



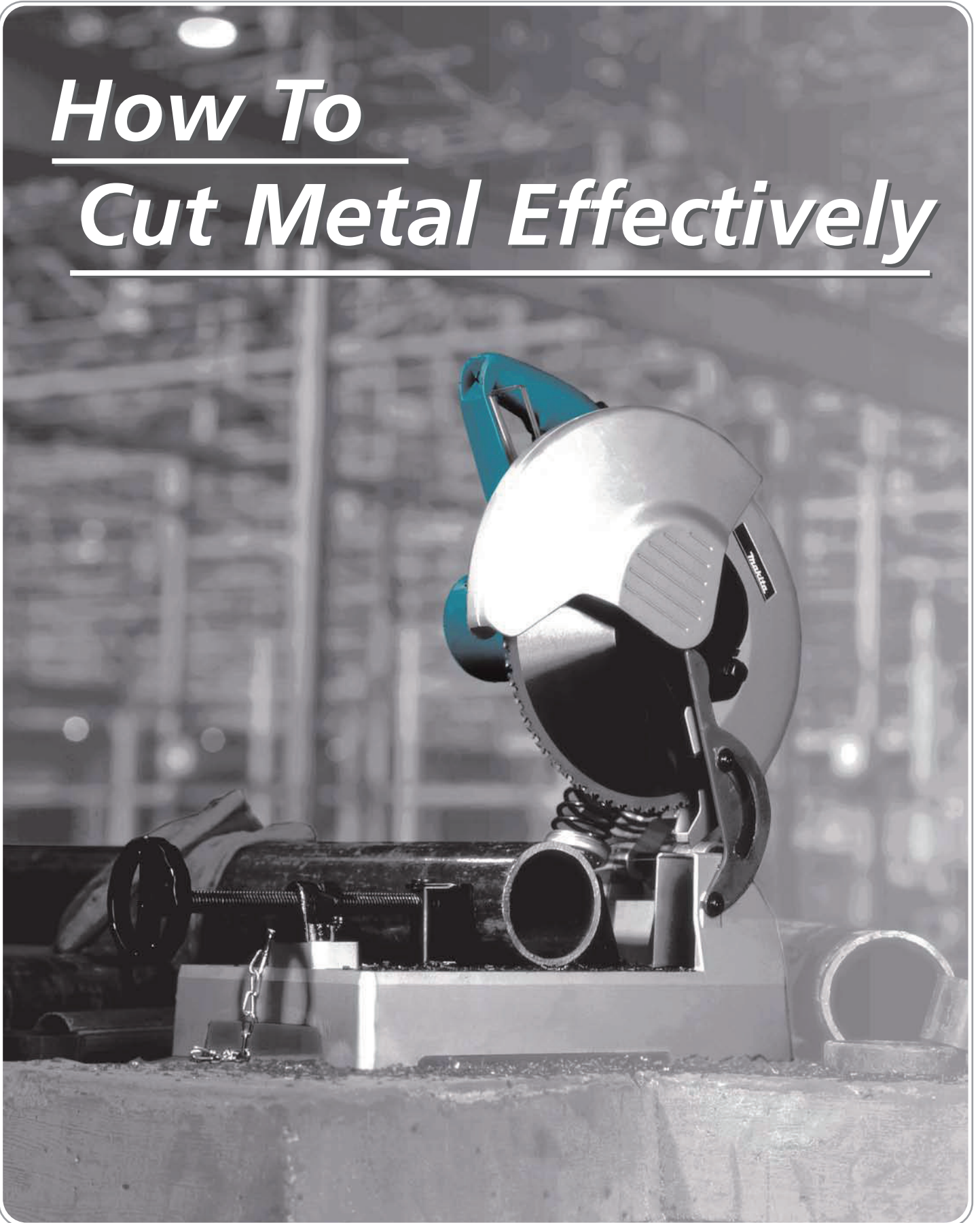
A world's leading manufacturer of power tools

# *How To*

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# *Cut Metal Effectively*

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# Why Makita Carbide-tipped Metal Cutting saw VS. Abrasive Cutting Saw



Carbide-Tipped Blades make Virtually Spark-Free Cuts



Abrasive Blades make Cuts with Sparks

## Makita's Carbide-Tipped Metal Blades Cuts Cleaner

Tubing

Threaded Rod

UNISTRUT™

Angle Iron

Pipe



Makita Carbide-Tipped Blade    Abrasive Blade



Makita Carbide-Tipped Blade    Abrasive Blade



Makita Carbide-Tipped Blade    Abrasive Blade



Makita Carbide-Tipped Blade    Abrasive Blade



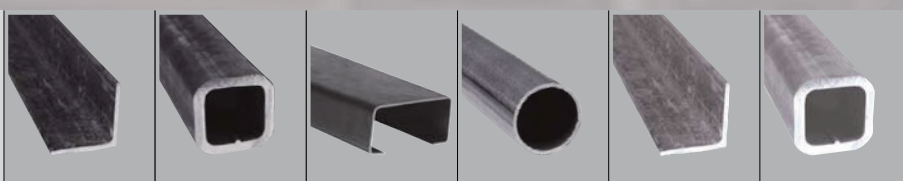
Makita Carbide-Tipped Blade    Abrasive Blade

## Carbide-Tipped Metal Blades for Many Applications

Applications		Applications										
		Angle		Tubing		Channel		Round Pipe	Stainless Angle	Stainless Tubing		
Size (mm)	Tip thickness	Part No.	Nominal thickness	6 mm	4 mm	3 mm	4.5 mm	2.3 mm	3.2 mm	3.8 mm	4 mm	1.5 mm
305 x 60T (Mild steel)	2.1 mm	A-87242		○	○	○	△	×	◎	◎	×	×
305 x 60T (Mild steel)	2.5 mm	A-81860		○	○	◎	○	×	◎	◎	×	×
305 x 60T (Mild steel Lessend noise)	2.4 mm	A-86723		◎	◎	◎	○	×	◎	◎	×	×
305 x 78T (Thin steel)	2.3 mm	A-87127		△	△	△	×	○	△	△	×	×
305 x 76T (Stainless)	1.95 mm	A-87579		○	○	△	×	◎	△	◎	○	○



◎ Excellent  
○ Good  
△ Fair  
× Not Applicable



# Metal Cutting Process

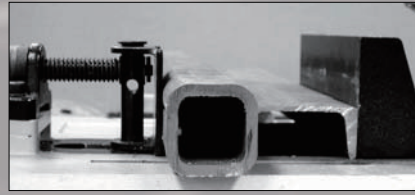
## Carbide-Tipped Metal Blade Cutting Tips

- Always wear safety glasses, gloves, protective equipment and follow instructions provided with power tool
- Do not apply excessive pressure on the handle when cutting as damage to the carbide-tips can be a result
- Too little or too much pressure on the handle may result in more sparks and premature blade wear
- Use block spacers when cutting square/rectangle tubing as well as channel and UNISTRUT™ for longer blade life
- When cutting long pieces of metal always use support blocks on both sides so the metal will be level with the saw base
- Do not touch blade or metal immediately after cut

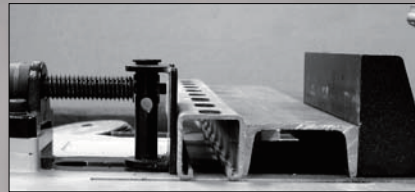
## Carbide-Tipped Metal Blade Cutting Process

- 1 Ensure metal is properly placed on saw base and firmly secured in the saw
- 2 Hold the saw handle firmly and wait until full speed is obtained
- 3 Lower the handle gently to bring the blade close to the metal
- 4 Gently ease the blade into the metal and add minimal pressure (reduce pressure if sparks appear)
- 5 After completed cut, turn off power tool and wait until blade has come to a complete stop then raise the handle back (if handle is raised back with blade still rotating then the blade may be caught)

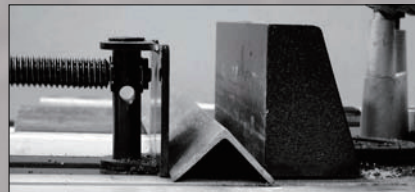
## Metal Cutting Process



Square & Rectangle Tubing  
(use block spacer)



Channels & UNISTRUT™  
(use block spacer)



Angle



Round Pipe



Threaded Rod

## Block Spacer Reference Chart

Applications		Square & Rectangle Tubing				Round Pipe		Square & Rectangle Tubing		Round Pipe	
The height of material		Up to 75 mm		Up to 100 mm		—		Up to 85 mm		—	
Block Spacer		A	B	A	B	A	B	A	B	A	B
	90 Degree Cutting	25	125	25	75	25	90	25	60	25	65
		50	100	50	50	50	65	50	35	50	40
		75	75	75	25	75	40	75	10	75	15
		100	50	100	0	100	15	85	0	90	0
		125	25	—	—	115	0	—	—	—	—
		* 150	0	—	—	—	—	—	—	—	—
	45 Degree Cutting										

\* Hint: Block Spacer should be determined by subtracting the metal width from 150 mm.

# Metal Cutting Saw 305 mm (12") Model LC1230

## Specifications

Blade diameter	305 mm (12")
Max. cutting capacities at 90°	115 mm
	75 mm x 150 mm
at 45°	90 mm
	85 mm x 85 mm
No load speed	1,300 min <sup>-1</sup> (rpm)
Overall dimensions (mm)	516 x 603 x 306 (L x H x W)
Net weight	19 kg (41.9 lbs)

## Standard Equipment

Carbide-Tipped Saw Blade  
(for mild steel)  
Socket Wrench  
Safety Goggles

Large D-Handle with Two Finger Trigger and Lock-off Button

External Accessible Brushes for easy maintenance

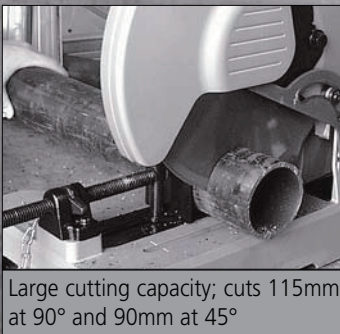
Powerful Motor

305 mm x 60T Carbide-Tipped Blade for virtually burr and spark free cuts

Quick Release Vise for fast stock retention and cut-offs

Quick Release Vise for fast stock retention and cut-offs

Large Cast Aluminum Base for stability



Large cutting capacity; cuts 115mm at 90° and 90mm at 45°



Quick release vise for fast repeat cut-offs



Large D-handle with two finger trigger and lock-off button



"Tool-less" guide plate adjustment for 0° - 45° miter cuts

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