




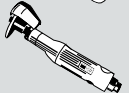


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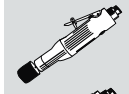

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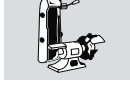
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## TOOLROOM CUT-OFF



### CATEGORY DEFINITION

Reinforced and non-reinforced engineered cut-off wheels for cutting all types of tool steel with fixed-based cut-off machines.

- APPLICATIONS:** Reinforced cut-off wheels are designed to resist breakage caused by severe cross-bending and are required on any operation where the work is not securely clamped.  
Non-Reinforced cut-off wheels are designed for use on fixed-based machines where the work is securely clamped, guarded, and where the wheel operates on a controlled cutting plane.
- SIZE RANGE:** 6" – 12" diameter
- GRIT RANGE:** 36 – 90 grit
- ABRASIVE GRAIN:** Aluminum Oxide
- BOND:** Resinoid, Rubber, and Shellac
- SHAPE:** Type 01 Straight

### CROSS REFERENCE GUIDE

NORTON	BETTER		
	Reinforced A60-OBNA2	Reinforced 57A364-TB25N	Non-Reinforced 57A60-M8B
Bates	A602-T-BF	A36-R-BF	-
Buffalo	A60-R-BF2	-	-
Dia. Tool	A80-SP	A46-SP	-
Radiac	A54-N6-B20	-	A54-N6-B20
Tyrolit	A60-QBF38A2	-	-

### TECHtip

- Smooth side pattern – Used when a precise thickness tolerance is needed
- Rough (R) sides pattern – Abrasive particles protrude from sides of wheel; used wet or dry on most metals

### TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSES	SUGGESTED CORRECTION
Poor cut rate	Insufficient power used Wheel too hard Contact area too large Wheel too coarse Wheel side out of truth	Increase feed or pressure to full power Use softer grade, or thinner wheel Reduce contact area Use finer grit Check spindle runout
Non-square cuts	Work not clamped properly Misaligned spindle bearings Poor coolant distribution Wheel is too hard	Check clamp and clean to remove swarf Check for bearing truth and alignment Ensure equal volume of coolant to each wheel side Use softer acting wheel: softer grade, or finer grit
Workpiece burn	Insufficient feed rate Poor coolant flow Wheel is too coarse Wheel is too hard Wheel is running out Wheel speed is too slow	Work machine to maximum power available Increase volume and direct at cutting point Use finer grit or more machine power Use softer grade wheel Check spindle and flanges Ensure tight flanges and maximum safe operating speed being used
Poor finish	Too much burr Wheel too coarse	Use finer grit, or softer grade Use finer grit

### TECHtip

- Wheels with a "W" reinforcement (reinforcement around the hole) are not considered to be truly reinforced.
- Clamp or fixture the workpiece for straightest cuts.
- Run wheels at the highest possible speed marked on the wheel and make cuts as quickly as possible. Do not overspeed wheels.
- It is recommended that a cut-off machine should have 1 horsepower for every inch of wheel diameter. For less than this, we recommend using a softer specification.
- Using a harder grade wheel increases wheel life, but it also increases burn, power required and decreases cut rate.
- Using a coarser grit wheel increases wheel life and cut rate, but it also increases burr and power required.

## TOOLROOM CUT-OFF

### FEATURED PRODUCTS



### TOOLROOM REINFORCED CUT-OFF WHEELS

BETTER CHOICE FOR CUTTING TOOL STEEL ON FIXED-BASED MACHINES WHEN WORK IS NOT SECURELY CLAMPED

#### FEATURES

- OBNA2 – side reinforced, resin bond
- B25N – constructed with full diameter fiberglass reinforcement

#### BENEFITS

- Yields maximum cut rate and minimum kerf loss; ideal when thin cut is desired
- Versatile; durable, free cutting; offer greatest stiffness

### AVAILABILITY

SIZE (D x T x H)	MAX. RPM	STD. PKG.	TIER: BETTER	
			SPEC.	PART #
<b>Type O1 Straight Cut-off – Reinforced</b>				
6 x .035 x 1/2	10,190	25	A60-OBNA2	66252835053
6 x .035 x 1-1/4	10,190	25	A60-OBNA2	66252835055
6 x .060 x 1/2	10,190	25	A60-OBNA2	66252835164
6 x .060 x 1/2	10,190	25	57A364-TB25N	66252822969
6 x .060 x 1-1/4	10,190	25	A60-OBNA2	66252835165
7 x .035 x 1/2	8,730	25	A60-OBNA2	66252938786
7 x .035 x 1-1/4	8,730	25	A60-OBNA2	66252938788
7 x .060 x 1/2	8,730	25	A60-OBNA2	66252938816
7 x .060 x 1-1/4	8,730	25	A60-OBNA2	66252938796
7 x .060 x 1-1/4	8,730	25	57A364-TB25N	66252922676

SIZE (D x T x H)	MAX. RPM	STD. PKG.	TIER: BETTER	
			SPEC.	PART #
<b>Type O1 Straight Cut-off – Reinforced</b>				
8 x .035 x 1/2	7,640	25	A60-OBNA2	66253043014
8 x .035 x 1-1/4	7,640	25	A60-OBNA2	66253042980
8 x .060 x 1/2	7,640	25	A60-OBNA2	66253043009
8 x .060 x 1-1/4	7,640	25	A60-OBNA2	66253042983
8 x .060 x 1-1/4	7,640	25	57A364-TB25N	66253022705
10 x .060 x 5/8	6,110	25	A60-OBNA2	66253149317
10 x .060 x 1-1/4	6,110	25	A60-OBNA2	66253149186
12 x .060 x 1	5,095	10	A60-OBNA2	66253261811
12 x .075 x 1	5,095	10	A60-OBNA2	66253261910
12 x .075 x 1-1/4	5,095	10	A60-OBNA2	66253261858



### TOOLROOM NON-REINFORCED CUT-OFF WHEELS

BETTER CHOICE FOR CUTTING TOOL STEEL ON FIXED-BASED MACHINES WHEN THE WORK IS SECURELY CLAMPED

#### FEATURES

- B bond (smooth sides)
- B25 bond (smooth sides)
- E7 bond (smooth sides)
- R30 bond (smooth sides)

#### BENEFITS

- A mild acting resin bond for light cut-off applications
- A versatile, free-cutting, more durable resin bond
- Ideal for dry cutting metal in high production runs
- A shellac bond with very mild cutting action, recommended for highly critical applications where no burr, heat checks, or discoloration is permitted
- Mild acting rubber bond primarily for wet, ultra-thin cutting

### AVAILABILITY

SIZE (D x T x H)	MAX. RPM	STD. PKG.	TIER: BETTER	
			SPEC.	PART #
<b>Type O1 Straight Cut-off – Non-Reinforced</b>				
6 x .015 x 1-1/4	6,370	25	57A90-R0R30	66252822953
6 x .020 x 1-1/4	6,370	25	57A90-R0R30	66252822954
6 x .035 x 1-1/4	6,370	25	57A60-M8B	66252822958
6 x .060 x 1/2	7,640	25	57A541-RB25	66252822970
6 x .060 x 1-1/4	7,640	25	57A60-M8B	66252822975
7 x .035 x 1-1/4	5,460	25	57A60-M8B	66252922983
			57A60-O8B	66252922986
			57A60-Q8B	66252922987
7 x .035 x 1-1/4	5,460	25	57A601-PB25	66252922988
			57A601-RB25	66252922989
7 x .035 x 1-1/4	5,185	25	57A60-OE7	66252922985
7 x .035 x 1-1/4	5,460	25	23A601-PB25	66252938701
7 x .050 x 1-1/4	5,460	25	23A601-PB25	66252938724*
7 x .060 x 1/2	6,550	25	57A60-O8B	66252922672

\*EXCEPTION: ROUGH SIDES

SIZE (D x T x H)	MAX. RPM	STD. PKG.	TIER: BETTER	
			SPEC.	PART #
<b>Type O1 Straight Cut-off – Non-Reinforced</b>				
7 x .060 x 1-1/4	6,550	25	57A46-M8B	66252922677
			57A60-M8B	66252922681
			57A60-Q8B	66252922684
			57A60-OE7	66252922683
7 x .090 x 1-1/4	6,550	25	57A60-M8B	66252922690
7 x .125 x 1-1/4	6,550	25	57A60-M8B	66252922692
8 x .035 x 1-1/4	4,775	25	57A60-N8B	66253022694
8 x .060 x 1/2	5,730	25	57A60-M8B	66253022702
8 x .060 x 1-1/4	5,730	25	57A60-M8B	66253022708
8 x .060 x 1-1/4	4,540	25	57A60-OE7	66253022709
10 x .060 x 5/8	4,585	25	57A46-Q8BW	66253122816
			57A60-M8BW	66253122818
10 x .090 x 5/8	4,585	25	57A60-M8BW	66253122824