

## Wheel Decoding

October 2015

Always focusing on simplification and on customers' needs, Cafro presents here the decoding of its wheels' description, allowing to define univocally shape, dimensions and abrasive rim specifications of its wheels. It is now possible to identify quickly the wheel necessary for your application, to verify its availability at stock or to simplify the request for custom-made wheels.



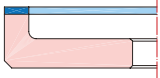


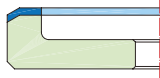
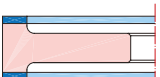
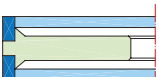
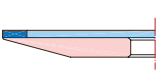
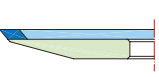


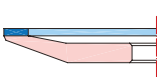
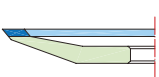
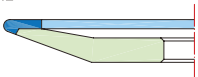
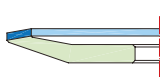
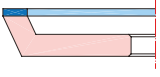
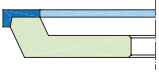
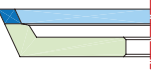
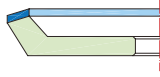
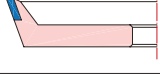
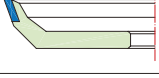
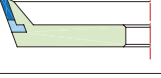
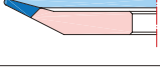
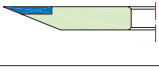
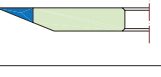
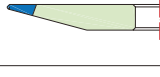
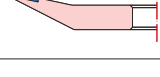
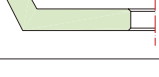



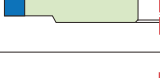





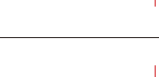












(Example: wheel 11V9G/20° 100 10 3 35 D 64 SR 125 M414)

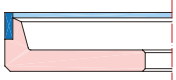
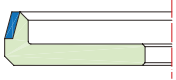
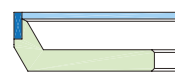
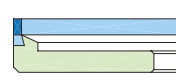
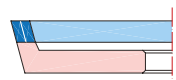


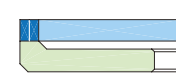
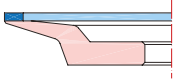
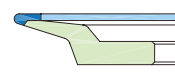
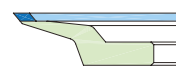
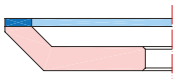
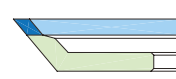
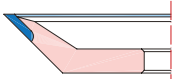
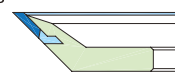
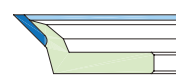
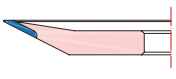
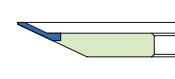
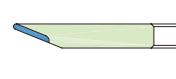


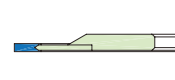
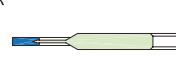
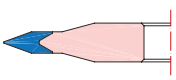
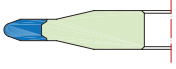

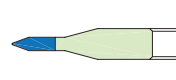
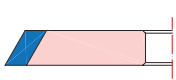

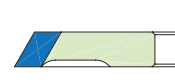
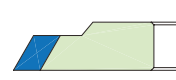


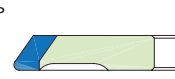
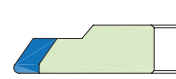
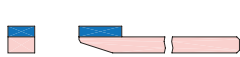


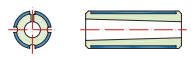

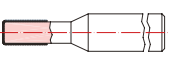
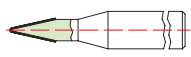
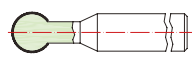
Wheel dimensions							Superabrasive rim specifications				
<b>11V9G</b>	<b>20°</b>	<b>100</b>	<b>10</b>	<b>3</b>	<b>35</b>	<b>20</b>	<b>D</b>	<b>64</b>	<b>SR</b>	<b>125</b>	<b>M414</b>
F	$\alpha$	$\emptyset$	W	X	T	H	A	G	Q	C	L

- F** Shape according to FEPA norm (See centerfold)
- $\alpha$**  Eventually rim angle or hub material
- $\emptyset$**  Outside Diameter
- W** Width of superabrasive rim
- X** Depth of superabrasive rim
- T** Total wheel height
- H** Bore or shaft diameter

- A** Superabrasive type (D=Diamond, B=CBN)
- G** Superabrasive grit size dimension (See last page)
- Q** Superabrasive Quality (CAFRO code)
- C** Superabrasive concentration (See last page)
- L** Bond (CAFRO code)

# FEPA Shapes

Standard shape	Some of the most common derived shapes		
6A2 	6C2 	6V5 	6Y2 
9A3 	9A9 		
4A2 	4V2 	1A2 	1V2 
13A2 	13V2 	13BH2 	4V5 
11A2 	11C2 	11V2 	11V5 
11V9 	15V9 	11V9P 	
4BT9 	4B9 	4B2 	4ET2 
12V4 	11V4 		
14A1 	14D1V 	14A1Q 	3A1 
1A1  ≥75mm Ø	1D1V 	1Q1 	1M1 
14F1Q 	1F1R 	14F1 	1P1 
14FF1 	1FF1 	1GG1 	1DD1 
1A1W 	1U1W 	1DD1W 	
1A1  <75mm Ø	1A8 	6A9P 	

Standard shape	Some of the most common derived shapes		
6A9 	6V9 	11A9 	6A2P 
11VV2 	3AA1 	14AA1 	6AA2 
10A2 		10BH2 	10V2 
12A2 			12V2 
12V9 		12V9P 	10V9 
13V9 		SHARK 	4V9 
1A1R 	1A1X 	3A1R 	14A1R 
14EE1 	14EF1 	1E1 	14E1 
1V1 	1VL1 	1V1P 	3V1 
1VF1 	1S1 	1VF1P 	3VF1 
L 			LG10 
PL 		PMR 	1PL 
1U1W 		1EE1W 	1R1W 

Designation according to the standard ISO 6106-2005 and FEPA 2005

## Grit Size

A comparative table for the measurement of diamond and CBN grit size distribution. The columns refer to the international standards for super-abrasive grit size definition.

FEPA	U.S.	MESH	DIN	GRIT SIZE CLASS
7	2500	-	7	MICRON
10	2000	-		
12	1500	-		
15	1200	-	15	
20	1000	-		
25	800	-		
30	600	500/600	30	VERY FINE
35	500	400/500		
46	400	325/400	35	
54	325	270/325	45 } 50	FINE
64	280	230/270	55 }	
76	220	200/230	60 } 70	
91	180	170/200	85 }	
107	150	140/170	90 } 100	MEDIUM
126	120	120/140	140 }	
151	100	100/120	120 } 150	LARGE
181	80	80/100	180 }	
213	70	70/80	200/250	VERY LARGE
252	60	60/80		
301	50	50/60	280	SPECIAL USE
356	45	45/50		
427	40	40/50		
501	35	35/40		
602	30	30/40		
711	25	25/30		
852	20	20/30		
1001	18	18/20		
1182	16	16/20		

### FEPA

ISO 6106-2005 standard, issued according to FEPA (Federation of European Producers of Abrasives) recommendations

### MESH

ANSI B74.16-2002 American standard

### DIN

DIN 848-65 German standard

### GRIT SIZE CLASS

an indicative description referred to precision grinding

## Abrasive Concentration

The abrasive concentration is expressed in carats / cc, and it stands for the ratio between its weight and the volume of the abrasive conglomerate; the weight of the grit cladding, if present, is not taken into account.

