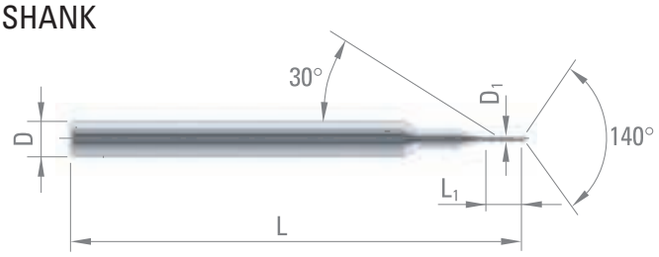
3 FLUTE TWIST DRILLS REINFORCED SHANK

Z = 3

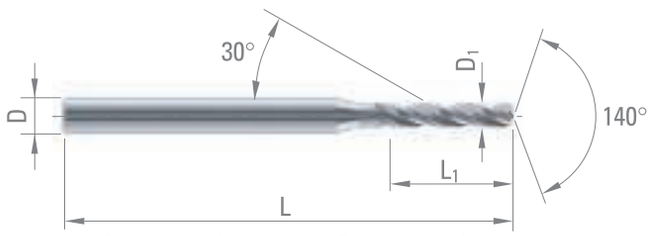
P. 65 P. 82

Steel < 600MPa	Steel > 600MPa	Cast iron	Titanium, titanium alloy	Al

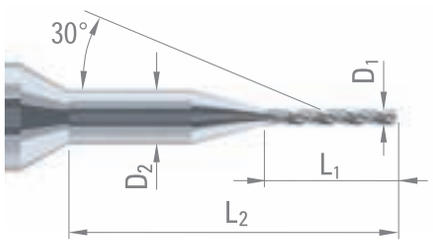
Ø 0.15 ≤ Ø 0.45



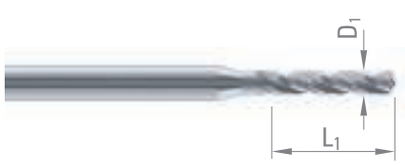
Ø 0.50 ≤ Ø 2.90



$D_{1\ 0/-0.004}$	L_1	D_2	L_2	D_{h6}	L	CARBIDE
0.15	1.5	1.5	6.80	3.0	38	☐
0.20	1.5	1.5	6.80	3.0	38	☐
0.25	2.0	1.5	7.35	3.0	38	☐
0.30	2.0	1.5	7.35	3.0	38	☐
0.35	2.0	1.5	7.35	3.0	38	☐
0.40	2.0	1.5	7.35	3.0	38	☐
0.45	3.6	1.5	8.95	3.0	38	☐



$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE
0.50	4.0	3.0	38	☐
0.53	4.5	3.0	38	☐
0.55	4.5	3.0	38	☐
0.60	4.5	3.0	38	☐
0.62	5.0	3.0	38	☐
0.65	5.0	3.0	38	☐
0.70	5.6	3.0	38	☐
0.71	5.6	3.0	38	☐
0.75	5.6	3.0	38	☐
0.80	6.3	3.0	38	☐
0.81	6.3	3.0	38	☐
0.82	6.3	3.0	38	☐
0.83	6.3	3.0	38	☐
0.84	6.3	3.0	38	☐
0.85	6.3	3.0	38	☐
0.86	7.1	3.0	38	☐
0.87	7.1	3.0	38	☐
0.88	7.1	3.0	38	☐
0.89	7.1	3.0	38	☐
0.90	7.1	3.0	38	☐
0.91	7.1	3.0	38	☐
0.92	7.1	3.0	38	☐
0.93	7.1	3.0	38	☐
0.94	7.1	3.0	38	☐
0.95	7.1	3.0	38	☐
0.96	9.0	3.0	38	☐
0.97	9.0	3.0	38	☐
0.98	9.0	3.0	38	☐
0.99	9.0	3.0	38	☐
1.00	9.0	3.0	38	☐
1.01	9.0	3.0	38	☐
1.02	9.0	3.0	38	☐
1.03	9.0	3.0	38	☐
1.04	9.0	3.0	38	☐
1.05	9.0	3.0	38	☐
1.06	9.0	3.0	38	☐
1.07	9.0	3.0	38	☐

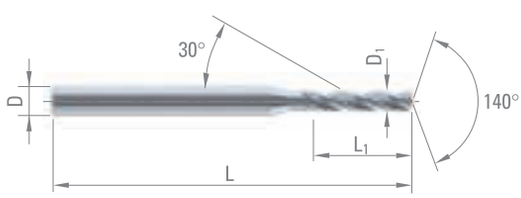


DIXI 1152 R

$D_{1\ 0/-0.004}$	L_1	D_{h6}	L	CARBIDE
1.08	9.0	3.0	38	☐
1.09	9.0	3.0	38	☐
1.10	9.0	3.0	38	☐
1.11	9.0	3.0	38	☐
1.12	9.0	3.0	38	☐
1.13	9.0	3.0	38	☐
1.14	9.0	3.0	38	☐
1.15	9.0	3.0	38	☐
1.16	10.0	3.0	38	☐
1.17	10.0	3.0	38	☐
1.18	10.0	3.0	38	☐
1.19	10.0	3.0	38	☐
1.20	10.0	3.0	38	☐
1.21	10.0	3.0	38	☐
1.22	10.0	3.0	38	☐
1.23	10.0	3.0	38	☐
1.24	10.0	3.0	38	☐
1.25	10.0	3.0	38	☐
1.26	10.0	3.0	38	☐
1.27	10.0	3.0	38	☐
1.28	10.0	3.0	38	☐
1.29	10.0	3.0	38	☐
1.30	10.0	3.0	38	☐
1.31	11.2	3.0	38	☐
1.32	11.2	3.0	38	☐
1.33	11.2	3.0	38	☐
1.34	11.2	3.0	38	☐
1.35	11.2	3.0	38	☐
1.36	11.2	3.0	38	☐
1.37	11.2	3.0	38	☐
1.38	11.2	3.0	38	☐
1.39	11.2	3.0	38	☐
1.40	11.2	3.0	38	☐
1.45	11.2	3.0	38	☐
1.50	11.2	3.0	38	☐
1.55	12.0	3.0	38	☐
1.60	12.0	3.0	38	☐
1.65	12.0	3.0	38	☐
1.67	12.0	3.0	38	☐
1.70	12.0	3.0	38	☐
1.75	12.0	3.0	38	☐
1.80	12.0	3.0	38	☐
1.85	12.0	3.0	38	☐
1.90	12.0	3.0	38	☐
1.95	12.0	3.0	38	☐
2.00	12.0	3.0	38	☐
2.03	15.0	3.0	38	☐
2.04	15.0	3.0	38	☐
2.05	15.0	3.0	38	☐
2.10	15.0	3.0	38	☐
2.15	15.0	3.0	38	☐
2.20	15.0	3.0	38	☐
2.25	15.0	3.0	38	☐
2.30	15.0	3.0	38	☐
2.35	15.0	3.0	38	☐
2.40	15.0	3.0	38	☐
2.45	15.0	3.0	38	☐
2.50	15.0	3.0	38	☐
2.55	15.0	3.0	38	☐
2.60	15.0	3.0	38	☐
2.70	16.0	3.0	38	☐
2.80	16.0	3.0	38	☐
2.90	16.0	3.0	38	☐

P. 65 P. 82

Steel < 600MPa	Steel > 600MPa	Cast iron	Titanium, titanium alloy	Al

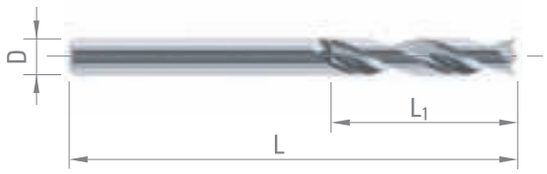


DIXI 1290 R

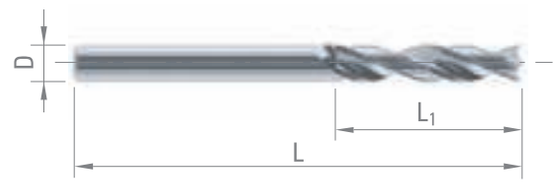
TWIST DRILLS FOR COMPOSITES / KEVLAR®

Z = 2

Ø 2.50 ≤ Ø 5.556



Ø 5.60 ≤ Ø 12.70



Kevlar®

Cutting conditions: Vc = 100 - 150 m/min
f = 0.05 - 0.15 mm/rev

D_{h6}	inches	L_1	L	CARBIDE
2.50		18	50	☐
3.00		18	50	☐
3.175	1/8"	18	50	☐
3.20		18	50	☐
3.30		18	50	☐
3.50		20	50	☐
3.80		20	50	☐
3.968	5/32"	22	50	☐
4.00		22	50	☐
4.10		22	50	☐
4.20		25	55	☐
4.50		25	58	☐
4.80		25	62	☐
5.00		25	62	☐
5.20		25	62	☐
5.50		25	66	☐
5.556	7/32"	25	60	☐

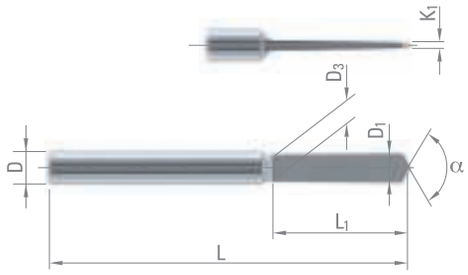
D_{h6}	inches	L_1	L	CARBIDE
5.60		30	66	☐
6.00		30	66	☐
6.35	1/4"	30	70	☐
6.50		30	70	☐
7.00		35	74	☐
8.00		35	75	☐
9.00		35	75	☐
9.525	3/8"	35	75	☐
10.00		35	75	☐
11.00		50	100	☐
12.00		50	100	☐
12.70	1/2"	50	100	☐

DIXI 1112 R+L

Z = 2

SPADE DRILLS

Ø 0.08 - 5.99



P. 68

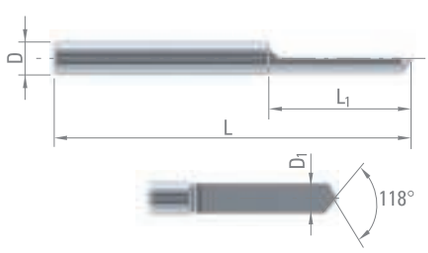
Steel < 600MPa | Cast iron | Cu alloy Silver Gold | Cu alloy difficult to machine | Al | Plastic

DIXI 1114 R+L

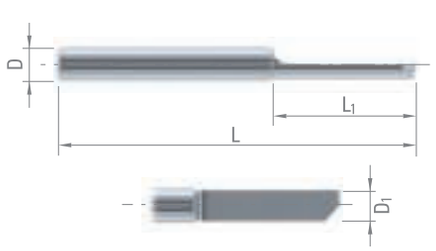
Z = 1

HALF-MOON BITS
EXECUTION A OR B

Ø 0.08 - 5.99



A



B

Indicative values to define
DIXI 1112, 1114 and **1118**'s geometry.

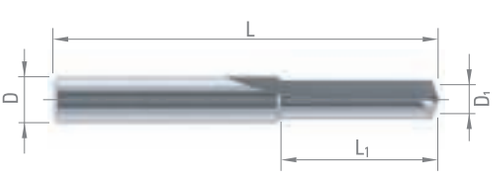
$D_{1\ 0/-0.004}$	L_1	D_{h6}	L
0.08 - 0.14	0.7	1.0	30
0.15 - 0.29	1.0	1.0	30
0.30 - 0.39	1.5	1.0	30
0.40 - 0.44	2.0	1.0	30
0.45 - 0.48	3.6	1.0	30
0.49 - 0.53	4.0	1.0	30
0.54 - 0.60	4.5	1.0	30
0.61 - 0.67	5.0	1.0	30
0.68 - 0.75	5.6	1.0	30
0.76 - 0.79	6.3	1.0	30
0.80 - 0.85	6.3	1.5	30
0.86 - 0.95	7.1	1.5	30
0.96 - 0.99	8.0	1.5	30
1.00 - 1.18	9.0	1.5	30
1.19 - 1.32	10.0	1.5	30
1.33 - 1.49	11.2	1.5	30
1.50 - 1.99	12.0	2.0	38
2.00 - 2.49	12.0	2.5	43
2.50 - 2.99	15.0	3.0	46
3.00 - 3.49	18.0	3.5	50
3.50 - 3.99	18.0	4.0	50
4.00 - 4.49	20.0	4.5	50
4.50 - 4.99	22.0	5.0	50
5.00 - 5.49	25.0	5.5	50
5.50 - 5.99	25.0	6.0	50

DIXI 1118 R+L

Z = 2

STRAIGHT FLUTE SLOT DRILLS

Ø 0.08 - 5.99

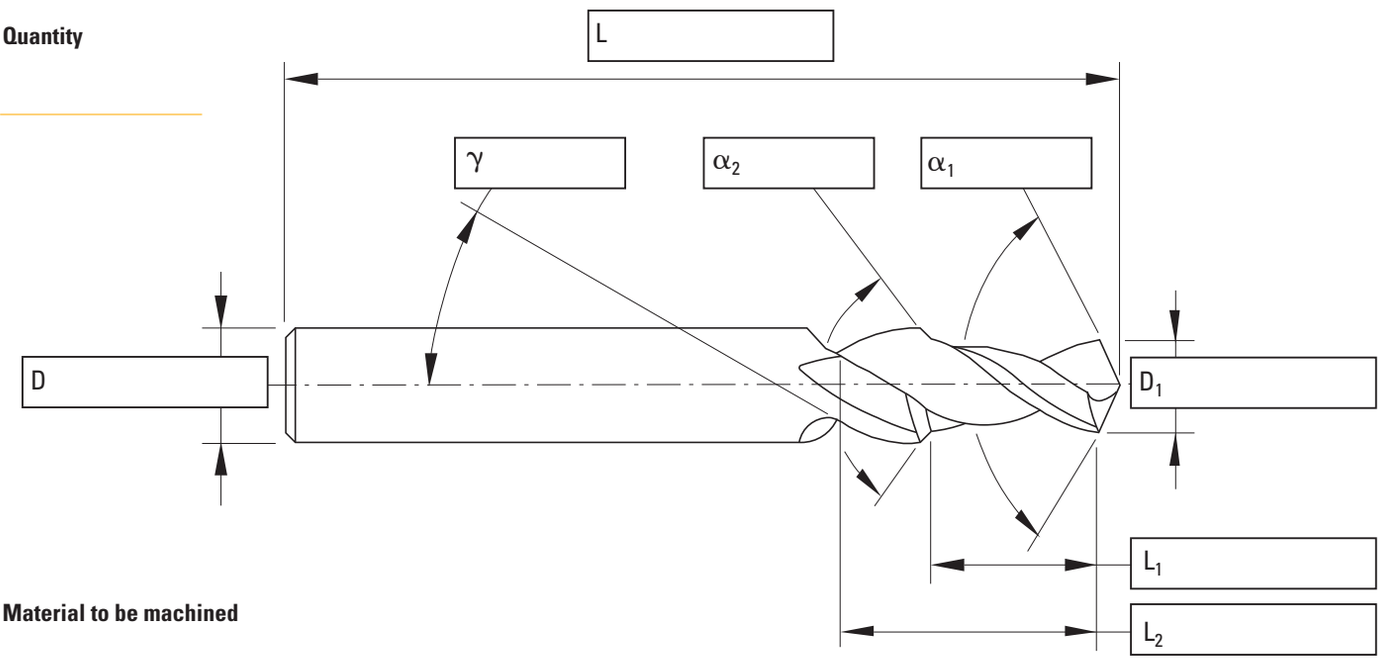


P. 84

DIXI 1501 R ☐ L ☐

Z =

Quantity

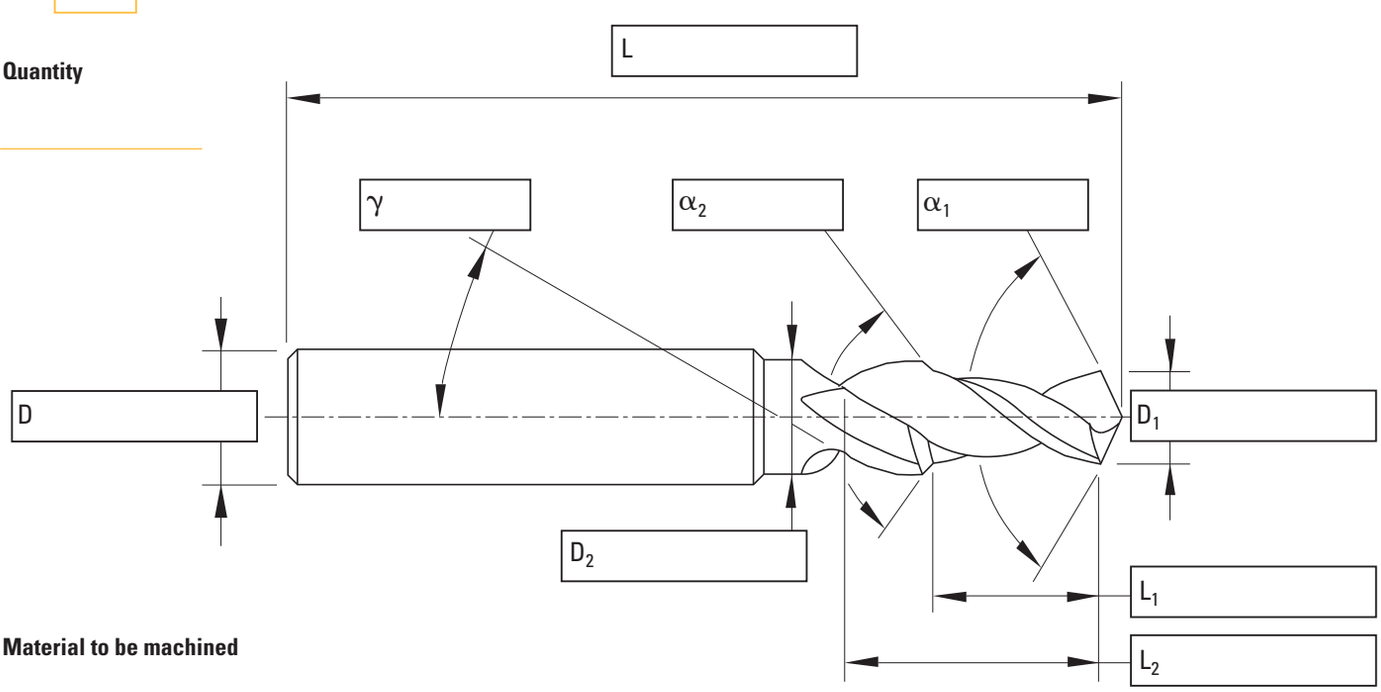


Material to be machined

DIXI 1502 R ☐ L ☐

Z =

Quantity



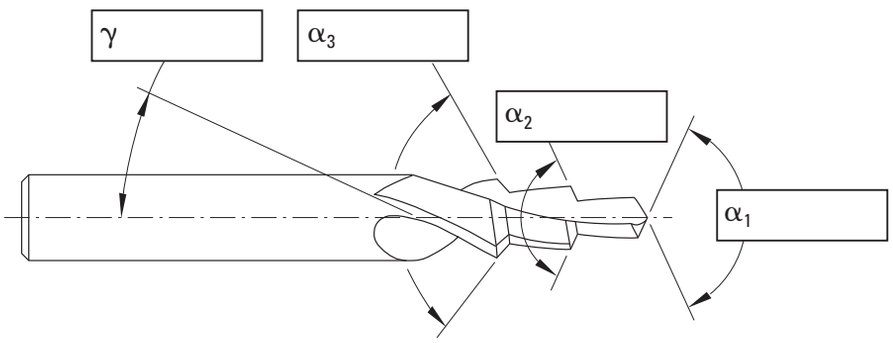
Material to be machined

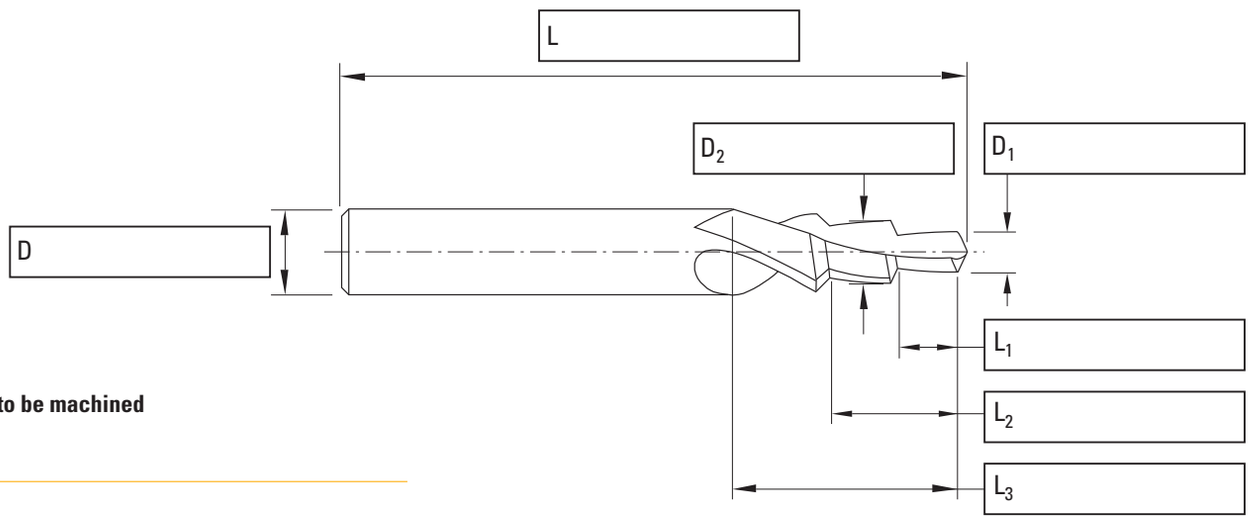
P. 84

DIXI 1503 R ☐ L ☐

Z =

Quantity



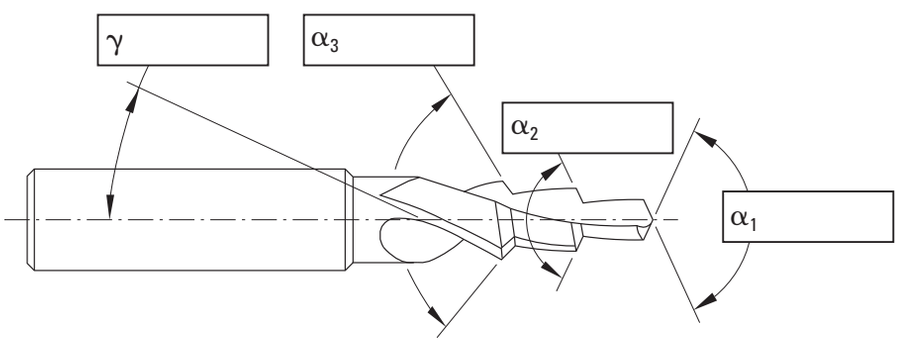


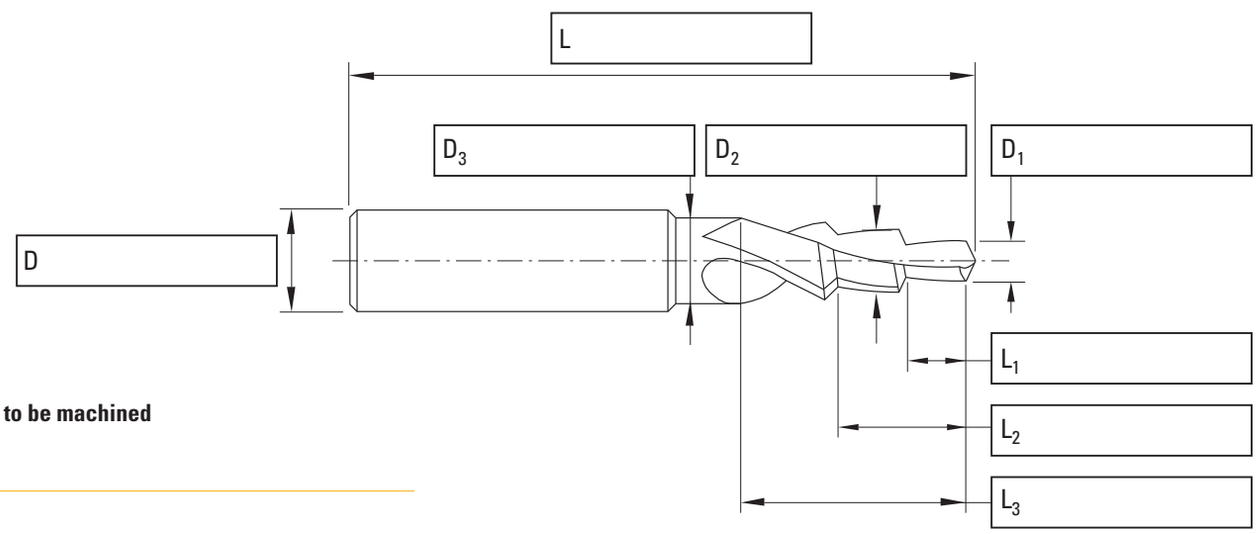
Material to be machined

DIXI 1504 R ☐ L ☐

Z =

Quantity

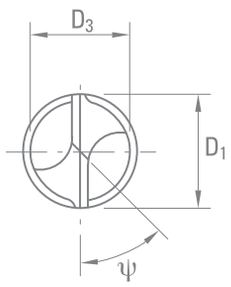


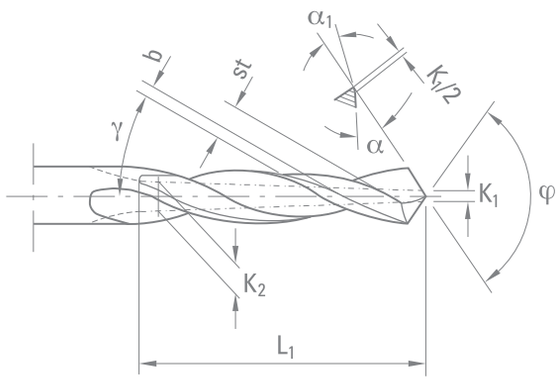


Material to be machined

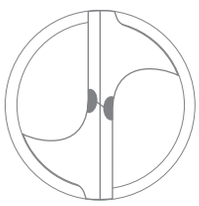
DRILL GEOMETRY

The geometrical nomenclature
of our twist drills for general use
is illustrated alongside.
Straight or reinforced shanks are available.

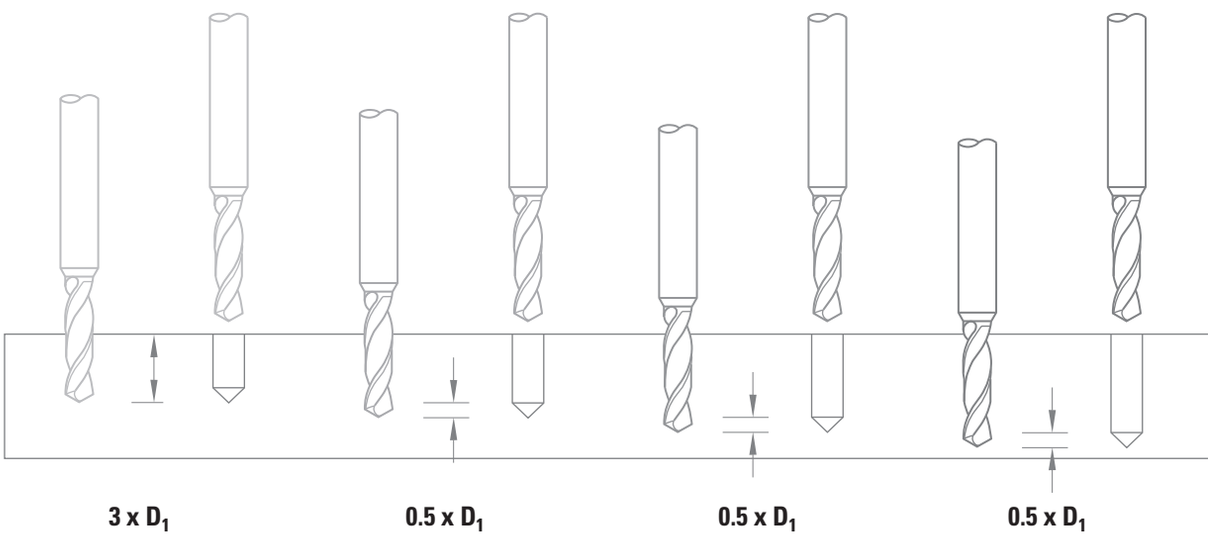




WEB THINNING



SOLUTION FOR DIFFICULT DRILLING



1st penetration

After

After

CUTTING CONDITIONS

Materials to be machined			CARBIDE		TiN		DICUT - TiAIN	
			Vc [m/min]		Vc [m/min]		Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**40**	60	**50**	70	**50**	70
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**30**	50	**40**	60	**40**	60
P	Lead alloyed cutting steel		**60**	90				
P	High alloyed steel	700 – 1500 N/mm²	**15**	40	**25**	50	**25**	50
M	Stainless steel	400 – 700 N/mm²	**35**	50	**40**	60	**40**	60
M	DUPLEX stainless steel	> 800 N/mm²	**20**	40	**30**	50	**30**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**30**	50	**40**	60	**40**	60
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**30**	50	**40**	60	**40**	60
K	Nodular ferritic cast iron / Malleable cast iron		**10**	30	**20**	40	**20**	40
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**10**	25	**20**	50	**20**	50
S	Titanium, titanium alloys		**80**	100				
N	Copper alloys - easy to machine (brass - bronze)		**40**	70	**60**	80	**60**	80
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**80**	100	**90**	120	**90**	120
N	Aluminium alloys	Si < 8%	**90**	150	**120**	160	**120**	160
N	Cast aluminium	Si > 8%	**70**	110	**90**	130	**90**	130
N	Plastic		**30**	60	**50**	80	**50**	80
N	Gold, silver		**50**	80	**65**	100	**65**	100

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[tr/min] \times f\,[mm]$$

Feed per revolution **f [mm]**

Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 - 16.00	Ø D_1 16.00 - 20.00
0.009 - 0.020	**0.016** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.05** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.16** - 0.28	**0.22** - 0.32	**0.26** - 0.40
0.007 - 0.015	**0.013** - 0.023	**0.020** - 0.03	**0.03** - 0.04	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24	**0.21** - 0.30
0.009 - 0.020	**0.016** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.05** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.16** - 0.28	**0.22** - 0.32	**0.26** - 0.40
0.006 - 0.015	**0.011** - 0.023	**0.017** - 0.03	**0.02** - 0.04	**0.03** - 0.08	**0.06** - 0.11	**0.08** - 0.15	**0.11** - 0.21	**0.15** - 0.24	**0.18** - 0.30
0.007 - 0.015	**0.013** - 0.023	**0.020** - 0.03	**0.03** - 0.04	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24	**0.21** - 0.30
0.006 - 0.015	**0.011** - 0.023	**0.017** - 0.03	**0.02** - 0.04	**0.03** - 0.08	**0.06** - 0.11	**0.08** - 0.15	**0.11** - 0.21	**0.15** - 0.24	**0.18** - 0.30
0.006 - 0.015	**0.011** - 0.023	**0.017** - 0.03	**0.02** - 0.04	**0.03** - 0.08	**0.06** - 0.11	**0.08** - 0.15	**0.11** - 0.21	**0.15** - 0.24	**0.18** - 0.30
0.007 - 0.015	**0.013** - 0.023	**0.020** - 0.03	**0.03** - 0.04	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24	**0.21** - 0.30
0.006 - 0.015	**0.011** - 0.020	**0.017** - 0.03	**0.02** - 0.04	**0.03** - 0.08	**0.06** - 0.11	**0.08** - 0.15	**0.11** - 0.21	**0.15** - 0.24	**0.18** - 0.30
0.006 - 0.015	**0.011** - 0.023	**0.017** - 0.03	**0.02** - 0.04	**0.03** - 0.08	**0.06** - 0.11	**0.08** - 0.15	**0.11** - 0.21	**0.15** - 0.24	**0.18** - 0.30
0.011 - 0.030	**0.020** - 0.045	**0.030** - 0.06	**0.04** - 0.08	**0.06** - 0.15	**0.10** - 0.21	**0.14** - 0.30	**0.20** - 0.42	**0.28** - 0.48	**0.32** - 0.60
0.009 - 0.020	**0.016** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.05** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.16** - 0.28	**0.22** - 0.32	**0.26** - 0.40
0.011 - 0.030	**0.020** - 0.045	**0.030** - 0.06	**0.04** - 0.08	**0.06** - 0.15	**0.10** - 0.21	**0.14** - 0.30	**0.20** - 0.42	**0.28** - 0.48	**0.32** - 0.60
0.011 - 0.030	**0.020** - 0.045	**0.030** - 0.06	**0.04** - 0.08	**0.06** - 0.15	**0.10** - 0.21	**0.14** - 0.30	**0.20** - 0.42	**0.28** - 0.48	**0.32** - 0.60
0.011 - 0.030	**0.020** - 0.045	**0.030** - 0.06	**0.04** - 0.08	**0.06** - 0.15	**0.10** - 0.21	**0.14** - 0.30	**0.20** - 0.42	**0.28** - 0.48	**0.32** - 0.60
0.013 - 0.045	**0.027** - 0.068	**0.041** - 0.09	**0.05** - 0.11	**0.08** - 0.23	**0.14** - 0.32	**0.19** - 0.45	**0.27** - 0.63	**0.38** - 0.72	**0.43** - 0.90
0.011 - 0.030	**0.020** - 0.045	**0.030** - 0.06	**0.04** - 0.08	**0.06** - 0.15	**0.10** - 0.21	**0.14** - 0.30	**0.20** - 0.42	**0.28** - 0.48	**0.32** - 0.60

DIXI 1111 - 1114 A - 1114 B

CUTTING CONDITIONS

	Materials to be machined		CARBIDE Vc [m/min]	
P	Lead alloyed cutting steel		**40**	60
N	Copper alloys - easy to machine (brass - bronze)		**50**	70
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**30**	50
N	Gold, silver		**30**	60
N	Plastic		**30**	60

DIXI 1112 - 1118

			CARBIDE Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**20**	40
P	Lead alloyed cutting steel		**40**	60
K	Nodular ferritic cast iron / Malleable cast iron		**20**	40
N	Copper alloys - easy to machine (brass - bronze)		**50**	80
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**30**	50
N	Aluminium alloys	Si < 8%	**60**	100
N	Cast aluminium	Si > 8%	**50**	90
N	Plastic		**30**	60

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times f\ [mm]$$

Feed per revolution **f [mm]**

Ø D_1 0.08 - 0.70	Ø D_1 0.70 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 6.00
0.001 - 0.011	**0.008** - 0.016	**0.012** - 0.02	**0.02** - 0.03	**0.02** - 0.05	**0.04** - 0.06	**0.05** - 0.10
0.001 - 0.018	**0.011** - 0.025	**0.015** - 0.04	**0.02** - 0.05	**0.03** - 0.08	**0.05** - 0.10	**0.06** - 0.15
0.001 - 0.011	**0.008** - 0.016	**0.012** - 0.024	**0.018** - 0.032	**0.024** - 0.048	**0.04** - 0.06	**0.05** - 0.10
0.001 - 0.018	**0.011** - 0.025	**0.015** - 0.04	**0.02** - 0.05	**0.03** - 0.08	**0.05** - 0.10	**0.06** - 0.15
0.002 - 0.004	**0.003** - 0.059	**0.036** - 0.08	**0.05** - 0.10	**0.06** -0.14	**0.09** - 0.22	**0.13** - 0.29

Feed per revolution **f [mm]**

Ø D_1 0.08 - 0.70	Ø D_1 0.70 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 6.00
0.001 - 0.011	**0.008** - 0.016	**0.012** - 0.024	**0.018** - 0.032	**0.024** - 0.048	**0.04** - 0.06	**0.05** - 0.10
0.001 - 0.011	**0.008** - 0.016	**0.012** - 0.024	**0.018** - 0.032	**0.024** - 0.048	**0.04** - 0.06	**0.05** - 0.10
0.001 - 0.009	**0.008** - 0.013	**0.011** - 0.020	**0.017** - 0.026	**0.022** - 0.039	**0.03** - 0.05	**0.04** - 0.08
0.001 - 0.018	**0.011** - 0.025	**0.015** - 0.038	**0.023** - 0.050	**0.030** - 0.075	**0.05** - 0.10	**0.06** - 0.15
0.001 - 0.011	**0.008** - 0.016	**0.012** - 0.024	**0.018** - 0.032	**0.024** - 0.048	**0.04** - 0.06	**0.05** - 0.10
0.001 - 0.018	**0.011** - 0.025	**0.015** - 0.038	**0.023** - 0.050	**0.030** - 0.075	**0.05** - 0.10	**0.06** - 0.15
0.001 - 0.018	**0.011** - 0.025	**0.015** - 0.038	**0.023** - 0.050	**0.030** - 0.075	**0.05** - 0.10	**0.06** - 0.15
0.002 - 0.004	**0.003** - 0.059	**0.036** - 0.08	**0.05** - 0.10	**0.06** -0.14	**0.09** - 0.22	**0.13** - 0.29

$D_1 < 1mm \Rightarrow Vc - 30\ \%$

CUTTING CONDITIONS

	Materials to be machined		CARBIDE Vc [m/min]		DICUT Vc [m/min]		TiN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**40**	60	**50**	70	**50**	70
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**30**	40	**30**	40
P	Lead alloyed cutting steel		**70**	100				
M	Stainless steel	400 – 700 N/mm²			**45**	60	**45**	60
M	DUPLEX stainless steel	> 800 N/mm²			**30**	50	**30**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**50**	80	**60**	90	**60**	90
K	Nodular ferritic cast iron / Malleable cast iron				**40**	60	**40**	60
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy			**20**	40	**20**	40
S	Titanium, titanium alloys		**30**	50				
N	Copper alloy - easy to machine (brass - bronze)		**80**	100				
N	Copper alloy - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**40**	70	**50**	80	**50**	80
N	Aluminium alloys	Si < 8%	**90**	110	**120**	130	**120**	130
N	Cast aluminium	Si > 8%	**70**	110	**90**	130	**90**	130
N	Plastic		**30**	60				
N	Gold, silver		**50**	80				

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times f\ [mm]$$

Feed per revolution **f [mm]**

Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 5.00	Ø D_1 5.00 - 6.00	Ø D_1 6.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 14.00
0.014 - 0.032	**0.027** - 0.041	**0.034** - 0.06	**0.05** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.14	**0.11** - 0.18	**0.14** - 0.22	**0.17** - 0.25
0.011 - 0.025	**0.023** - 0.032	**0.029** - 0.05	**0.04** - 0.06	**0.05** - 0.07	**0.06** - 0.08	**0.07** - 0.11	**0.10** - 0.14	**0.12** - 0.17	**0.14** - 0.20
0.014 - 0.032	**0.027** - 0.041	**0.034** - 0.06	**0.05** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.14	**0.11** - 0.18	**0.14** - 0.22	**0.17** - 0.25
0.011 - 0.025	**0.023** - 0.032	**0.029** - 0.05	**0.04** - 0.06	**0.05** - 0.07	**0.06** - 0.08	**0.07** - 0.11	**0.10** - 0.14	**0.12** - 0.17	**0.14** - 0.20
0.008 - 0.023	**0.020** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.06** - 0.10	**0.08** - 0.13	**0.10** - 0.16	**0.12** - 0.18
0.011 - 0.025	**0.023** - 0.032	**0.029** - 0.05	**0.04** - 0.06	**0.05** - 0.07	**0.06** - 0.08	**0.07** - 0.11	**0.10** - 0.14	**0.12** - 0.17	**0.14** - 0.20
0.008 - 0.023	**0.020** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.06** - 0.10	**0.08** - 0.13	**0.10** - 0.16	**0.12** - 0.18
0.008 - 0.023	**0.020** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.06** - 0.10	**0.08** - 0.13	**0.10** - 0.16	**0.12** - 0.18
0.011 - 0.025	**0.023** - 0.032	**0.029** - 0.05	**0.04** - 0.06	**0.05** - 0.07	**0.06** - 0.08	**0.07** - 0.11	**0.10** - 0.14	**0.12** - 0.17	**0.14** - 0.20
0.008 - 0.023	**0.020** - 0.030	**0.024** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.06** - 0.10	**0.08** - 0.13	**0.10** - 0.16	**0.12** - 0.18
0.014 - 0.032	**0.027** - 0.041	**0.034** - 0.06	**0.05** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.14	**0.11** - 0.18	**0.14** - 0.22	**0.17** - 0.25
0.017 - 0.050	**0.035** - 0.064	**0.043** - 0.09	**0.06** - 0.12	**0.07** - 0.14	**0.09** - 0.17	**0.11** - 0.22	**0.14** - 0.28	**0.18** - 0.34	**0.22** - 0.39
0.017 - 0.050	**0.035** - 0.064	**0.043** - 0.09	**0.06** - 0.12	**0.07** - 0.14	**0.09** - 0.17	**0.11** - 0.22	**0.14** - 0.28	**0.18** - 0.34	**0.22** - 0.39
0.021 - 0.072	**0.049** - 0.092	**0.060** - 0.13	**0.08** - 0.17	**0.10** - 0.20	**0.13** - 0.24	**0.15** - 0.32	**0.20** - 0.40	**0.25** - 0.48	**0.30** - 0.56
0.017 - 0.050	**0.035** - 0.064	**0.043** - 0.09	**0.06** - 0.21	**0.07** - 0.14	**0.09** - 0.17	**0.11** - 0.22	**0.14** - 0.28	**0.18** - 0.34	**0.22** - 0.39

CUTTING CONDITIONS

Materials to be machined			CARBIDE		DICUT		TiN		DLC	
			Vc [m/min]		Vc [m/min]		Vc [m/min]		Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**40**	60	**50**	70	**50**	70		
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**30**	40	**30**	40		
P	Lead alloyed cutting steel		**60**	90						
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**50**	80	**60**	90	**60**	90		
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB			**30**	50	**30**	50		
K	Nodular ferritic cast iron / Malleable cast iron				**40**	60	**40**	60		
S	Titanium, titanium alloys		**30**	50						
N	Copper alloys - easy to machine (brass - bronze)		**80**	100					**90**	110
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**40**	70	**50**	80	**50**	80	**50**	80
N	Aluminium alloys	Si < 8%	**80**	130					**100**	150
N	Cast aluminium	Si > 8%	**70**	110					**90**	130
N	Plastic		**30**	60	**50**	80	**50**	80	**50**	80
N	Gold, silver		**50**	80	**70**	100	**70**	100	**70**	100

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times f\ [mm]$$

Feed per revolution **f [mm]**

Ø D_1 0.10 - 0.30	Ø D_1 0.30 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 - 16.00
0.002 - 0.004	**0.003** - 0.028	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.11	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.28	**0.21** - 0.32
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.028	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.11	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.28	**0.21** - 0.32
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.021	**0.015** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.09** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.028	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.11	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.28	**0.21** - 0.32
0.002 - 0.004	**0.003** - 0.042	**0.27** - 0.05	**0.04** - 0.07	**0.05** - 0.10	**0.06** - 0.16	**0.10** - 0.21	**0.13** - 0.30	**0.19** - 0.42	**0.27** - 0.48
0.002 - 0.004	**0.003** - 0.042	**0.027** - 0.05	**0.04** - 0.07	**0.05** - 0.10	**0.06** - 0.16	**0.10** - 0.21	**0.13** - 0.30	**0.19** - 0.42	**0.27** - 0.48
0.002 - 0.004	**0.003** - 0.059	**0.036** - 0.08	**0.05** - 0.10	**0.06** - 0.14	**0.09** - 0.22	**0.13** - 0.29	**0.18** - 0.42	**0.26** - 0.59	**0.36** - 0.67
0.002 - 0.004	**0.003** - 0.042	**0.027** - 0.05	**0.04** - 0.07	**0.05** - 0.10	**0.06** - 0.16	**0.10** - 0.21	**0.13** - 0.30	**0.19** - 0.42	**0.27** - 0.48

D_1 < 1mm ⇒ Vc - 30 %

CUTTING CONDITIONS

Materials to be machined			CARBIDE		DICUT		TiN		DLC	
			Vc [m/min]		Vc [m/min]		Vc [m/min]		Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**40**	60	**50**	70	**50**	70		
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**30**	40	**30**	40		
P	Lead alloyed cutting steel		**60**	90						
M	Stainless steel	400 – 700 N/mm²			**45**	60	**45**	60		
M	DUPLEX stainless steel	> 800 N/mm²			**30**	50	**30**	50		
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**50**	80	**60**	90	**60**	90		
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB			**30**	50	**30**	50		
K	Nodular ferritic cast iron / Malleable cast iron				**40**	60	**40**	60		
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy			**20**	40	**20**	40		
S	Titanium, titanium alloys		**30**	50						
N	Copper alloys - easy to machine (brass - bronze)		**80**	100					**90**	110
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**40**	70	**50**	80	**50**	80	**50**	80
N	Aluminium alloys	Si < 8%	**80**	130					**100**	150
N	Cast aluminium	Si > 8%	**70**	110					**90**	130
N	Graphite								**60**	100
N	Plastic		**30**	60	**50**	80	**50**	80	**50**	80
N	Gold, silver		**50**	80	**70**	100	**70**	100	**70**	100

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times f\ [mm]$$

Feed per revolution **f [mm]**

Ø D_1 0.10 - 0.30	Ø D_1 0.30 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 - 16.00
0.002 - 0.004	**0.003** - 0.028	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.11	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.28	**0.21** - 0.32
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.028	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.11	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.28	**0.21** - 0.32
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.021	**0.015** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.09** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.021	**0.018** - 0.03	**0.03** - 0.04	**0.03** - 0.05	**0.04** - 0.08	**0.07** - 0.11	**0.09** - 0.15	**0.13** - 0.21	**0.18** - 0.24
0.002 - 0.004	**0.003** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.05	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.22
0.002 - 0.004	**0.003** - 0.028	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.11	**0.08** - 0.14	**0.11** - 0.20	**0.15** - 0.28	**0.21** - 0.32
0.002 - 0.004	**0.003** - 0.042	**0.27** - 0.05	**0.04** - 0.07	**0.05** - 0.10	**0.06** - 0.16	**0.10** - 0.21	**0.13** - 0.30	**0.19** - 0.42	**0.27** - 0.48
0.002 - 0.004	**0.003** - 0.042	**0.027** - 0.05	**0.04** - 0.07	**0.05** - 0.10	**0.06** - 0.16	**0.10** - 0.21	**0.13** - 0.30	**0.19** - 0.42	**0.27** - 0.48
0.002 - 0.004	**0.003** - 0.059	**0.036** - 0.08	**0.05** - 0.10	**0.06** - 0.14	**0.09** - 0.22	**0.13** - 0.29	**0.18** - 0.42	**0.26** - 0.59	**0.36** - 0.67
0.002 - 0.004	**0.003** - 0.059	**0.036** - 0.08	**0.05** - 0.10	**0.06** - 0.14	**0.09** - 0.22	**0.13** - 0.29	**0.18** - 0.42	**0.26** - 0.59	**0.36** - 0.67
0.002 - 0.004	**0.003** - 0.042	**0.027** - 0.05	**0.04** - 0.07	**0.05** - 0.10	**0.06** - 0.16	**0.10** - 0.21	**0.13** - 0.30	**0.19** - 0.42	**0.27** - 0.48

D_1 < 1mm ⇒ Vc - 30 %

CUTTING CONDITIONS

	Materials to be machined		CARBIDE Vc [m/min]		TiN Vc [m/min]		DICUT- TiAlN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**40**	60	**50**	70	**50**	70
P	Lead alloyed cutting steel		**60**	90				
P	High alloyed steel	700 – 1500 N/mm²			**40**	60	**40**	60
M	Stainless steel	400 – 700 N/mm²	**40**	60	**50**	70	**50**	70
M	DUPLEX stainless steel	> 800 N/mm²	**20**	40	**30**	50	**30**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**50**	80	**60**	80	**60**	80
K	Nodular ferritic cast iron / Malleable cast iron		**30**	50	**40**	60	**40**	60
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**15**	25	**20**	40	**20**	40
S	Titanium, titanium alloys		**35**	55				
N	Copper alloys - easy to machine (brass - bronze)		**80**	100				
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**40**	70	**60**	90	**60**	90
N	Aluminium alloys	Si < 8%	**80**	100			**90**	130
N	Plastic		**30**	60				
N	Gold, silver		**50**	80				

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[tr/min] \times f\,[mm]$$

Feed per revolution f [mm]

Ø D_1 0.20 - 0.40	Ø D_1 0.40 - 0.60	Ø D_1 0.60 - 0.80	Ø D_1 0.80 - 1.00	Ø D_1 1.00 - 1.20	Ø D_1 1.20 - 1.40	Ø D_1 1.40 - 1.60	Ø D_1 1.60 - 1.80	Ø D_1 1.80 - 2.00	Ø D_1 2.00 - 2.50
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070
0.003 - 0.010	**0.008** - 0.015	**0.012** - 0.018	**0.015** - 0.020	**0.018** - 0.025	**0.022** - 0.030	**0.026** - 0.035	**0.030** - 0.045	**0.034** - 0.055	**0.038** - 0.070

$$D_1 < 1mm \Rightarrow Vc - 30\,\%$$

CUTTING CONDITIONS

	Materials to be machined		CARBIDE Vc [m/min]		TiN Vc [m/min]		DICUT - TiAIN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**40**	60	**50**	70	**50**	70
P	Lead alloyed cutting steel		**60**	90				
P	High alloyed steel	700 – 1500 N/mm²	**15**	30	**20**	40	**20**	40
M	Stainless steel	400 – 700 N/mm²	**35**	50	**40**	60	**40**	60
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**50**	80	**60**	80	**60**	80
K	Nodular ferritic cast iron / Malleable cast iron		**30**	50	**40**	60	**40**	60
S	Titanium, titanium alloys		**30**	50				
N	Copper alloys - easy to machine (brass - bronze)		**80**	100				
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**40**	70	**50**	80	**50**	80
N	Aluminium alloys	Si < 8%	**80**	100			**90**	110
N	Plastic		**30**	60				
N	Gold, silver		**50**	80				

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times f\ [mm]$$

Feed per revolution **f [mm]**

Ø D_1 0.20 - 0.40	Ø D_1 0.40 - 0.60	Ø D_1 0.60 - 0.80	Ø D_1 0.80 - 1.00	Ø D_1 1.00 - 1.20	Ø D_1 1.20 - 1.40	Ø D_1 1.40 - 1.60	Ø D_1 1.60 - 1.80	Ø D_1 1.80 - 2.00	Ø D_1 2.00 - 2.50
0.005 - 0.013	**0.010** - 0.018	**0.014** - 0.04	**0.02** - 0.05	**0.04** - 0.06	**0.04** - 0.09	**0.06** - 0.10	**0.08** - 0.11		
0.005 - 0.013	**0.010** - 0.018	**0.014** - 0.04	**0.02** - 0.05	**0.04** - 0.06	**0.04** - 0.09	**0.06** - 0.10	**0.08** - 0.11		
0.003 - 0.009	**0.007** - 0.013	**0.010** - 0.03	**0.02** - 0.05	**0.03** - 0.04	**0.03** - 0.06	**0.04** - 0.07	**0.06** - 0.08		
0.005 - 0.010	**0.008** - 0.014	**0.012** - 0.03	**0.02** - 0.035	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.07** - 0.08		
0.004 - 0.010	**0.008** - 0.014	**0.012** - 0.03	**0.02** - 0.035	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.07** - 0.08		
0.004 - 0.010	**0.008** - 0.014	**0.012** - 0.03	**0.02** - 0.04	**0.03** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.07** - 0.08		
0.003 - 0.009	**0.007** - 0.013	**0.010** - 0.03	**0.02** - 0.04	**0.03** - 0.04	**0.03** - 0.06	**0.04** - 0.07	**0.06** - 0.08		
0.006 - 0.020	**0.013** - 0.028	**0.018** - 0.05	**0.03** - 0.06	**0.05** - 0.09	**0.05** - 0.13	**0.07** - 0.15	**0.10** - 0.17		
0.005 - 0.013	**0.010** - 0.018	**0.014** - 0.04	**0.02** - 0.05	**0.04** - 0.06	**0.04** - 0.09	**0.06** - 0.10	**0.08** - 0.11		
0.006 - 0.020	**0.013** - 0.028	**0.018** - 0.05	**0.03** - 0.06	**0.05** - 0.09	**0.05** - 0.13	**0.07** - 0.15	**0.10** - 0.17		
0.008 - 0.028	**0.018** - 0.040	**0.025** - 0.08	**0.04** - 0.08	**0.07** - 0.13	**0.08** - 0.19	**0.10** - 0.22	**0.14** - 0.24		
0.006 - 0.020	**0.013** - 0.028	**0.018** - 0.05	**0.03** - 0.06	**0.05** - 0.09	**0.05** - 0.13	**0.07** - 0.15	**0.10** - 0.17		

D_1 < 1mm ⇒ Vc - 30 %

DIXI 1145

CUTTING CONDITIONS

	Materials to be machined		Ø D_1 < 2.00 TiAlN Vc [m/min]		Ø D_1 ≥ 2.00 TiAlN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**30**	60	**70**	90
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**35**	50	**40**	60
P	High alloyed steel	700 – 1500 N/mm²	**15**	30	**70**	90
M	Stainless steel	400 – 700 N/mm²	**10**	25	**35**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**30**	60	**70**	100
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**10**	25	**50**	80
K	Nodular ferritic cast iron / Malleable cast iron		**15**	30	**50**	80
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**10**	25	**15**	35
S	Titanium, titanium alloys		**20**	45	**40**	70
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**50**	90	**90**	110

DIXI 1149

			TiAlN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70**	90
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**40**	60
P	High alloyed steel	700 – 1500 N/mm²	**35**	50
M	Stainless steel	400 – 700 N/mm²	**35**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**70**	100
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**40**	60
K	Nodular ferritic cast iron / Malleable cast iron		**30**	50
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**12**	30
S	Titanium, titanium alloys		**30**	60
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**70**	90
N	Aluminium alloys	Si < 8%	**130**	16h0

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times f\ [mm]$$

Feed per revolution **f [mm]**

Ø D_1 < 1.00	Ø D_1 1.00 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 4.50	Ø D_1 4.50 - 6.00	Ø D_1 6.00 - 7.00	Ø D_1 7.00 - 8.00	Ø D_1 8.00 - 10.00	Ø D_1 10.00 - 12.00	Ø D_1 12.00 - 14.00
0.02 - 0.03	**0.03** - 0.05	**0.03** - 0.06	**0.04** - 0.10	**0.08** - 0.12	**0.10** - 0.14	**0.11** - 0.16	**0.13** - 0.20	**0.15** - 0.25	**0.20** - 0.30
0.01 - 0.02	**0.015** - 0.04	**0.02** - 0.05	**0.04** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.15	**0.13** - 0.18	**0.16** - 0.20
0.005 - 0.008	**0.007** - 0.012	**0.01** - 0.04	**0.03** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.15	**0.13** - 0.18	**0.16** - 0.20
0.005 - 0.008	**0.009** - 0.02	**0.008** - 0.04	**0.03** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.15	**0.12** - 0.18	**0.15** - 0.20
0.02 - 0.03	**0.03** - 0.04	**0.04** - 0.05	**0.04** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.15	**0.13** - 0.18	**0.16** - 0.20
0.01 - 0.02	**0.02** - 0.03	**0.03** - 0.04	**0.03** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.15	**0.12** - 0.18	**0.15** - 0.20
0.02 - 0.03	**0.03** - 0.04	**0.04** - 0.05	**0.04** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.15	**0.13** - 0.18	**0.16** - 0.20
0.008 - 0.02	**0.01** - 0.03	**0.01** - 0.04	**0.03** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.15	**0.12** - 0.18	**0.15** - 0.20
0.008 - 0.02	**0.01** - 0.03	**0.01** - 0.04	**0.03** - 0.08	**0.06** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.15	**0.12** - 0.18	**0.15** - 0.20
0.03 - 0.04	**0.04** - 0.05	**0.045** - 0.06	**0.04** - 0.10	**0.08** - 0.12	**0.10** - 0.14	**0.11** - 0.16	**0.13** - 0.20	**0.16** - 0.25	**0.20** - 0.30

Ø D_1 1.00 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 5.00	Ø D_1 5.00 - 6.00	Ø D_1 6.00 - 7.00	Ø D_1 7.00 - 8.00	Ø D_1 8.00 - 9.00	Ø D_1 9.00 - 10.00	Ø D_1 10.00 - 14.00
0.02 - 0.04	**0.03** - 0.06	**0.04** - 0.09	**0.06** - 0.11	**0.08** - 0.12	**0.10** - 0.14	**0.11** - 0.16	**0.13** - 0.18	**0.15** - 0.20	**0.15** - 0.30
0.02 - 0.04	**0.02** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.14	**0.12** - 0.15	**0.13** - 0.20
0.01 - 0.03	**0.01** - 0.40	**0.03** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.14	**0.12** - 0.15	**0.12** - 0.20
0.01 - 0.03	**0.01** - 0.04	**0.03** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.09** - 0.14	**0.12** - 0.15	**0.12** - 0.20
0.02 - 0.04	**0.04** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.14	**0.12** - 0.15	**0.13** - 0.20
0.02 - 0.04	**0.04** - 0.05	**0.04** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.08** - 0.11	**0.09** - 0.12	**0.10** - 0.14	**0.12** - 0.15	**0.13** - 0.20
0.02 - 0.04	**0.03** - 0.04	**0.03** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.14	**0.12** - 0.15	**0.12** - 0.20
0.008 - 0.03	**0.01** - 0.03	**0.03** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.07** - 0.11	**0.08** - 0.12	**0.09** - 0.14	**0.12** - 0.15	**0.12** - 0.20
0.008 - 0.03	**0.01** - 0.03	**0.03** - 0.07	**0.05** - 0.08	**0.07** - 0.09	**0.07** - 0.12	**0.08** - 0.12	**0.09** - 0.14	**0.12** - 0.15	**0.12** - 0.20
0.02 - 0.04	**0.02** - 0.06	**0.05** - 0.08	**0.06** - 0.10	**0.08** - 0.12	**0.10** - 0.14	**0.11** - 0.16	**0.13** - 0.18	**0.13** - 0.20	**0.16** - 0.30
0.02 - 0.04	**0.02** - 0.06	**0.05** - 0.08	**0.06** - 0.10	**0.08** - 0.12	**0.10** - 0.14	**0.11** - 0.16	**0.13** - 0.18	**0.13** - 0.20	**0.16** - 0.30

DIXI 1146

CUTTING CONDITIONS

Materials to be machined			TiAlN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**80**	120
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**70**	100
P	Lead alloyed cutting steel		**80**	120
P	High alloyed steel	700 – 1500 N/mm²	**40**	70
M	DUPLEX stainless steel	> 800 N/mm²	**30**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**90**	130
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**80**	120
K	Nodular ferritic cast iron / Malleable cast iron		**70**	100
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**15**	30
S	Titanium, titanium alloys		**50**	100

DIXI 1147

			TiAlN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**70**	100
P	Unalloyed steel / Low alloy steel	600 – 1500 N/mm²ed	**60**	90
P	Lead alloyed cutting steel		**80**	110
P	High alloyed steel	700 – 1500 N/mm²	**30**	60
M	DUPLEX cast iron	> 800 N/mm²	**30**	50
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**90**	130
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**80**	120
K	Nodular ferritic cast iron / Malleable cast iron		**70**	100
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**15**	30
N	Aluminium alloys	Si < 8%	**130**	160

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times f\ [mm]$$

Feed per revolution **f [mm]**

Ø D_1 0.80 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00
0.03 - 0.11	**0.06** - 0.16	**0.08** - 0.21	**0.11** - 0.25	**0.13** - 0.27	**0.16** - 0.33	**0.19** - 0.35
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.20	**0.10** - 0.23	**0.12** - 0.25	**0.15** - 0.27	**0.18** - 0.30
0.03 - 0.12	**0.07** - 0.17	**0.09** - 0.23	**0.11** - 0.25	**0.14** - 0.27	**0.17** - 0.30	**0.21** - 0.35
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.17	**0.12** - 0.22	**0.12** - 0.23	**0.15** - 0.25	**0.18** - 0.28
0.008 - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.07** - 0.14
0.03 - 0.12	**0.07** - 0.17	**0.09** - 0.23	**0.12** - 0.29	**0.14** - 0.35	**0.17** - 0.40	**0.21** - 0.46
0.03 - 0.12	**0.07** - 0.17	**0.09** - 0.23	**0.12** - 0.29	**0.14** - 0.35	**0.17** - 0.40	**0.21** - 0.46
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.20	**0.10** - 0.25	**0.12** - 0.30	**0.15** - 0.35	**0.18** - 0.40
0.008 - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.07** - 0.14
0.008 - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.07** - 0.14

Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00
0.03 - 0.11	**0.06** - 0.16	**0.08** - 0.21	**0.11** - 0.26	**0.13** - 0.32	**0.16** - 0.37	**0.19** - 0.42
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.20	**0.10** - 0.25	**0.12** - 0.30	**0.15** - 0.35	**0.18** - 0.40
0.03 - 0.12	**0.07** - 0.17	**0.09** - 0.23	**0.12** - 0.29	**0.14** - 0.35	**0.17** - 0.40	**0.21** - 0.46
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.20	**0.12** - 0.25	**0.12** - 0.30	**0.15** - 0.35	**0.18** - 0.40
0.008 - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.07** - 0.14
0.03 - 0.12	**0.07** - 0.17	**0.09** - 0.23	**0.12** - 0.29	**0.14** - 0.35	**0.17** - 0.40	**0.21** - 0.46
0.03 - 0.12	**0.07** - 0.17	**0.09** - 0.23	**0.12** - 0.29	**0.14** - 0.35	**0.17** - 0.40	**0.21** - 0.46
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.20	**0.10** - 0.25	**0.12** - 0.30	**0.15** - 0.35	**0.18** - 0.40
0.008 - 0.02	**0.01** - 0.04	**0.02** - 0.06	**0.03** - 0.08	**0.04** - 0.10	**0.05** - 0.12	**0.07** - 0.14
0.03 - 0.10	**0.06** - 0.15	**0.08** - 0.20	**0.10** - 0.25	**0.12** - 0.30	**0.15** - 0.35	**0.18** - 0.40

DIXI 1151 - 1152

CUTTING CONDITIONS

	Materials to be machined		CARBIDE Vc [m/min]		TiN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**40**	60	**50**	70
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²			**40**	60
P	Lead alloyed cutting steel		**60**	90		
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**50**	80	**60**	90
K	Nodular ferritic cast iron / Malleable cast iron		**40**	55	**50**	70
S	Titanium, titanium alloys		**30**	50		
N	Copper alloys - easy to machine (brass - bronze)		**60**	100		
N	Cast aluminium	Si > 8%	**70**	110	**80**	120
N	Gold, silver		**50**	80	**60**	90

DIXI 1280

			XIDUR Vc [m/min]	
H	Hardened tool steel and cast iron	> 1500 N/mm² (45 - 65 HRC)	**15**	25
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**15**	30

$$n\,[tr/min] = \frac{Vc\,[m/min] \times 1000}{\pi \times D_1\,[mm]}$$

$$Vf\,[mm/min] = n\,[tr/min] \times f\,[mm]$$

Feed per revolution f [mm]

Ø D_1 0.20 - 0.50	Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30
0.004 - 0.008	**0.006** - 0.017	**0.015** - 0.025	**0.02** - 0.035	**0.030** - 0.04	**0.035** - 0.08	**0.07** - 0.18	**0.15** - 0.25	**0.18** - 0.30

D_1 < 1mm ⇒ Vc - 30 %

Ø D_1 0.25 - 0.50	Ø D_1 0.50 - 1.00	Ø D_1 1.00 - 2.50	Ø D_1 2.50 - 3.00	Ø D_1 3.00 - 4.00	Ø D_1 4.00 - 5.00	Ø D_1 5.00 - 8.00	Ø D_1 8.00 - 12.00
0.01	0.02	0.025	0.03	0.04	0.05	0.05	0.06
0.01	0.02	0.025	0.03	0.04	0.05	0.05	0.06

Pecking cycle = 0.25 x ØD_1

CUTTING CONDITIONS

	Materials to be machined		CARBIDE Vc [m/min]		TiAlN Vc [m/min]	
P	Unalloyed steel / Low alloyed steel	< 600 N/mm²	**40**	60	**50**	70
P	Unalloyed steel / Low alloyed steel	600 – 1500 N/mm²	**30**	50	**40**	60
P	Lead alloyed cutting steel		**60**	90	**70**	100
P	High alloyed steel	700 – 1500 N/mm²	**35**	50	**25**	50
M	Stainless steel	400 – 700 N/mm²	**15**	40	**40**	60
M	DUPLEX stainless steel	> 800 N/mm²	**30**	50	**40**	60
K	Grey cast iron / Nodular pearlitic iron	< 250 HB	**10**	30	**60**	90
K	Alloyed cast iron / Nodular pearlitic iron	> 250 HB	**50**	80	**40**	60
K	Nodular ferritic cast iron / Malleable cast iron		**30**	50	**40**	60
S	Special alloys / Heat resistant stainless steel	Inconel Nimonic Hastelloy	**20**	40	**30**	50
S	Titanium, titanium alloys		**30**	50	**40**	60
N	Copper alloys - easy to machine (brass - bronze)		**80**	100	**90**	120
N	Copper alloys - difficult to machine / Aluminium bronze	(CuAlFe) (Ampco)	**40**	70	**60**	80
N	Aluminium alloys	Si < 8%	**80**	120	**100**	160
N	Cast aluminium	Si > 8%	**70**	110	**90**	130
N	Plastic		**30**	60	**50**	80
N	Gold, silver		**50**	80	**65**	100

$$n\ [tr/min] = \frac{Vc\ [m/min] \times 1000}{\pi \times D_1\ [mm]}$$

$$Vf\ [mm/min] = n\ [tr/min] \times f\ [mm]$$

Feed per revolution **f [mm]**

Ø D_1 0.30 - 1.00	Ø D_1 1.00 - 1.50	Ø D_1 1.50 - 2.00	Ø D_1 2.00 - 3.00	Ø D_1 3.00 - 5.00	Ø D_1 5.00 - 7.00	Ø D_1 7.00 - 10.00	Ø D_1 10.00 - 14.00	Ø D_1 14.00 - 16.00	Ø D_1 16.00 - 20.00
0.003 - 0.018	**0.014** - 0.027	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.25	**0.20** - 0.29	**0.22** - 0.36
0.002 - 0.014	**0.012** - 0.021	**0.018** - 0.03	**0.02** - 0.04	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.12** - 0.20	**0.17** - 0.22	**0.19** - 0.28
0.003 - 0.018	**0.014** - 0.027	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.25	**0.20** - 0.29	**0.22** - 0.36
0.002 - 0.014	**0.012** - 0.021	**0.018** - 0.03	**0.02** - 0.04	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.12** - 0.20	**0.17** - 0.22	**0.19** - 0.28
0.002 - 0.013	**0.010** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.07	**0.05** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.21	**0.16** - 0.26
0.002 - 0.014	**0.012** - 0.021	**0.018** - 0.03	**0.02** - 0.04	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.12** - 0.20	**0.17** - 0.22	**0.19** - 0.28
0.002 - 0.013	**0.010** - 0.02	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.07	**0.05** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.21	**0.16** - 0.26
0.002 - 0.014	**0.012** - 0.021	**0.018** - 0.03	**0.02** - 0.04	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.12** - 0.20	**0.17** - 0.22	**0.19** - 0.28
0.002 - 0.013	**0.010** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.07	**0.05** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.21	**0.16** - 0.26
0.002 - 0.014	**0.012** - 0.021	**0.018** - 0.03	**0.02** - 0.04	**0.04** - 0.07	**0.06** - 0.10	**0.08** - 0.14	**0.12** - 0.20	**0.17** - 0.22	**0.19** - 0.28
0.002 - 0.013	**0.010** - 0.020	**0.015** - 0.03	**0.02** - 0.03	**0.03** - 0.07	**0.05** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.21	**0.16** - 0.26
0.004 - 0.028	**0.018** - 0.042	**0.027** - 0.06	**0.04** - 0.07	**0.05** - 0.14	**0.09** - 0.20	**0.13** - 0.28	**0.18** - 0.39	**0.25** - 0.45	**0.29** - 0.56
0.003 - 0.018	**0.014** - 0.027	**0.021** - 0.04	**0.03** - 0.05	**0.04** - 0.09	**0.07** - 0.13	**0.10** - 0.18	**0.14** - 0.25	**0.20** - 0.29	**0.22** - 0.36
0.004 - 0.028	**0.018** - 0.042	**0.027** - 0.06	**0.04** - 0.07	**0.05** - 0.14	**0.09** - 0.20	**0.13** - 0.28	**0.18** - 0.39	**0.25** - 0.45	**0.29** - 0.56
0.004 - 0.028	**0.018** - 0.042	**0.027** - 0.06	**0.04** - 0.07	**0.05** - 0.14	**0.09** - 0.20	**0.13** - 0.28	**0.18** - 0.39	**0.25** - 0.45	**0.29** - 0.56
0.005 - 0.040	**0.025** - 0.060	**0.038** - 0.08	**0.05** - 0.10	**0.08** - 0.20	**0.13** - 0.28	**0.18** - 0.40	**0.25** - 0.56	**0.35** - 0.64	**0.40** - 0.80
0.004 - 0.028	**0.018** - 0.042	**0.027** - 0.06	**0.04** - 0.07	**0.05** - 0.14	**0.09** - 0.20	**0.13** - 0.28	**0.18** - 0.39	**0.25** - 0.45	**0.29** - 0.56

D_1 < 1mm ⇒ Vc - 30 %