

# TUNGSTEN CARBIDE BURRS

Innovative technology is now used in the range in the form of the new “Dtech” cutting edges, as well as the introduction of the new high performance Xtrem products. This new extended line of carbide burrs covers a variety of toothings and cutting shapes giving them optimum adaptation to the key characteristics of various application materials.

## APPLICATIONS & MARKETS

- Weld removal
- Chamfering
- Weld preparation
- Deburring
- Aerospace
- Automotive
- Shipbuilding
- Foundry
- Aviation



BEST

## XTREM

FERR. & NON FERR.

XTREM

FEATURES	BENEFITS
<ul style="list-style-type: none"> <li>■ TiAlN (Titanium aluminium nitride) coating</li> </ul>	<ul style="list-style-type: none"> <li>■ Better sliding characteristics for improved removal of chippings</li> <li>■ Less wear of tothing</li> <li>■ Less heat build up</li> <li>■ Reduction of cutting pressure due to improved lubrication</li> <li>■ Ideal for use on the hardest, Xtrem materials</li> </ul>
<ul style="list-style-type: none"> <li>■ Tungsten carbide head</li> </ul>	<ul style="list-style-type: none"> <li>■ Capable of being used at high speeds &amp; at high temperatures</li> </ul>
<ul style="list-style-type: none"> <li>■ Skip flute design</li> </ul>	<ul style="list-style-type: none"> <li>■ Long life</li> </ul>
<ul style="list-style-type: none"> <li>■ Wide variety of cuts available</li> </ul>	<ul style="list-style-type: none"> <li>■ Sharp cutting edges for improved productivity &amp; longer product life</li> </ul>
<ul style="list-style-type: none"> <li>■ Wide variety of shapes available</li> </ul>	<ul style="list-style-type: none"> <li>■ Suitable for many different applications</li> </ul>













BETTER

## STANDARD

FERR. & NON FERR.

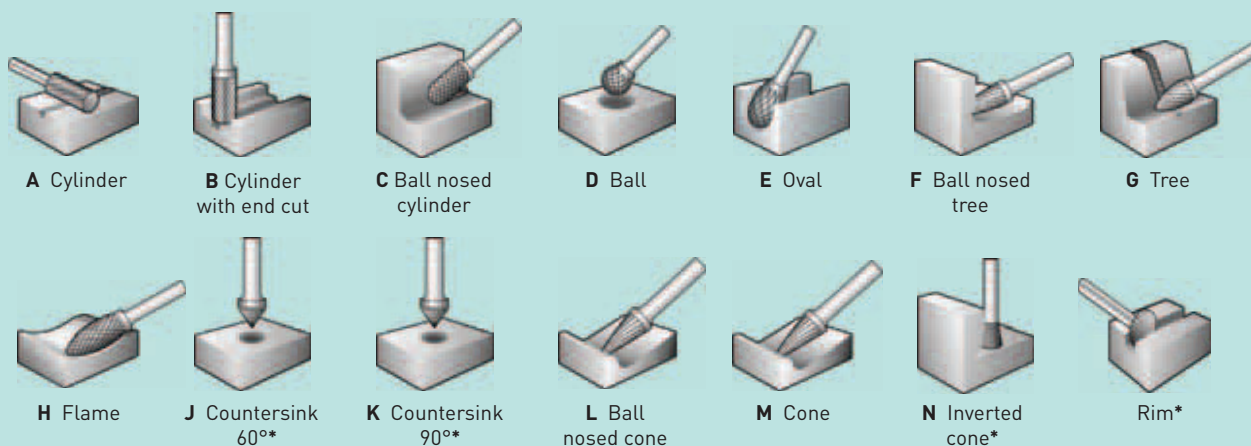
FEATURES	BENEFITS
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# PRODUCT SELECTION

USAGE KEY						
<p> Highly recommended</p> <p> Recommended</p>						
CUT STYLE	D DOUBLE CUT	DTECH DOUBLE CUT EXTRA	ALU ALUMINIUM SPECIAL	DF* FINE DOUBLE CUT	BC* CHIP BREAKER	S* SIMPLE
QUALITIES	Universal cutting style. Fast material removal. Smooth finish. Granular chip break.	Better stock removal. Stronger tooth formation (decreased tooth wedge angle). Longer tool life. Reduced chipping.	For deburring of aluminium alloys & plastic wide tooth formation. Easy chip flow.	Granular chip break. Fine finish applications. Use on heat treated & tough alloy steel.	General purpose deburring.	General purpose application produces scratch free surface.
<b>XTREM</b>						
Steel						
Hardened steel						
Stainless steel						
Cast iron						
Titanium						
Nickel						
Copper/copper alloys						
Aluminium						
Plastics						
<b>STANDARD</b>						
Steel						
Hardened steel						
Stainless steel						
Cast iron						
Titanium						
Nickel						
Copper/copper alloys						
Aluminium						
Plastics						
Cement						

\*Made-to-order

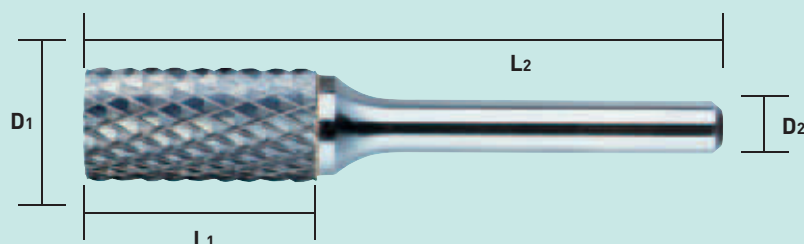
## PRODUCT SELECTION



\*Made-to-order

### DIMENSIONS & DESCRIPTION OF THE BURR

<b>A</b>	<b>16,0</b>	<b>x</b>	<b>25,0</b>	<b>6x65</b>	<b>DTECH</b>
Shape	Diameter of the head		Length of the head	Diameter of the shank & overall length of the burr (OL)	Cut style
	<b>D<sub>1</sub></b>		<b>L<sub>1</sub></b>	<b>D<sub>2</sub> + L<sub>2</sub></b>	



### RECOMMENDED OPERATING SPEEDS (RPM)

MATERIAL TYPE	∅	∅	∅	∅	∅
	3mm	6mm	10mm	12mm	16mm
Steel	60000-90000	45000-90000	30000-40000	22500-30000	18000-24000
Tempered steel	60000-90000	30000-45000	19000-30000	15000-22500	12000-18000
Stainless steel	60000-90000	30000-45000	19000-30000	15000-22500	12000-18000
Casting	45000-90000	22500-60000	15000-40000	11000-30000	9000-24000
Titanium	60000-90000	30000-45000	19000-30000	15000-22500	12000-18000
Nickel	60000-90000	30000-45000	19000-30000	15000-22500	12000-18000
Copper & copper alloys	45000-90000	22500-60000	15000-40000	11000-30000	9000-24000
Aluminium	30000-90000	15000-70000	10000-50000	7000-38000	6000-30000
Plastics	30000-90000	15000-70000	10000-50000	7000-38000	6000-30000
Cement	60000-90000	30000-45000	19000-30000	15000-22500	12000-18000



## SKIP FLUTE GEOMETRY



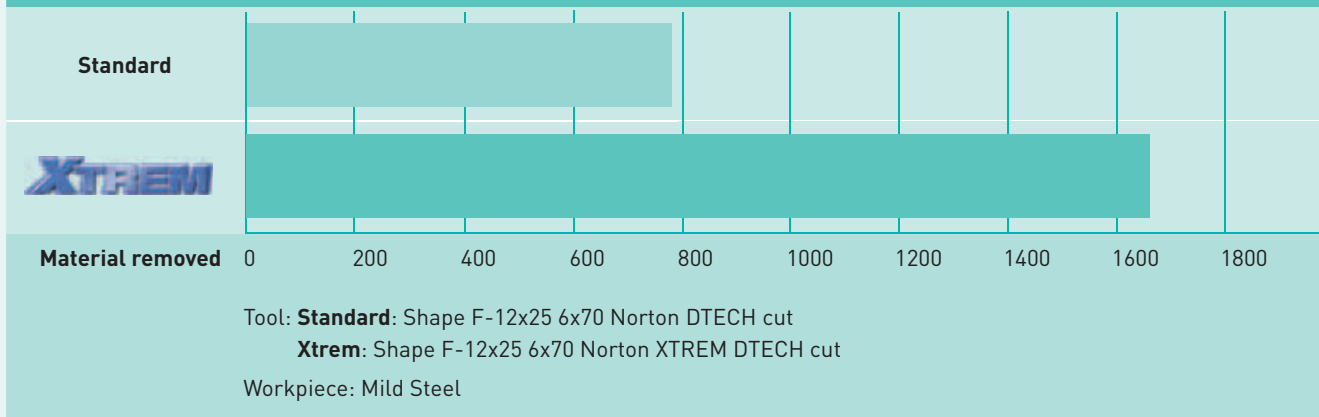
Skip flute geometry

All Norton Carbide Burrs have what is known as skip flute geometry, which means products are more precise and have improved cutting characteristics. This also gives greater strength and improved removal of chips.



Conventional "centred" geometry

## ADVANTAGES OF XTREM

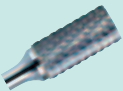





## SPEC CHECK

- For more information about these products as well as made-to-order capabilities, please refer to the Tungsten Carbide Burrs Catalogue




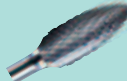




Dimensions Key: DIM = Dimensions, D<sup>1</sup> = Head Diameter, L<sup>1</sup> = Head Length, D<sup>2</sup> = Shank Diameter, L<sup>2</sup> = Shank Length

TUNGSTEN CARBIDE BURRS				XTREM	
PRODUCT SHAPE	SUB SHAPE	DIM D <sup>1</sup> xL <sup>1</sup> xD <sup>2</sup> xL <sup>2</sup> (mm)	PK QTY	BEST	BETTER
				XTREM	STANDARD
<p>A CYLINDER</p> 	D	3x13x3x38	1		63642586518
	D	6x19x6x50	1	69957383214	60157638141
	D	8x19x6x65	1		60157638143
	ALU	10x19x6x65	1	69957383216	60157638195
	D	10x19x6x65	1	69957383215	60157638144
	D	10x25x6x162	1		63642535764
	ALU	12x25x6x70	1	69957383220	63642586517
	D	12x25x6x70	1	69957383219	07660707808
<p>B CYLINDER WITH END CUT</p> 	D	3x13x3x38	1		60157638140
	D	6x19x6x50	1	63642595182	63642586641
	D	8x19x6x65	1		07660707804
	D	8x19x6x175	1		63642535757
	ALU	10x19x6x65	1	69957383228	07660739845
	D	10x19x6x65	1	69957383223	60157638145
	DTECH	10x19x6x65	1	69957383227	07660739844
	D	12x19x6x65	1	63642595184	
	ALU	12x19x6x65	1	69957383232	63642586623
	D	12x25x6x70	1	69957383229	60157638147
	DTECH	12x25x6x70	1	69957383230	60157638174
	D	16x25x6x70	1		60157638190
<p>C BALL NOSED CYLINDER</p> 	D	3x13x3x38	1	63642595185	63642586710
	D	6x13x6x162	1		63642535773
	D	6x19x6x50	1	69957383234	60157638150
	D	8x19x6x65	1		60157638151
	ALU	10x19x6x65	1	69957383239	60157638182
	D	10x19x6x65	1	69957383236	60157638152
	DTECH	10x19x6x65	1	69957383238	07660739841
	D	12x19x6x65	1		60157638153
	ALU	12x19x6x65	1	69957383278	07660707846
	D	12x25x6x70	1	69957383241	60157638154
	DTECH	12x25x6x70	1	69957383277	60157638175
	D	16x25x6x70	1		60157638191
<p>D BALL</p> 	D	3x2,5x3x75	1		63642535794
	D	3x2,7x3x38	1		63642586859
	D	6x5x6x150	1		63642535770
	D	6x5,4x6x50	1		60157638166
	D	8x7,2x6x52	1		60157638167
	D	10x9x6x53	1	69957383279	07660707832
	D	12x10,8x6x55	1	69957383281	69957383148

**Dimensions Key:** DIM = Dimensions, D<sup>1</sup> = Head Diameter, L<sup>1</sup> = Head Length, D<sup>2</sup> = Shank Diameter, L<sup>2</sup> = Shank Length

**TUNGSTEN CARBIDE BURRS (CONTINUED)**

PRODUCT SHAPE	SUB SHAPE	DIM D <sup>1</sup> xL <sup>1</sup> xD <sup>2</sup> xL <sup>2</sup> (mm)	PK QTY	<b>XTREM</b>	
				BEST	BETTER
				XTREM	STANDARD
<b>E</b> OVAL 	D	3x6x3x38	1		636425 <b>86891</b>
	D	6x10x6x50	1		636425 <b>86892</b>
	D	10x16x6x60	1		601576 <b>38159</b>
	D	12x22x6x67	1		601576 <b>38162</b>
<b>F</b> BALL NOSED TREE 	D	3x12,7x3x75	1		699573 <b>90247</b>
	D	3x13x3x38	1		636425 <b>86953</b>
	D	6x16x6x50	1	699573 <b>83296</b>	636425 <b>86955</b>
	ALU	10x19x6x65	1	699573 <b>83300</b>	636425 <b>86951</b>
	D	10x19x6x65	1	699573 <b>83299</b>	601576 <b>38170</b>
	ALU	12x25x6x70	1	699573 <b>83303</b>	601576 <b>38181</b>
	D	12x25x6x70	1	699573 <b>83301</b>	601576 <b>38171</b>
	DTECH	12x25x6x70	1	699573 <b>83302</b>	601576 <b>38179</b>
	D	12x25x8x70	1		601576 <b>38172</b>
	D	16x25x6x70	1		636425 <b>86952</b>
<b>G</b> TREE 	D	3x13x3x38	1		601576 <b>38163</b>
	D	6x16x6x50	1	699573 <b>83305</b>	601576 <b>38164</b>
	D	10x19x6x65	1	699573 <b>83307</b>	601576 <b>38165</b>
	D	12x25x6x70	1	699573 <b>83310</b>	076607 <b>07829</b>
<b>H</b> FLAME 	D	8x19x6x65	1		601576 <b>38160</b>
	D	12x32x6x77	1	699573 <b>83312</b>	636425 <b>87971</b>
<b>L</b> BALL NOSED CONE 	D	6x16x5x50	1		601576 <b>38156</b>
	ALU	6x16x6x50	1		636425 <b>87095</b>
	D		1	699573 <b>83313</b>	
	D	8x19x6x69	1		636425 <b>87104</b>
	D	10x27x6x75	1		636425 <b>87100</b>
	ALU	12x30x6x75	1	699573 <b>83325</b>	636425 <b>87101</b>
	D		1	699573 <b>83320</b>	636425 <b>87102</b>
	DTECH	12x30x6x75	1	699573 <b>83321</b>	636425 <b>87067</b>
	D	16x33x8x78	1		636425 <b>87103</b>
<b>M</b> CONE 	D	3x11x3x38	1		636425 <b>87134</b>
	D	3x11,7x3x75	1		636425 <b>35767</b>
	D	6x19x6x50	1	699573 <b>83326</b>	636425 <b>87137</b>
	D	6x25x6x50	1		636425 <b>87138</b>
	D	10x16x6x65	1		636425 <b>87133</b>
	D	12x22x6x70	1	699573 <b>83328</b>	601576 <b>38149</b>

## XTREM BURR KITS

				<b>XTREM</b>
KIT	SHAPE	DIM D <sup>1</sup> xL <sup>1</sup> xD <sup>2</sup> xL <sup>2</sup> (mm)	PK QTY	BEST
D	B	10x19x6x65	1	699573 <b>85143</b>
	B	12x25x6x70	1	
	C	10x19x6x65	1	
	C	12x25x6x70	1	
	L	12x30x6x75	1	
	E	10x16x6x60	1	
	G	10x19x6x65	1	
	G	12x25x6x70	1	
	D	12x10,8x6x55	1	
	F	12x25x6x70	1	
DTECH	B	10x19x6x65	1	699573 <b>85141</b>
	B	12x25x6x70	1	
	C	10x19x6x65	1	
	C	12x25x6x70	1	
	L	12x30x6x75	1	
	E	10x16x6x60	1	
	G	10x19x6x65	1	
	G	12x25x6x70	1	
	D	12x10,8x6x55	1	
	F	12x25x6x70	1	
ALU	B	12x25x6x70	1	699573 <b>85142</b>
	C	12x25x6x70	1	
	L	12x30x6x75	1	
	D	12x10,8x6x55	1	
	F	12x25x6x70	1	



## STANDARD BURR KITS

KIT	SHAPE	DIM D <sup>1</sup> xL <sup>1</sup> xD <sup>2</sup> xL <sup>2</sup> (mm)	PK QTY	BETTER
				STANDARD
D	A	3x13x3x38	1	07660708056
	B	3x13x3x38	1	
	M	3x11x3x38	1	
	C	3x13x3x38	1	
	L	3x8x3x38	1	
	H	3x8x3x38	1	
	E	3x6x3x38	1	
	G	3x13x3x38	1	
	D	3x2,7x3x39	1	
	F	3x13x3x38	1	
DTECH	A	10x19x6x65	1	07660739870
	A	12x25x6x70	1	
	C	10x19x6x65	1	
	C	12x25x6x70	1	
	L	12x30x6x75	1	
	E	10x16x6x60	1	
	G	10x19x6x65	1	
	G	12x25x6x70	1	
	D	12x10,8x6x55	1	
	F	12x25x6x70	1	

