# TUNGSTEN CARBIDE ROTARY BURR CUTTER


## CRAFT TECH CUTTING TOOLS PVT.LTD

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# TECHNICAL DATA OF USAGE OF TUNGSTEN CARBIDE ROTARY BURR CUTTER

## RECOMMENDED OPERATING SPEED

| ROTARY BURR DIAMETER | OPERATING SPEED | |
|---|---|---|
| | FRPM | T0 |
| 3MM | 45,000 | 90,000 |
| 6MM | 23,000 | 45,000 |
| 10MM | 19,000 | 30,000 |
| 12MM | 15,000 | 22,000 |
| 16MM | 12,000 | 18,000 |
| 20MM | 7,500 | 15,000 |

## BURR APPLICATION BY MATERIAL

| MATERIAL | STANDARD CUT | DIAMOND CUT | SHALLOW CUT |
|---|---|---|---|
| ALUMINIUM | | | ✓ |
| BRASS,BRONZE,COPPER | ✓ | ✓ | |
| CARBON | ✓ | | |
| CAST IRON | ✓ | | |
| FIBERGLASS | ✓ | | |
| HARD RUBBER | ✓ | | ✓ |
| MAGNESIUM | | | ✓ |
| MASONITE | ✓ | | ✓ |
| PLASTICS | ✓ | | ✓ |
| STEEL-40-60 HRc | ✓ | ✓ | |
| STEEL, ALLOY STEEL | ✓ | ✓ | |
| NICKEL/ CHROME STEELS | ✓ | ✓ | |
| STAINLESS STEEL | ✓ | ✓ | |
| STEEL WELDMENTS | ✓ | ✓ | |
| TITANIUM | ✓ | ✓ | |
| WOOD | | | ✓ |
| ZINC | | | ✓ |

## BURR TROUBLESHOOTING GUIDE : POSSIBLE CAUSES

| | EXCESIVE FORCE | SHANK FRICTION WITH WORK PIECE | WORN BURR | INCORRECT COLLECT LOCTION | WORN GRINDER BEARING | POOR SHANK STRAIGHTNESS | UNSTABLE WORK PIECE | WORKING IN SOFT METAL | CUTTING ABRASIVE METAL | LOW SETUP RIGIDITY |
|---|---|---|---|---|---|---|---|---|---|---|
| BROKEN BRAZING JOINT | ✓ | ✓ | ✓ | | | | | | | |
| POOR BURR CONTROL | | | | ✓ | ✓ | ✓ | ✓ | | | ✓ |
| FLUTE CLOGGING | | | | | | | | ✓ | | |
| EXCESSIVE VIBRATION | | | | ✓ | ✓ | ✓ | ✓ | | | |
| POOR FINISHING | | | | ✓ | ✓ | ✓ | ✓ | | | |
| POOR TOOL LIFE | | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ |

## BURR TROUBLESHOOTING GUIDE : POSSIBLE SOLUTION

| | REDUCE CUTTING PRESURE | ENSURE SHANK/WORK PIECE CLEARANCE | PREPLACE WORN BURR | CHECK BURR LOCATION & REPLACE COLLECT IF | CHECK AND REPLACE GRINDER BEARING IF | CHECK SHANK STRAIGHTNESS –REPLACE IF NECESSARY | IMPROVE WORKPIECE STABILITY | USE A SHALLOW CUT BURR | USE LUBRICANT OR ANTI STICKING Agent | INCREASE RPM | REDUCE RPM | MAKE LIGHTER CUTS | CHANGE TO DIAMOND CUT | FASTER FEED | SLOWER FEED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BROKEN BRAZING JOINT | ✓ | ✓ | ✓ | | | | | | | | | | | | |
| POOR BURR CONTROL | | | | ✓ | ✓ | ✓ | ✓ | | | | | | | | |
| FLUTE CLOGGING | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| EXCESSIVE VIBRATION | | | | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | | | ✓ | ✓ |
| POOR FINISHING | | | | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | | ✓ | ✓ | ✓ |
| POOR TOOL LIFE | | ✓ | | ✓ | ✓ | ✓ | | | ✓ | | ✓ | | ✓ | ✓ | |

# SAFTY PRECAUTIONARY MEASURE FOR ROTARY BURR USAGE

- **Choose correct shape and size of Rotary burr with correct teeth profile as per the work piece.**
- **Ensure of Pneumatic grinder used as of recommended RPM.**
- **Check that the collect is the correct size and not worn or eccentric. The cutter must run true. Rotational eccentricity produces a type of hammering that will affect the finish of the work and affect the life of the teeth and the shank.**
- **Make sure of 2/3 of the shank should be grip tightly inside the collect. Avoid excess over hanging in case of Long shank. Ensure min 35-40 mm of the shank should be inside the collect.**
- **Use proper safety gears like eye glasses, mask, ear protection, gloves during the use of Rotary Burr.**
- **Ensure the Job Piece should be held tightly in the Vice or Jig. During the operation. Preferable to place the job piece isolate inside a transparent chamber during the de-burring operation.**
- **Apply constant movement and light pressure when in use. Remove high spots first and then traverse the work. Excessive pressure should not be applied as this can cause brazing failure at the joining of the Carbide Head with the Steel Shank.**
- **Replace worn out rotary burr with the new one, it is unsafe to used Rotary burr after its life**
- **Don't Use Rotary Burr at inappropriate place and hazardous condition.**

CRAFT TECH CUTTING TOOLS PVT.LTS is not responsible for any mishap occurred during the usage of its Rotary Burr cutter at clients work shop.