

Bur Presentation

by Bill Tarlton

Helpful Pre-Carving Information

Open Discussion and Input Welcomed

Bur Shaft Sizes

Most Common $1/8$ " Shaft Diameter

Also Found in $3/32$ " Shaft Diameter

Smallest Size is $1/16$ " Shaft Diameter
(Dental)

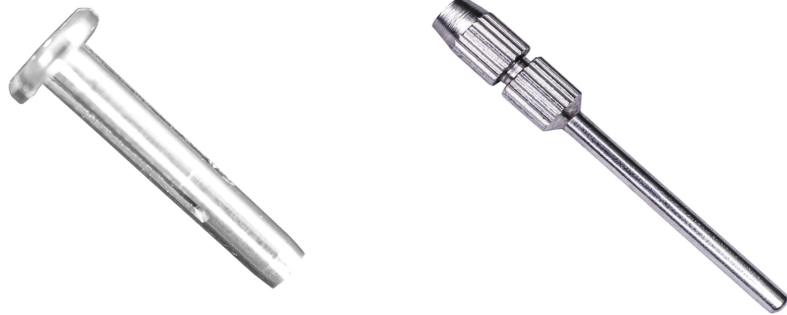
Step-Down Adaptors

1/8" Shaft to 3/32" Step Down Collet

1/8" Shaft to 1/16" Twist Adaptor (Least Expensive)

3/32" Shaft to 1/16" Twist Adaptor (Least Expensive)

3/32" to 1/16" Step Down Collet



Most Common Bur Materials

Carbide/Tungsten

- Longest lasting

- For skin and pulp

- Can be used up to 35k+rpm (depending on profile)

- Many Are “Double Cut” Profile

HSS

- Good for skin and pulp

- Can be used up to 35k+ rpm (depending on profile)

- Normally Single Cut Profile

Regular Steel (Cheapest & Least Effective)

- For skin and pulp

- Dull quicker than HSS & Carbide

- Heats quicker resulting in burn marks

Diamond

- Used primarily for pulp shaping & carving

- Will dull after excessive use

- Cuts in All Directions

Common Shapes

Your desired outcome determines the shape to use

Ball (outlining, stippling, material removal)

Football/Pear

Wheel

Pointed (aka Filigree)

Rounded

Flame

Bullet

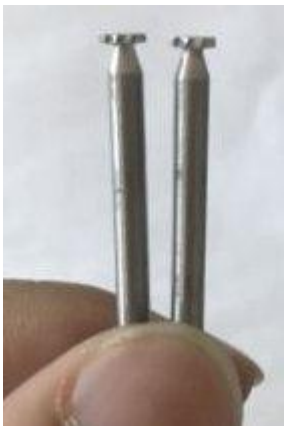
Barrel (Edges, Smoothing)

Taper

Cylinder

Inverted Cone

Shapes Cont'd



Determining the Speed

0-35k RPM Range

Diamond

Carbide (Fine, Medium) Double Cut

<25k RPM

For Course Profiles

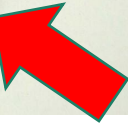
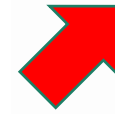
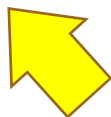
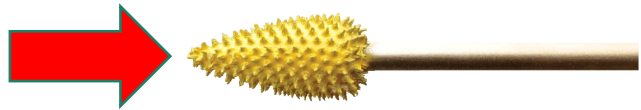
For Large Cutting Profiles (such as cutting teeth)

10-15 RPM For Sanding/Smoothing Operations

If you see it start to char, slow it down

Use lower speeds for removing skin; higher speeds for pulp

Speed Selection (Cont'd)



It's Hands On Time – Don't Force It!!!!!!!

Cutting a line (outlining)

Removing Skin

Removing Pulp

Shaping

Filigree

Stipple

Undercutting for Inlays/3-D Effect

Insetting Cabochon/Embellishments

Bur Maintenance

Burs Will Clog

Soak Clogged Burs in Acetone Overnight

Use Toothbrush to Brush Off

Heat Stained Burs Will Still Work

Sources

Ram Products Inc.

Welburn

Arizona Gourds

Home Depot/Lowes

Idaho Tools

Ebay/Amazon

Alibaba