

# Bur Presentation

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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)

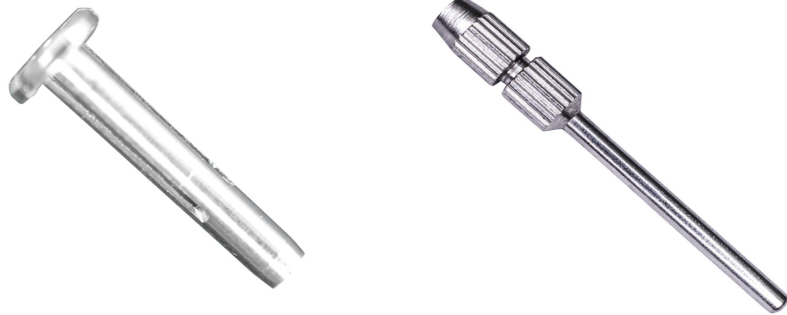
# Step-Down Adaptors

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

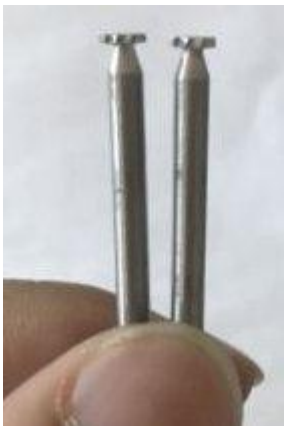
Barrel (Edges, Smoothing)

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

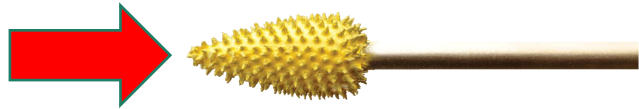
For Large Cutting Profiles (such as cutting teeth)

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