



 **Power Cut**



Carbide Burs Catalogue

Tungsten Carbide Burrs

Flute Styles



Double Cut - CUT 1 (D/C)



Single Cut - CUT 2 (S/C)



Non-ferrous - CUT 1 (NF)



Diamond Cut - CUT 4 (DIA)

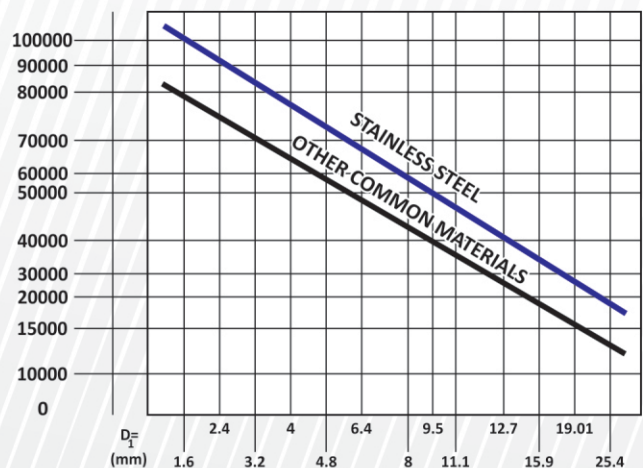


Chip Breaker - CUT 2 SP (C/B)

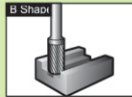
Material	D	S	N	CB	DC
Aluminium			✓		
Brass, Bronze Copper	✓			✓	
Carbon Fiber		✓			
Fiberglass					✓
Cast Iron	✓	✓		✓	
Plastic			✓	✓	✓
Steel hardness 40-50Rc	✓	✓		✓	✓
Steel hardness 55-60Rc	✓	✓		✓	✓
Carbon Steel	✓	✓		✓	
Nickel Chrome Steel	✓	✓		✓	✓
Stainless Steel	✓	✓		✓	
Weldments Steel	✓	✓		✓	
Titanium	✓	✓		✓	
Zinc			✓		

Burr Speed Recommendations:

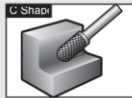
Extra-long burrs with 6mm shanks over 150mm long and 3mm shank burrs over 50mm long should be used at reduced speeds.



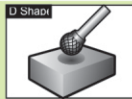
Contents



B FORM/SHAPE B



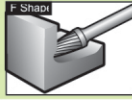
C FORM/SHAPE C



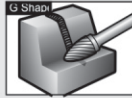
D FORM/SHAPE D



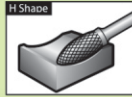
E FORM/SHAPE E



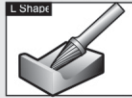
F FORM/SHAPE F



G FORM/SHAPE G



H FORM/SHAPE H



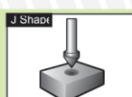
L FORM/SHAPE L



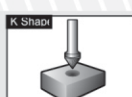
M FORM/SHAPE M



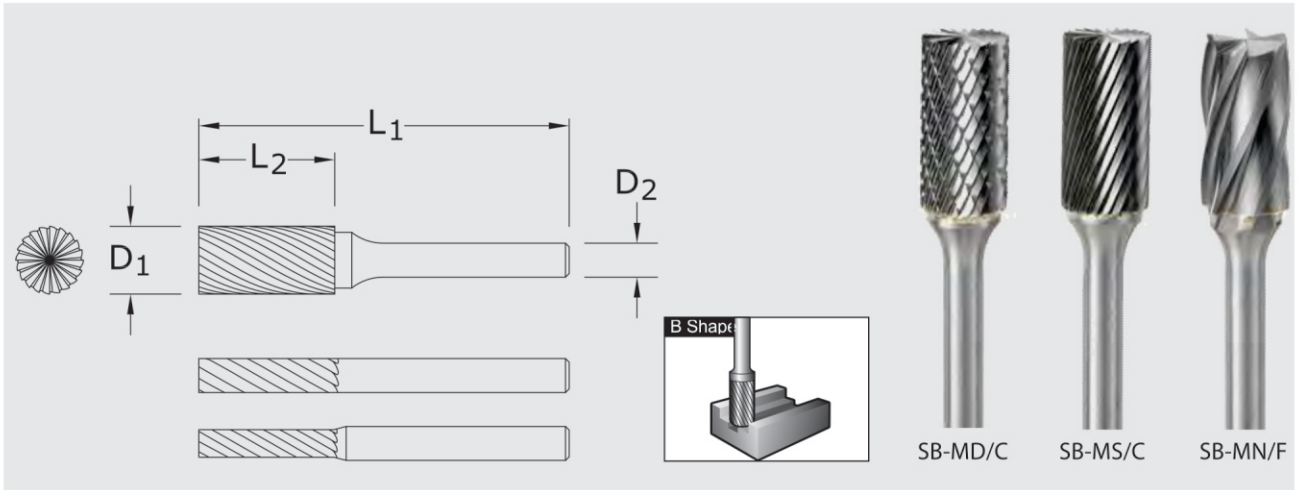
N FORM/SHAPE N



J FORM/SHAPE J



K FORM/SHAPE K



Cylinder with Endcut

Shape: B

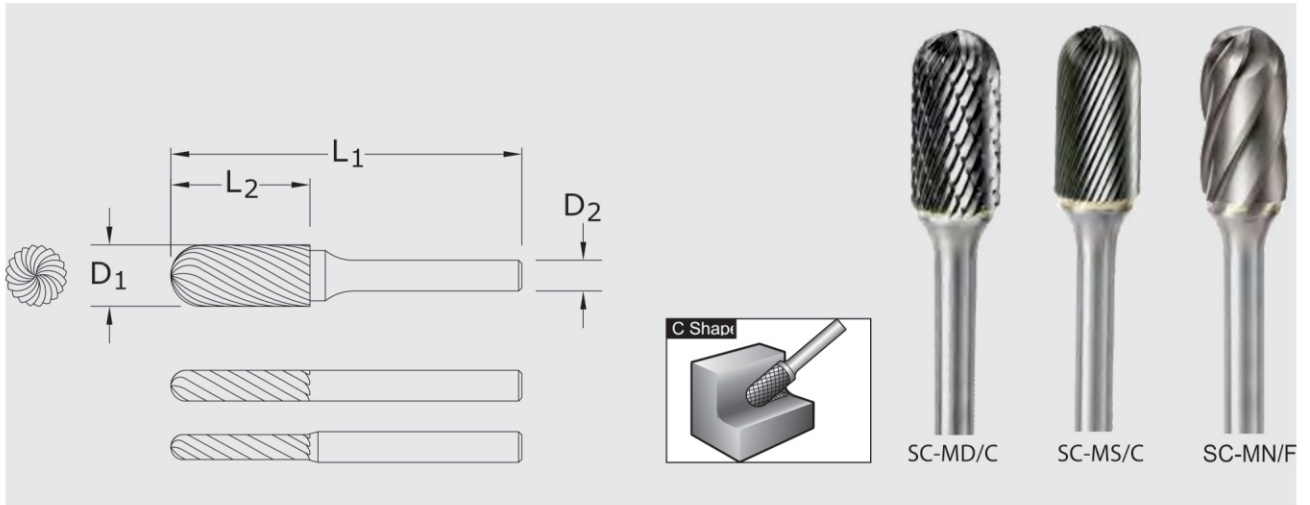
3mm- shank		Dimensions-All in mm			Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3
1.5	6.0	3.0	38.0	Solid	B31.506-2	B31.506-6	-
2.0	11.0	3.0	38.0	Solid	B30211-2	B30211-6	-
2.5	12.0	3.0	38.0	Solid	B32.512-2	B32.512-6	-
3.0	14.0	3.0	38.0	Solid	B30314-2	B30314-6	B30314-3
5.0	12.7	3.0	38.0	Solid	B30512-2	B30512-6	-
6.3	4.7	3.0	37.0	Brazed	B30605-2	B30605-6	-
6.3	12.7	3.0	45.0	Brazed	B30612-2	B30612-6	B30612-3

6mm- shank		Dimensions-All in mm			Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3
3.0	14.0	6.0	50.0	Solid	B60312-2	B60312-6	-
4.0	14.0	6.0	50.0	Solid	B60413-2	B60413-6	-
5.0	16.0	6.0	50.0	Solid	B60516-2	B60516-6	-
6.0	18.0	6.0	50.0	Solid	B60618-2	B60618-6	B60618-3
6.0	25.0	6.0	50.0	Solid	B60625-2	B60625-6	-
8.0	19.0	6.0	64.0	Brazed	B60820-2	B60820-6	B60820-3
9.6	13.5	6.0	59.0	Brazed	B61014-2	B61014-6	-
9.6	19.0	6.0	64.0	Brazed	B61020-2	B61020-6	B61020-3
9.6	25.0	6.0	70.0	Brazed	B61025-2	B61025-6	-
11.0	25.0	6.0	70.0	Brazed	B61125-2	B61125-6	-
12.7	19.0	6.0	64.0	Brazed	B61220-2	B61220-6	-
12.7	25.0	6.0	70.0	Brazed	B61225-2	B61225-6	B61225-3
16.0	25.0	6.0	70.0	Brazed	B61525-2	B61525-6	B61525-3
19.0	25.0	6.0	70.0	Brazed	B62025-2	B62025-6	B62025-3
25.0	25.0	6.0	70.0	Brazed	B62525-2	B62525-6	B62525-3



Cylinder without Endcut - Shape Sb

Tool No.	Cutting Diameter D1	Length of Cut L1	Shank Diameter D2	Overall Length L1	Part No.
SA-4M BUR	3.0	12.0	3.0	38	40100



Ball Nosed Cylinder

Shape: C

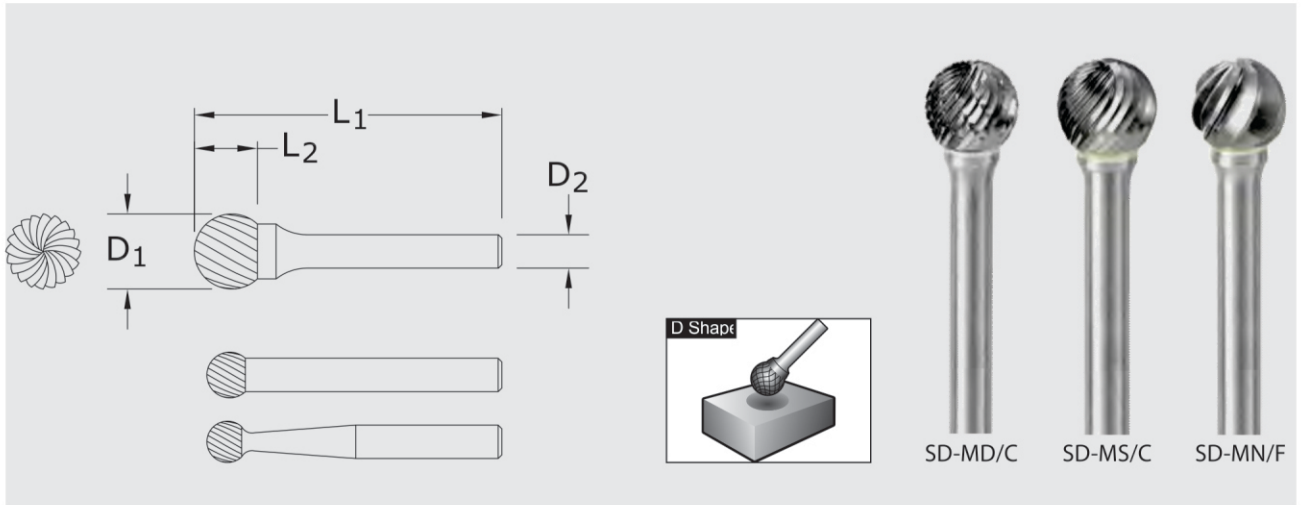
3mm- shank					Dimensions-All in mm			Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3			
2.0	11.0	3.0	38.0	Solid	C30211-2	C30211-6	-			
2.5	11.0	3.0	38.0	Solid	C32.511-2	C32.511-6	-			
3.0	14.0	3.0	38.0	Solid	C30312-2	C30312-6	C30312-3			
5.0	12.7	3.0	38.0	Solid	C30512-2	C30512-6	-			
6.3	12.7	3.0	45.0	Brazed	C30612-2	C30612-6	C30612-3			

6mm- shank					Dimensions-All in mm			Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3			
3.0	14.0	6.0	50.0	Solid	C60312-2	C60312-6	-			
4.0	14.0	6.0	50.0	Solid	C60413-2	C60413-6	-			
5.0	16.0	6.0	50.0	Solid	C60516-2	C60516-6	-			
6.0	18.0	6.0	50.0	Solid	C60618-2	C60618-6	C60618-3			
6.0	25.0	6.0	50.0	Solid	C60625-2	C60625-6	-			
8.0	19.0	6.0	64.0	Brazed	C60820-2	C60820-6	C60820-3			
9.6	19.0	6.0	64.0	Brazed	C61020-2	C61020-6	C61020-3			
9.6	25.0	6.0	70.0	Brazed	C61025-2	C61025-6	-			
11.0	25.0	6.0	70.0	Brazed	C61125-2	C61125-6	-			
12.0	10.0	6.0	54.0	Brazed	C61210-2	C61210-6	-			
12.7	19.0	6.0	64.0	Brazed	C61220-2	C61220-6	C61220-3			
12.7	25.0	6.0	70.0	Brazed	C61225-2	C61225-6	C61225-3			
16.0	25.0	6.0	70.0	Brazed	C61525-2	C61525-6	C61525-3			
19.0	25.0	6.0	70.0	Brazed	C62025-2	C62025-6	C62025-3			
25.0	25.0	6.0	70.0	Brazed	C62525-2	C62525-6	-			



Ball Nosed Cylinder - Shape SC

Tool No.	Cutting Diameter D1	Length of Cut L2	Shank Diameter D2	Overall Length L1	Part No.
SC-42M BUR	3.0	14.0	3.0	38	40110



Ball

Shape: D

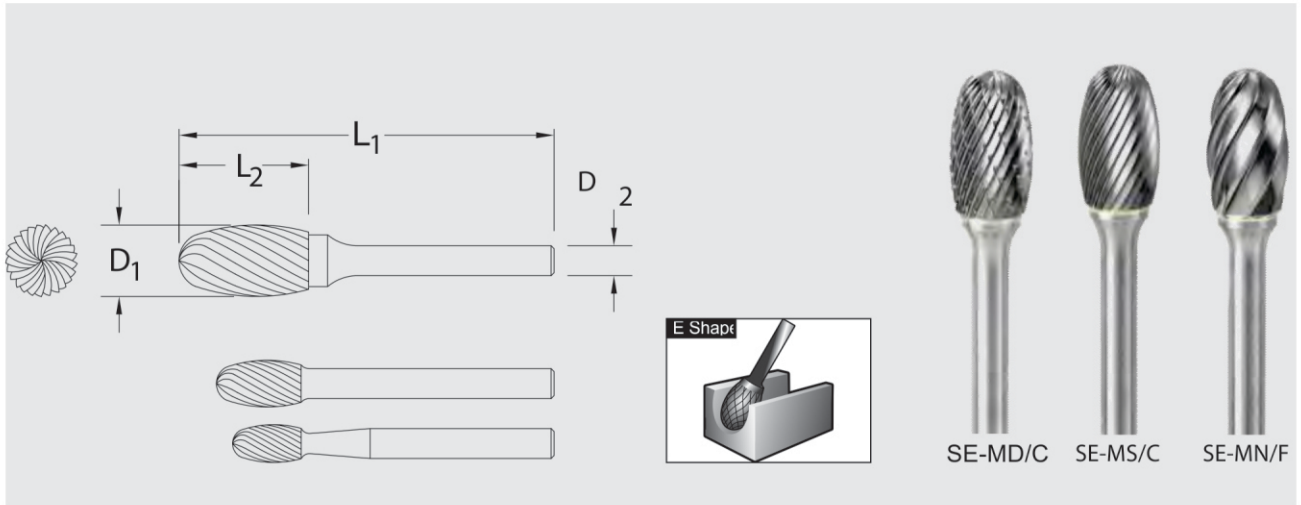
3mm- shank					Dimensions-All in mm			Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3			
2.0	1.8	3.0	38.0	Solid	D30202-2	D30202-6	-			
2.5	2.3	3.0	38.0	Solid	D32.52.5-2	D32.52.5-6	-			
3.0	2.5	3.0	38.0	Solid	D30303-2	D30303-6	D30303-3			
4.0	3.4	3.0	38.0	Solid	D30404-2	D30404-6	D30404-3			
5.0	4.7	3.0	38.0	Solid	D30505-2	D30505-6	-			
6.3	5.0	3.0	38.0	Brazed	D30606-2	D30606-6	D30606-3			

6mm- shank					Dimensions-All in mm			Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3			
3.0	2.5	6.0	50.0	Solid	D60303-2	D60303-6	-			
4.0	3.0	6.0	50.0	Solid	D60404-2	D60404-6	-			
5.0	4.0	6.0	50.0	Solid	D60505-2	D60505-6	-			
6.0	4.7	6.0	50.0	Solid	D60606-2	D60606-6	D60606-3			
8.0	6.0	6.0	52.0	Brazed	D60808-2	D60808-6	D60808-3			
9.6	8.0	6.0	54.0	Brazed	D61010-2	D61010-6	D61010-3			
11.0	9.5	6.0	55.0	Brazed	D61111-2	D61111-6	-			
12.7	11.0	6.0	56.0	Brazed	D61212-2	D61212-6	D61212-3			
16.0	14.0	6.0	59.0	Brazed	D61515-2	D61515-6	D61515-3			
19.0	16.5	6.0	62.0	Brazed	D62020-2	D62020-6	D62020-3			
25.0	22.0	6.0	67.0	Brazed	D62525-2	D62525-6	D62525-3			



Ball Shape - Shape SD

Tool No.	Cutting Diameter D1	Length of Cut L2	Shank Diameter D2	Overall Length L1	Part No.
SD-42M BUR	3.0	2.5	3.0	38	40120



Oval

Shape: E

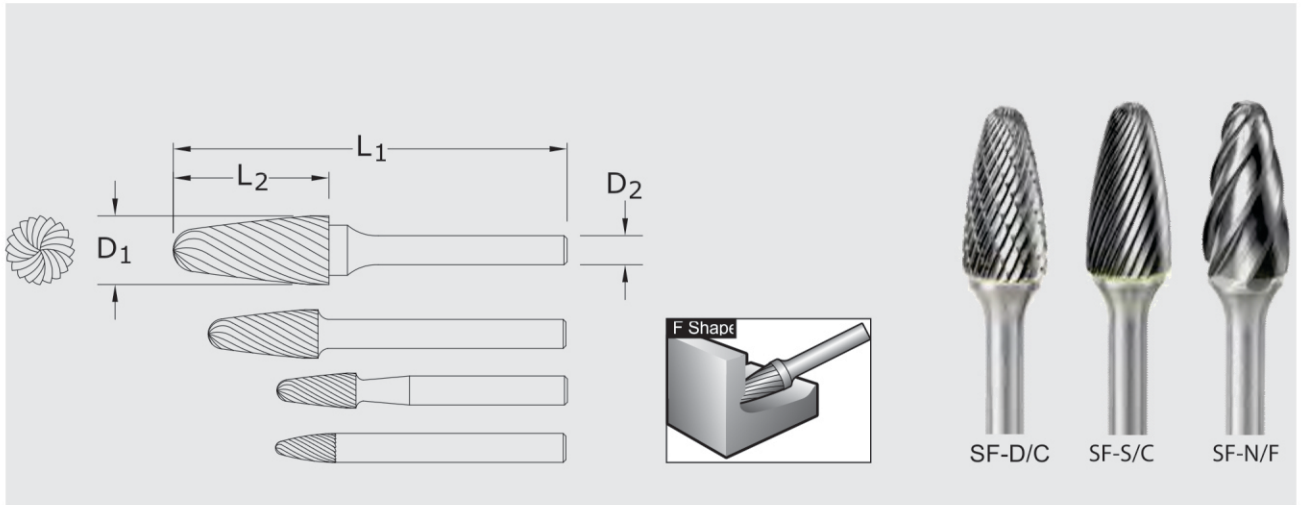
3mm- shank		Dimensions-All in mm			Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3
3.0	6.0	3.0	38.0	Solid	E30306-2	E30306-6	E30306-3
5.0	8.0	3.0	38.0	Solid	E30508-2	E30508-6	-
6.3	9.5	3.0	42.0	Brazed	E30610-2	E30610-6	E30610-3

6mm- shank		Dimensions-All in mm			Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3
6.0	10.0	6.0	50.0	Solid	E60610-2	E60610-6	E60610-3
8.0	15.0	6.0	60.0	Brazed	E60815-2	E60815-6	E60815-3
9.6	16.0	6.0	60.0	Brazed	E61015-2	E61015-6	E61015-3
12.7	22.0	6.0	67.0	Brazed	E61220-2	E61220-6	E61220-3
16.0	25.0	6.0	70.0	Brazed	E61525-2	E61525-6	E61525-3
19.0	25.0	6.0	70.0	Brazed	E62025-2	E62025-6	E62025-3



Oval Shape - Shape SE

Tool No.	Cutting Diameter D1	Length of Cut L2	Shank Diameter D2	Overall Length L1	Part No.
SE-4\M BUR	3.0	6.0	3.0	38	40130



Ball Nosed Tree Shape: F

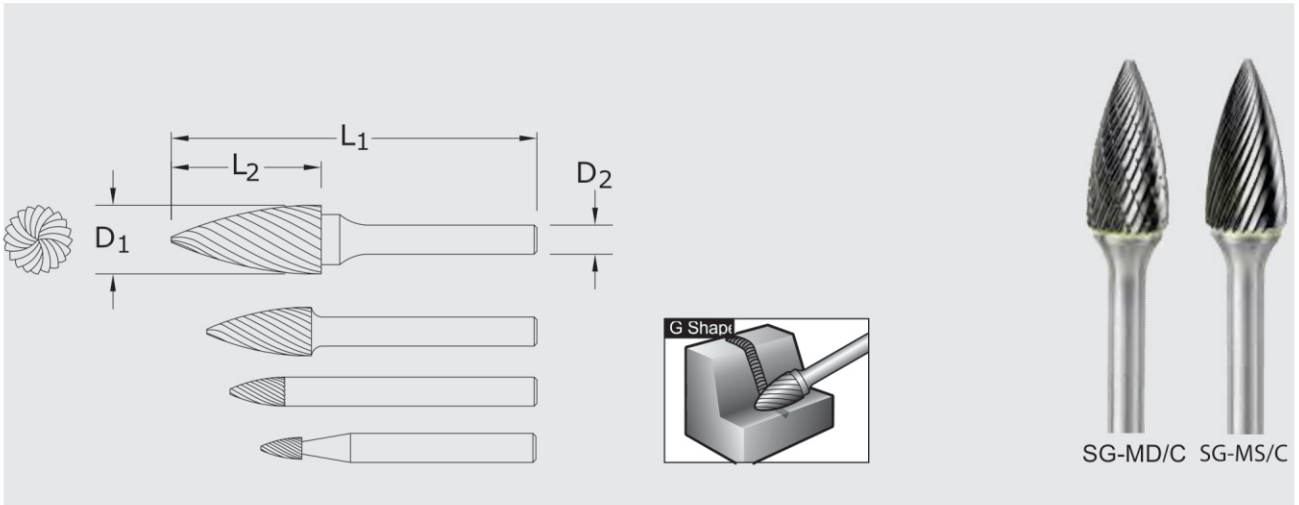
3mm- shank					Dimensions-All in mm			Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3			
3.0	6.0	3.0	38.0	Solid	F30306-2	F30306-6	-			
3.0	8.0	3.0	38.0	Solid	F30308-2	F30308-6	-			
3.0	14.0	3.0	38.0	Solid	F30312-2	F30312-6	F30312-3			
5.0	12.7	3.0	38.0	Solid	F30512-2	F30512-6	-			
6.3	12.7	3.0	45.0	Brazed	F30612-2	F30612-6	F30612-3			

6mm- shank					Dimensions-All in mm			Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3			
6.0	18.0	6.0	50.0	Solid	F60618-2	F60618-6	F60618-3			
8.0	20.0	6.0	65.0	Brazed	F60820-2	F60820-6	F60820-3			
9.6	19.0	6.0	64.0	Brazed	F61020-2	F61020-6	F61020-3			
11.0	25.0	6.0	70.0	Brazed	F61125-2	F61125-6	-			
12.7	19.0	6.0	64.0	Brazed	F61220-2	F61220-6	-			
12.7	25.0	6.0	70.0	Brazed	F61225-2	F61225-6	F61225-3			
16.0	25.0	6.0	70.0	Brazed	F61525-2	F61525-6	F61525-3			
16.0	30.0	6.0	75.0	Brazed	F61530-2	F61530-6	-			
19.0	25.0	6.0	70.0	Brazed	F62025-2	F62025-6	F62025-3			
19.0	32.0	6.0	77.0	Brazed	F62032-2	F62032-6	F62032-3			
19.0	38.0	6.0	83.0	Brazed	F62038-2	F62038-6	F62038-3			



Ball Nosed Tree Shape SF

Tool No.	Cutting Diameter D1	Length of Cut L2	Shank Diameter D2	Overall Length L1	Part No.
SF-4M BUR	3.0	14.0	3.0	38	40140



Pointed Tree Shape: G

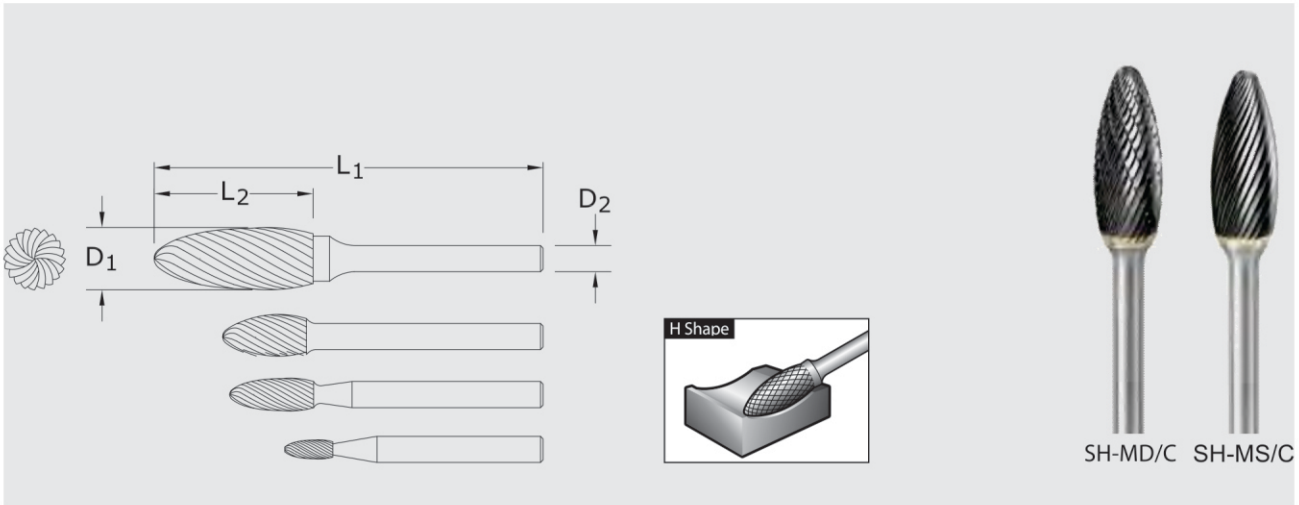
3mm- shank				Dimensions-All in mm		Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3	
3.0	6.0	3.0	38.0	Solid	G30306-2	G30306-6	-	
3.0	10.0	3.0	38.0	Solid	G30310-2	G30310-6	-	
3.0	14.0	3.0	38.0	Solid	G30312-2	G30312-6	G30312-3	
5.0	12.7	3.0	38.0	Solid	G30512-2	G30512-6	-	
6.3	12.7	3.0	45.0	Brazed	G30612-2	G30612-6	G30612-3	

6mm- shank				Dimensions-All in mm		Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3	
6.0	18.0	6.0	50.0	Solid	G60618-2	G60618-6	G60618-3	
8.0	19.0	6.0	64.0	Brazed	G60820-2	G60820-6	G60820-3	
9.6	19.0	6.0	64.0	Brazed	G61020-2	G61020-6	G61020-3	
12.7	19.0	6.0	64.0	Brazed	G61220-2	G61220-6	-	
12.7	25.0	6.0	70.0	Brazed	G61225-2	G61225-6	G61225-3	
12.7	30.0	6.0	75.0	Brazed	G61230-2	G61230-6	-	
16.0	25.0	6.0	70.0	Brazed	G61525-2	G61525-6	G61525-3	
16.0	30.0	6.0	75.0	Brazed	G61630-2	G61630-6	-	
19.0	25.0	6.0	70.0	Brazed	G62025-2	G62025-6	-	
19.0	38.0	6.0	83.0	Brazed	G62038-2	G62038-6	-	



Pointed Tree Shape SG

Tool No.	Cutting Diameter D1	Length of Cut L2	Shank Diameter D2	Overall Length L1	Part No.
SG-41M BUR	3.0	8.0	3.0	38	40150
SG-44M BU	3.0	14.0	3.0	38	40160



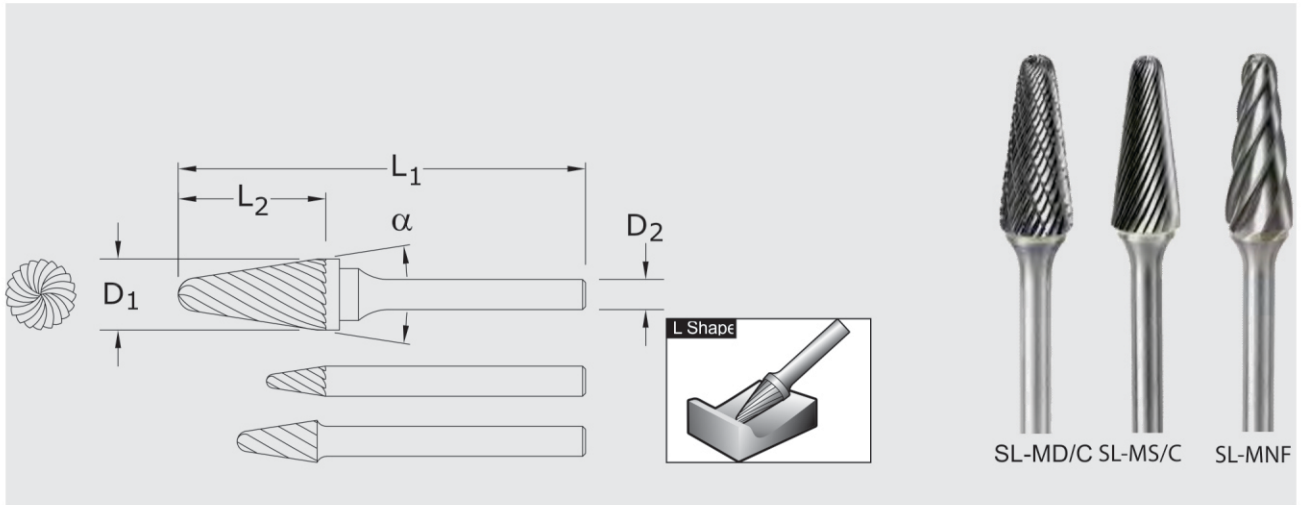
Flame **Shape: H**

3mm- shank		Dimensions-All in mm			Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3
3.0	6.0	3.0	38.0	Solid	H30306-2	H30306-6	-
5.0	9.5	3.0	38.0	Solid	H30510-2	H30510-6	-
6.0	10.0	3.0	43.0	Brazed	H30612-2	H30612-6	-

6mm- shank		Dimensions-All in mm			Part Numbers		
d1	l1	d2	l2	Type	Cut 2	Cut 6	Cut 3
6.0	14.0	6.0	50.0	Solid	H60614-2	H60614-6	-
8.0	19.0	6.0	64.0	Brazed	H60820-2	H60820-6	H60820-3
9.6	19.0	6.0	65.0	Brazed	H61020-2	H61020-6	H61020-3
12.7	32.0	6.0	77.0	Brazed	H61232-2	H61232-6	H61232-3
16.0	36.0	6.0	81.0	Brazed	H61535-2	H61535-6	H61535-3
19.0	41.0	6.0	86.0	Brazed	H62042-2	H62042-6	-



Flame - Shape SH					
Tool No.	Cutting Diameter D1	Length of Cut L2	Shank Diameter D2	Overall Length L1	Part No.
SH-ε`M BUR	3.0	6.0	3.0	38	40170



Ball Nose Cone

Shape: L

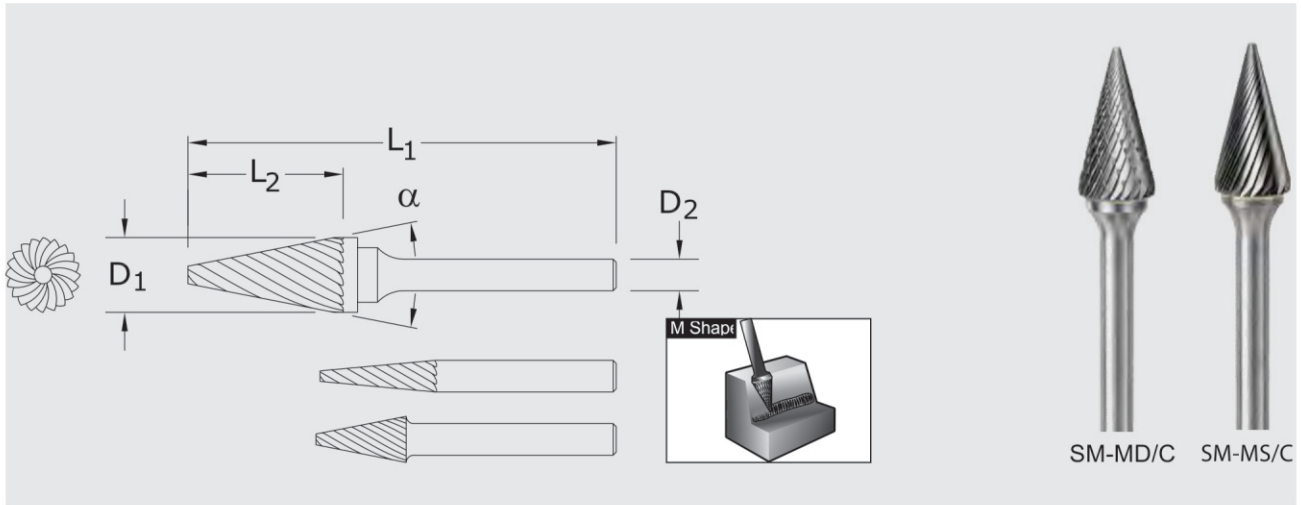
3mm- shank		Dimensions-All in mm				Part Numbers		
d1	l1	d2	l2	Type	Angle	Cut 2	Cut 6	Cut 3
3.0	10.0	3.0	38.0	Solid	10°	L30310-2	L30310-6	-
3.0	14.0	3.0	38.0	Solid	8°	L30312-2	L30312-6	L30312-3
5.0	12.7	3.0	38.0	Solid	14°	L30512-2	L30512-6	-
6.3	15.8	3.0	48.0	Brazed	22°	L30612-2	L30612-6	L30612-3

6mm- shank		Dimensions-All in mm				Part Numbers		
d1	l1	d2	l2	Type	Angle	Cut 2	Cut 6	Cut 3
6.0	18.0	6.0	50.0	Solid	14°	L60618-2	L60618-6	L60618-3
8.0	25.4	6.0	70.0	Brazed	14°	L60822-2	L60822-6	L60822-3
10.0	20.0	6.0	65.0	Brazed	14°	L61020-2	L61020-6	L61020-3
9.6	30.0	6.0	76.0	Brazed	14°	L61026-2	L61026-6	L61026-3
12.0	25.0	6.0	70.0	Brazed	14°	L61225-2	L61225-6	-
12.7	32.0	6.0	77.0	Brazed	14°	L61228-2	L61228-6	L61228-3
16.0	33.0	6.0	78.0	Brazed	14°	L61533-2	L61533-6	L61533-3
19.0	41.0	6.0	86.0	Brazed	14°	L62038-2	L62038-6	-



Ball Nosed Cone - Shape SL

Tool No.	Cutting Diameter D1	Length of Cut L ₂	Shank Diameter D2	Overall Length L ₁	Part No.
SL-42M BUR	3.0	14.0	3.0	38	40180



Cone

Shape: M

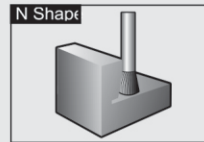
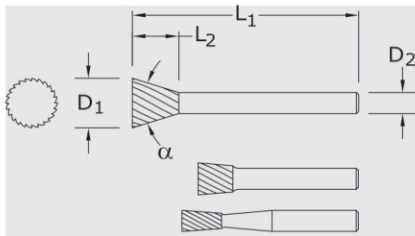
3mm- shank		Dimensions-All in mm				Part Numbers		
d1	l1	d2	l2	Type	Angle	Cut 2	Cut 6	Cut 3
3.0	8.0	3.0	38.0	Solid	18°	M30308-2	M30308-6	-
3.0	11.0	3.0	38.0	Solid	14°	M30311-2	M30311-6	M30311-3
3.0	15.0	3.0	38.0	Solid	10°	M30315-2	M30315-6	-
6.3	12.7	3.0	49.0	Brazed	22°	M30612-2	M30612-6	M30612-3

6mm- shank		Dimensions-All in mm				Part Numbers		
d1	l1	d2	l2	Type	Angle	Cut 2	Cut 6	Cut 3
6.0	12.7	6.0	50.0	Solid	20°	M60612-2	M60612-6	-
6.0	20.0	6.0	50.0	Solid	14°	M60620-2	M60620-6	M60620-6
6.0	25.0	6.0	50.0	Solid	10°	M60625-2	M60625-6	-
8.0	18.0	6.0	64.0	Brazed	22°	M60818-2	M60818-6	-
9.6	16.0	6.0	64.0	Brazed	28°	M61020-2	M61020-6	M61020-6
12.7	22.0	6.0	71.0	Brazed	28°	M61222-2	M61222-6	M61222-6
16.0	25.0	6.0	71.0	Brazed	31°	M61525-2	M61525-6	-



Cone - Shape SM

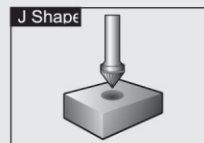
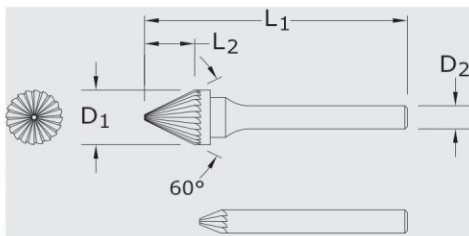
Tool No.	Cutting Diameter D1	Length of Cut L2	Shank Diameter D2	Overall Length L1	Part No.
SM-43M BUR	3.0	15.0	3.0	38	40190



Inverted Cone

Shape: N

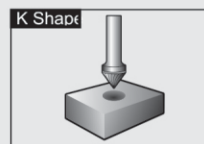
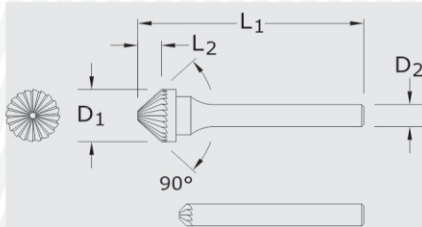
6mm- shank		Dimensions-All in mm				Part Numbers	
d1	l1	d2	l2	Type	Angle	Cut 2	Cut 6
6.0	8.0	6.0	50.0	Solid	10°	N60606-2	N60606-6
9.6	9.5	6.0	55.0	Brazed	16°	N61010-2	N61010-6
12.7	12.7	6.0	58.0	Brazed	28°	N61212-2	N61212-6
16.0	19.0	6.0	64.0	Brazed	18°	N61520-2	N61520-6
19.0	16.0	6.0	61.0	Brazed	30°	N62015-2	N62015-6



60° Countersink

Shape: J

6mm- shank		Dimensions-All in mm				Part Numbers	
d1	l1	d2	l2	Type		Cut 2	Cut 6
6.0	4.0	6.0	50.0	Solid		J60606-2	J60606-6
9.6	8.0	6.0	56.0	Brazed		J61008-2	J61008-6
12.7	11.0	6.0	59.0	Brazed		J61210-2	J61210-6
16.0	14.5	6.0	63.0	Brazed		J61512-2	J61512-6
19.0	17.5	6.0	65.0	Brazed		J62018-2	J62018-6
25.0	24.5	6.0	70.0	Brazed		J62520-2	J62520-6



90° Countersink

Shape: K

6mm- shank		Dimensions-All in mm				Part Numbers	
d1	l1	d2	l2	Type		Cut 2	Cut 6
6.0	3.0	6.0	50.0	Solid		K60603-2	K60603-6
9.6	4.7	6.0	53.0	Brazed		K61004-2	K61004-6
12.7	6.3	6.0	55.0	Brazed		K61206-2	K61206-6
16.0	8.0	6.0	57.0	Brazed		K61508-2	K61508-6
19.0	9.5	6.0	59.0	Brazed		K62012-2	K62012-6
25.0	12.7	6.0	61.0	Brazed		K62512-2	K62512-6

LONG SHANK



Universal Long Shank

Tool No.	Cutting Diameter D ¹	Length of Cut L ²	Shank Diameter D2	Overall Length L1	Double Cut 6 EDP No.	Single Cut 3 EDP No.
Cylinder Shape						
SA-1ML6	6.0	12.7	6.0	162.0	26178	26175
SA-3ML6	9.5	19.0	6.0	169.0	26203	26200
SA-5ML6	12.7	25.0	6.0	175.0	26228	26225
Cylinder Shape Radius End						
SC-1ML6	6.0	12.7	6.0	162.0	26328	26325
SC-3ML6	9.5	19.0	6.0	169.0	26353	26350
SC-5ML6	12.7	25.0	6.0	175.0	26378	26375
Ball Shape						
SD-1ML6	6.0	5.0	6.0	155.0	26403	26400
SD-3ML6	9.5	8.0	6.0	158.0	26428	26425
SD-5ML6	12.7	11.0	6.0	161.0	26453	26450
Oval Shape						
SE-1ML6	6.0	9.5	6.0	160.0	26478	26475
SE-3ML6	9.5	16.0	6.0	166.0	26503	26500
SE-5ML6	12.7	22.0	6.0	172.0	26528	26525
Tree Shape Radius End						
SF-1ML6	6.0	12.7	6.0	163.0	26553	26550
SF-3ML6	9.5	19.0	6.0	169.0	26578	26575
SF-5ML6	12.7	25.0	6.0	175.0	26603	26600
Tree Shape Pointed End						
SG-1ML6	6.0	12.7	6.0	163.0	26628	26625
SG-3ML6	9.5	19.0	6.0	169.0	26653	26650
SG-5ML6	12.7	25.0	6.0	175.0	26678	26675
Flame Shape						
SH-2ML6	8.0	19.0	6.0	169.0	26703	26700
SH-5ML6	12.7	32.0	6.0	182.0	26728	26725
14° Taper Radius End						
SL-1ML6	6.0	16.0	6.0	166.0	26753	26750
SL-3ML6	9.5	27.0	6.0	182.0	26778	26775
SL-4ML6	12.7	28.0	6.0	183.0	26803	26800

Maximum recommended speeds for extended length shanks is 10,000 rpm



Without Endcut

Dimensions-All in mm				
d1	l1	d2	l2	Type
3.0	13.0	3.0	45.0	Solid
4.0	16.0	4.0	50.0	Solid
6.0	19.0	6.0	63.0	Solid
8.0	25.0	8.0	63.0	Solid
10.0	25.0	10.0	63.0	Solid
12.0	30.0	12.0	75.0	Solid



With Endcut

Dimensions-All in mm				
d1	l1	d2	l2	Type
3.0	13.0	3.0	45.0	Solid
4.0	16.0	4.0	50.0	Solid
6.0	19.0	6.0	63.0	Solid
8.0	25.0	8.0	63.0	Solid
10.0	25.0	10.0	63.0	Solid
12.0	30.0	12.0	75.0	Solid



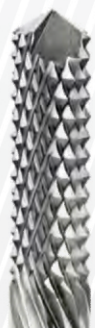
Two Flute Endmill Endcut

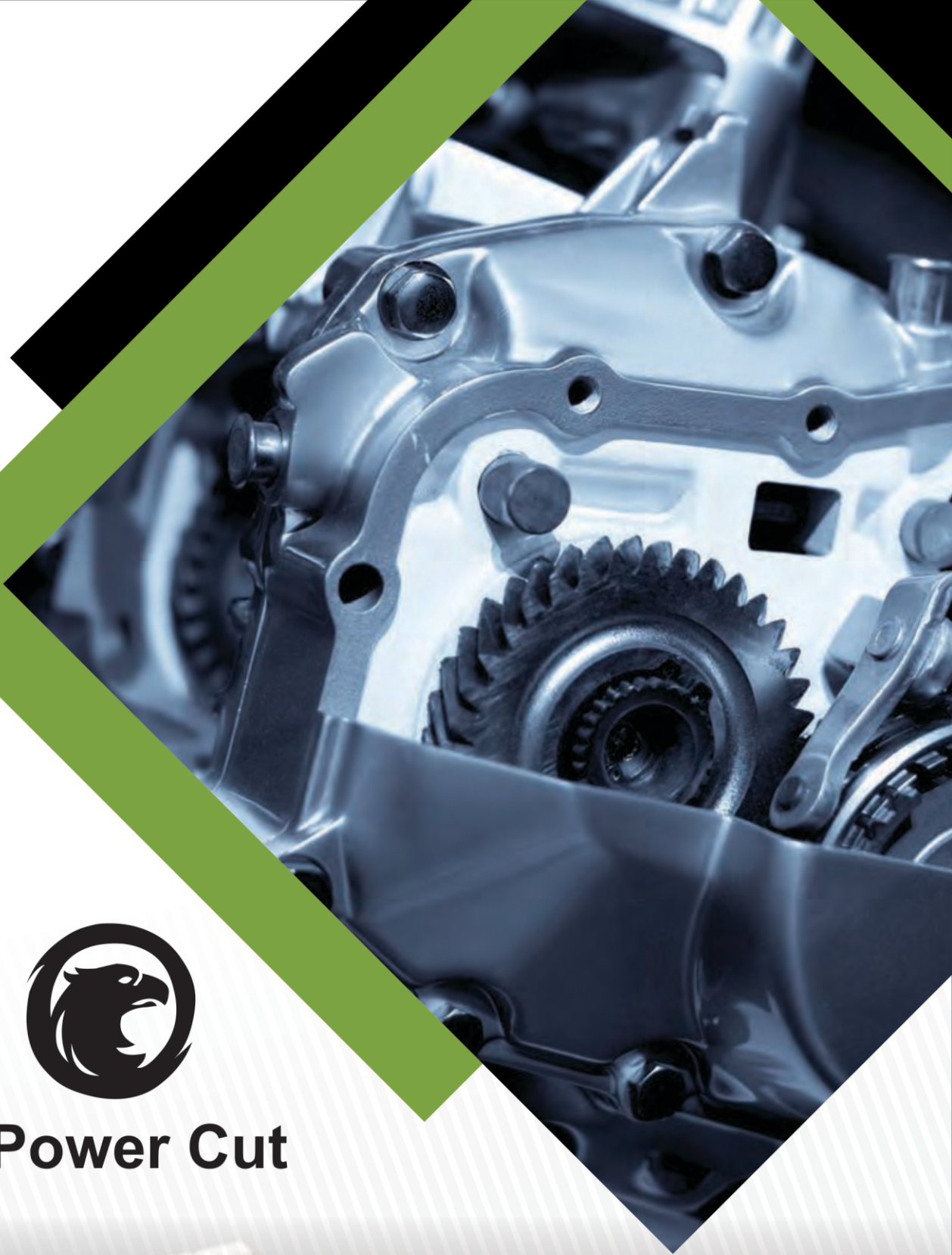
Dimensions-All in mm				
d1	l1	d2	l2	Type
3.0	13.0	3.0	45.0	Solid
4.0	16.0	4.0	50.0	Solid
6.0	19.0	6.0	63.0	Solid
8.0	25.0	8.0	63.0	Solid
10.0	25.0	10.0	63.0	Solid
12.0	30.0	12.0	75.0	Solid



135° Drill Point

Dimensions-All in mm				
d1	l1	d2	l2	Type
3.0	13.0	3.0	45.0	Solid
4.0	16.0	4.0	50.0	Solid
6.0	19.0	6.0	63.0	Solid
8.0	25.0	8.0	63.0	Solid
10.0	25.0	10.0	63.0	Solid
12.0	30.0	12.0	75.0	Solid





 **Power Cut**

