

SHREE TRADERS

Cutting tools and Pneumatics Automation



TOOLBITS

Solid cutting tools made from High-Speed Steel (HSS) or Carbide. Manufactured as single bars that require grinding to shape. Undergo cryogenic heat treatment for durability and structural stability. Used for general-purpose turning, allowing for reshaping and reuse after

Applications of Tool bits:

- 1. **Turning Tool bits** Used for shaping cylindrical workpieces.
- 2. **Boring Tool bits** Enlarges existing holes in a workpiece.
- 3. **Threading Tool bits** Cuts internal or external threads.
- 4. **Grooving Tool bits** Creates grooves or slots.
- 5. **Parting Tool bits** Used to cut off finished parts



USED IN LATHE MACHINE



Uses of Tool bits in Turning:

Precision Cutting: Achieves exact dimensions and tolerances on workpieces.
Surface Finish: Ensures smooth surfaces for both functionality and aesthetics.
Material Removal: Removes excess material to form desired shapes.
Creating Features: Forms holes, threads, grooves, and other functional elements.



Dimensions and Specifications:

- Length: Varies based on the machine and operation requirements.
- Width and Height: Common sizes include 1/4", 3/8", 1/2", etc.
- **Material**: Typically made from High-Speed Steel (HSS) or carbide for enhanced durability and cutting performance.

Anatomy and Structure:

- **Shank**: The main body of the tool bit that is clamped into the tool holder.
- **Cutting Edge**: The part of the tool that comes into contact with the workpiece to remove material.
- **Rake Face**: The surface over which the chips flow after being cut.
- **Flank**: The surface of the tool that is adjacent to the cutting edge and provides clearance to prevent rubbing against the workpiece.
- **Nose Radius**: The rounded tip of the tool bit, which affects the finish of the machined surface.



DIMENSIONS IN INCHES

DIMENSION IN MM

EXAMPLE $\Rightarrow \frac{3}{8}$ "X 4"

EXAMPLE \Rightarrow

10mm X 200mm

			Size in	inches					
W/d				L					
1/8	2 1/2	3	4						
3/16	2 1/2	3	4		6				
1/4	2 1/2	3	4		6	8			
				Corresponding Size in n					
			W/d				L		
			3	65	75	100			
			5	65	75	100	150		
			6	65	75	100	150	200	

Holding Mechanism:

Tool bits are secured using tool holders, which clamp the shank firmly to ensure stability during machining. Proper alignment and tight clamping are crucial to prevent tool chatter and achieve the desired machining accuracy.





HSS TOOLBIT BLANKS

	NOMINAL SI	75	GRADES						
			ZEDD	S100	\$200	S400	\$400E	\$500	РКТ
ММ	INCH	EQUIVALENT MM	SQ. Price Each Rs.	SQ./RD Price Each Rs.	QTY.				
-	3/32 x 2.1/2	2.38 x 63.50	140	310	436	459	365	488	10
-	3/32 x 3	2.38 x 76.20	164	501	701	735	588	781	10
3x 75	1/8 x 3	3.18 x 76.20	164	343	483	510	401	531	10
3 x 100	1/8 x 4	3.18 x 101.60	215	618	889	933	734	970	10
4 x 75	5/32 x 3	3.97 x 76.20	164	347	495	520	410	532	10
4 x 100	5/32 x 4	3.97 x 101.60	220	538	769	808	640	829	10
5x 75	3/16 x 3	4.76 x 76.20	140	274	360	377	321	390	10

HSS PARTING TOOLBITS

NOMIN	GR			
		MARK II	T42	РКТ
INCH	EQUIVALENT MM	Price Each Rs.	Price Each Rs.	QTY.
3/32 x 1/2 x 4	2.38 x 12.70 x 101.60	834	1,463	10
3/32 x 5/8 x 5	2.38 x 15.88 x 127.00	1,045	1,923	10
1/8 x 3/4 x 6*	3.18 x 19.05 x 152.40	1,332	2,361	10
1/8 x 7/8 x 6	3.18 x 22.23 x 152.40	1,559	2,883	10
3/16 x 1 x 6	4.76 x 25.40 x 152.40	1,938	3,303	10

Mark II - M2 (HSS with 0% Cobalt) (62-65 HRc), T42 (HSS with 10% Cobalt)



Unit of Pack in Plastic Box

SQUARE & ROUND (INCH SPECIFICATION) HSN Code 8207 8000 BP 101 0% Cobalt (M2) Rs/Pc BP 202 5% Cobalt(M35) BP 303 8% Cobalt(M42) BP 404 10% Cobalt(T42) Size in mm Size in inch Rs/Pc Rs/Pc Rs/Pc

2.5 X 63	5/32 x 4	146	294	445	454		1
2.5 x 75	5/32 x 3	175	469	718	720	•	1
3 x 75	3/32 x 2 1/2	175	320	497	500	22	1
3 x 100	1/8 x 3	225	579	910	919		1

ToolBits

Upto I/2" (12.50 mm)to be ordered in multiple of 10Nos.

HIGH SPEED STEEL TOOL BIT

BP 505 10% Cobalt CRYO(T42) Rs/Pc