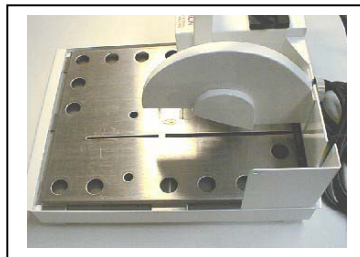


# SMART CUT™ 6009 Precision Diamond Saw



[www.ukam.com/diamond\\_saws.htm](http://www.ukam.com/diamond_saws.htm)

**Fast & Precision** sectioning of printed circuit boards, ceramic substrates, electronic packages, and many other materials. Coolant is stored below and applied to sample by rotating the blade. Saw table has a **large working area** and no inhibiting lip. The **durable housing** is made from **all metal**, with pan and table from **stainless steel**. Housing and pan have an industrial powder coated finish for great looks and long life. This unit is equipped with a special **angle block** that allows



you to **finish section edges of your specimens at a ten degree angle**, giving you a head start towards the next step in your failure analysis process. The saw also comes with an optional Rip Fence attachment that will allow you to make **uniform sections** from your sample.

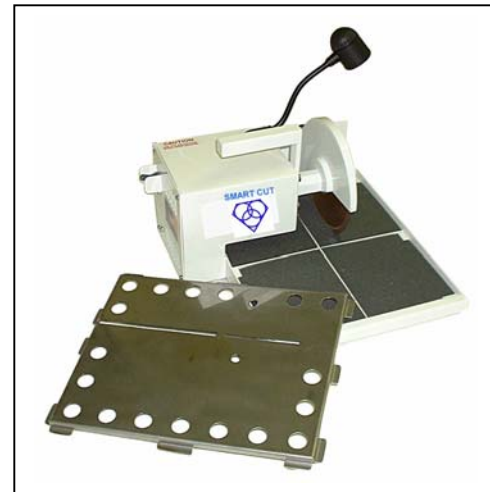
This accessory easily attaches to front lip of the saw pan and is adjustable to almost any width. The saw comes equipped with a high torque, permanent magnet **D.C. motor** that has plenty of power for **sectioning any sample hardness**. Motor has Ground Fault Circuit Interrupter to protect against electrical shock.



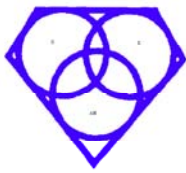
## Best Performance & Price Diamond Saw

- Housing Made from all Metal
- Super Large surface work area. (cut specimens as large as 12" long and 1/2" thick.
- Allows you to section samples with 10 degree angle.
- Sections very Uniform samples
- Lightweight & simple construction makes saw user friendly and easy to use. Portable
- High intensity lamp provides excellent light for cross sectioning
- Unique Coolant System provides sufficient coolant cutting area observing extra coolant
- Powerful D.C. Motor provides lots of power & torque for sectioning larger & harder samples
- Best performance & price per cut
- Universal Application

## Table can easily adjusted & removed



Stainless steel table is removed to reveal the four compartments in the pan, each containing a sponge. Coolant is added to the sponges that control supply of coolant to the blade. Excess coolant is held in sponges preventing spills and coolant sprays.



# UKAM Industrial Superhard Tools

Division of LEL Diamond Tools International, Inc.



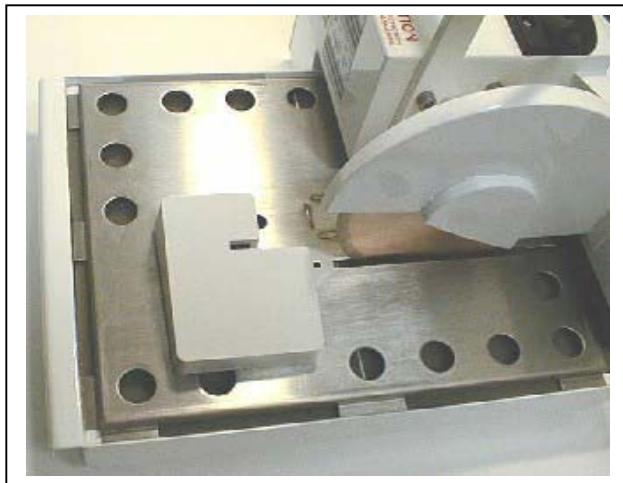
The saw also comes with a **high intensity lamp** that is easily positioned to light the work area and is built into the saw. Saw is **lightweight** so you can carry it around with one hand even when loaded with coolant. And has a built-in carrying handle, and unique coolant system that allows this portable convenience. Blades are easily changed, as the **removable blade guard** comes off with a few turns of a knob. **Made in U.S.A**



**SMART CUT™ 6009** Precision Diamond Saw comes with one (1)

**FREE**

Diamond Wafering Blade 6" x .020"  
Sintered (Metal Bonded) Diamond Height:  
7mm

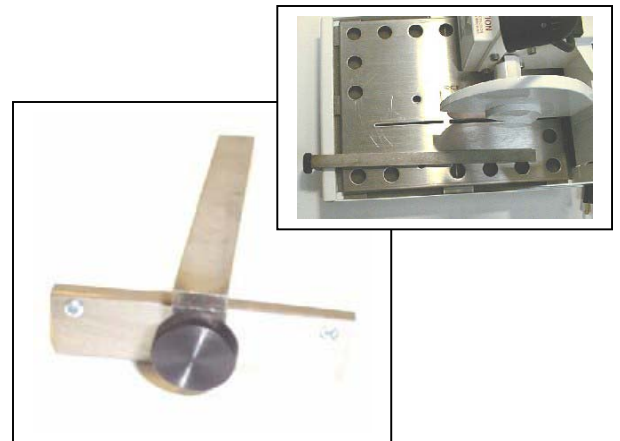


## Angle Block



This unit is equipped (included) with a special **angle block** that allows you to **finish section edges of your specimens at a ten degree angle**, giving you a head start towards the next step in your failure analysis process.

## Rip Fence Attachment (Vise)



Saw also comes with an optional Rip Fence attachment (sold separately) that will allow you to make **uniform sections** from your sample.

## Technical Information:

- Motor: 1/4 HP
- RPM's 400 to 3,000 RPM
- Blade Range: 5", 6" and 7" Diameter
- Arbor: 5/8"
- Fluid Capacity: 1/4
- Dimensions: 14" x 14" x 12"
- Shipping Weight: 22 lb

**Call (661) 257-2288 or e-mail: [lel@ukam.com](mailto:lel@ukam.com) for a competitive price quote**

25345 Avenue Stanford, Unit 211 Valencia, CA 91355  
Phone: (661) 257-2288 Fax: (661) 257-3833

# NEW GENERATION AND TECHNOLOGY!!!

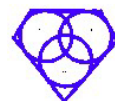
## Precision Diamond Wafering Blades (METAL BOND) - SMART CUT

Will work on just about any material. 1 blade can substitute any diamond, abrasive, or carbide blade. Guaranteed improvement in overall performance. **Save up to 650%**

**NEW**



Continuous Rim

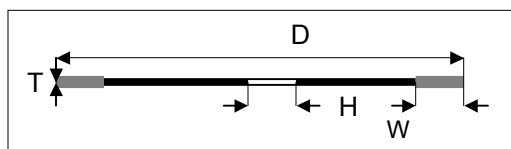


Different Product  
Different Company  
Different Technology

### SMART CUT technology

Precision Diamond Blade (Metal Bonded)

**SMART CUT** precision sintered (metal bonded) diamond wafering blades are the highest overall performance blades available today. Manufactured utilizing **SMART CUT** technology, will work on almost any material, substituting many other blades. You can't find a better value on the market. **SMART CUT** series precision diamond wafering blades will give you consistent results you can count on everyday.



### Application

Plastic, very soft metals + Non-ferrous soft metals + Very ductile metals (Ti) Soft ferrous metals + Medium soft ferrous metals + Medium hard ferrous metals Hard ferrous metals + Very hard ferrous metals + Extremely hard ferrous metals + Sintered carbides Hard ceramics + Minerals and ceramics

### Used on:

Sectioning saws  
Abrasive cut-off saws  
Surface Grinders  
And other equipment

It's time you Expect

## MORE from your tools

## ADVANTAGES

Item #	Diameter	Rim Width	Rim Depth
23-4670W	4" (101.6mm)	.014" (0.35mm)	.20" (5mm)
23-4671W	4" (101.6mm)	.020" (0.5mm)	.20" (5mm)
23-4673W	6" (152.4mm)	.014" (0.35mm)	.20" (5mm)
23-4674W	6" (152.4mm)	.020" (0.5mm)	.276" (7mm)
23-4675W	6" (152.4mm)	.032" (0.8mm)	.276" (7mm)
23-4678W	8" (203.2mm)	.025" (0.6mm)	.276" (7mm)
23-4679W	8" (203.2mm)	.032" (0.8mm)	.276" (7mm)
23-4711W	10" (254mm)	.032" (0.8mm)	.276" (7mm)
23-4712W	10" (254mm)	.040" (1.0mm)	.276" (7mm)
23-4716W	12" (300mm)	.0512" (1.3mm)	.276" (7mm)
23-4717W	14" (350mm)	.0512" (1.3mm)	.276" (7mm)
23-4718W	16" (400mm)	.0512" (1.0mm)	.276" (7mm)

Other diamond wafering blade sizes from **0.5" to 72" Diameter** are available. Starting from **.001" Thick**.

### Standard arbor sizes:

1/2", 5/8", 3/4", 1", 1-1/4", 2.75"

**we can make any arbor size** (inside diameter) you want.

- + More Universal
- + More Aggressive
- + Cuts Faster
- + Cuts Smoother
- + Lasts Longer
- + Minimal Chipping
- + More Precision
- + Straight Cut
- + Heat Resistant
- + Easier to Use
- + NO oil (no contamination)
- + Minimal Dressing
- + **SAVE MONEY!!!**

All sizes are in stock and ready for same day delivery.

Other sizes are available upon request. Please check for availability.

Prices are F.O.B. Valencia, CA.

References and letters of recommendation are available upon request.

**Guarantee:** 100% Quality and Satisfaction is Guaranteed

**Price Matching:** we will be any competitors price for the same type and quality product.

[www.ukam.com/metallographic\\_diamond\\_blades.htm](http://www.ukam.com/metallographic_diamond_blades.htm)



**UKAM Industrial Superhard Tools** Division of LEL Diamond Tools International, Inc.

25345 Avenue Stanford Unit 211, Valencia, CA 91355 – tel (661) 257-2288 – fax (661) 257-3833

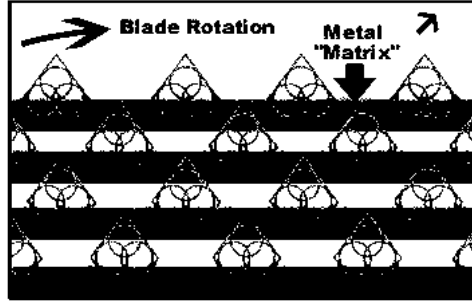
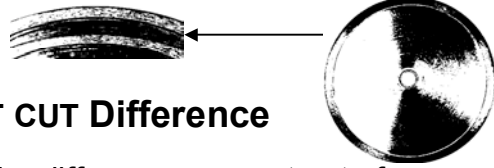
# SMART CUT™

ADVANCED TECHNOLOGY  
THAT REDEFINES  
THE STANDARD  
IN CUTTING

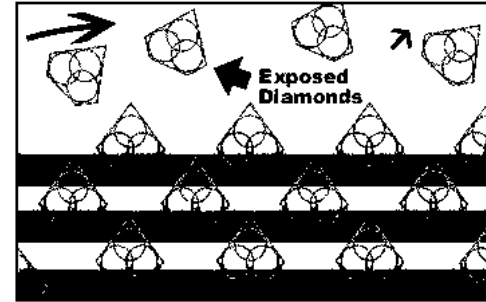
**Diamonds Oriented  
In Matrix**

## How Smart Cut Works?

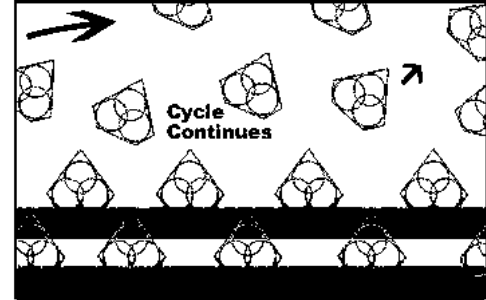
The sharpest and finest quality DeBeers diamonds that go into a Smart Cut Diamond Bond, immediately penetrate into the material, grinding and polishing as they cut.



Diamonds are activated only at the exposed layer. As diamonds layer begin to wear out, diamonds in a new diamond layer are immediately activated, substituting the already used up diamond layer. The Smart Cut Diamond Bond makes sure every diamond is in the right place and at the right time, working where you need it most.



The newly exposed diamonds don't effect diamonds already working on the material. Unlike many other diamond bonds, diamonds in a Smart Cut remain sharp and grow sharper with each cut. Prolonging product life and consistent performance.



This advanced formulated open diamond bond design insures minimal chipping, fast cut, constant speed of cut, minimal cutting noise, and most important of all minimal loss of precious material.

## SMART CUT Difference

That's the difference you get out of every **SMART CUT™** product. The difference you can't see, but you will feel and highly appreciate.

## = RESULTS

## NEWS RELEASE

**Date: October 16, 2000**

For immediate release

UKAM Industrial Superhard Tools, Division of LEL Diamond Tools International, Inc. has recently introduced **SMART CUT** technology, a new breakthrough in manufacturing precision diamond wafering blades. The company maintains this technology will redefine the standard in cutting.

This technology allows us to properly position and orient the diamond inside the metal matrix. Making sure every diamond is in the right place and at the right time, working where you need it most. (Please, see diagram ....)

This technology has also allowed us to develop a NEW GENERATION (hybrid) diamond bond matrix. In a **SMART CUT** diamond bond you will find all the advantages of cutting speed and smoothness that you have come to expect in a resin bond, and unique characteristics of a metal bond in terms of life, aggressiveness, durability, and excellent performance on you look for in a metal bond.

**maximum cutting performance** – each diamond works like a small horse. Diamonds come in contact with the material in the right place and at the right time, working where you need them most. You get the maximum use out of diamond and bond.

**no glazing** – blade requires minimum dressing, the bond renews itself

**faster cutting action** - Diamond wafering blades manufactured utilizing this technology are much more aggressive than your conventional blades. They cut faster, still leaving behind a smooth finish.

**more universal** - These diamond blades are designed to work on practically any material you can find, You can cut very hard materials, than switch to cutting soft materials and the blade will still maintain the same consistent performance.

**superior coolant system** - these blades are designed to cut with or without oil. We feel it is more preferable to the user to use water as a coolant. Oil does not a proper coolant for this procedure, as most other manufacturers would suggest. Water is a true organic coolant, witch does not leave the specimen being cut oily or contaminated.

[www.ukam.com/metallographic\\_case\\_studies.htm](http://www.ukam.com/metallographic_case_studies.htm)

THE NEXT  
GENERATION  
OF PRECISION

**DIAMOND**  
WAFERING BLADES

**SMART CUT™**



**UKAM Industrial Superhard Tools** is one of the largest precision diamond tool manufacturers in the U.S. and Europe. We offer

- Technical Support
- Application Assistance
- Real value and savings

With over 50 years of experience in manufacturing, research, and development. Following the belief "that there is always room for improvement", we continue to raise standards for the whole industry.

**Largest inventory in the U.S.** With over 4,000 diamond wafering blades, you are sure to find the solution you are looking for in stock and ready for same day delivery. If you are not using these blades, you are paying too much.

# HOW TO ORDER



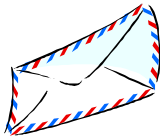
## Order by Phone:

Call: (661) 257-2288 Monday through Friday 8:00 a.m. to 5:30 p.m.



## Order by Fax:

Fax: (661) 257-3833, available 24 hours a day.



## Order by Mail:

send your orders to: 25345 Avenue Stanford, Unit 211 Valencia, CA 91355 U.S.A.

please include product item number, description, and payment.

## Accepted forms of payment



We accept Visa, Mastercard, and American Express. California Residents add 8.25% sales tax.

**Guarantee:** The quality of our products are 100% guaranteed.

## International Orders

Mail, fax, or e-mail orders to UKAM Industrial Superhard Tools. A confirmation of receipt will be forwarded to buyer immediately. If a confirmation of receipt is not received, buyer should resubmit

the purchase order to UKAM Industrial Superhard Tools in order to insure processing of the order. UKAM Industrial Superhard Tools will calculate and fax or e-mail the subtotal of the merchandise and comparison shipping charges when the order is prepared to be shipped. Buyer should then choose the preferred means of shipping, add shipping costs to the subtotal of estimate and notify UKAM Industrial Superhard Tools by phone, fax, or e-mail, regarding preferred shipping and chosen method of payment.

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## **Whatever your goal or objective**

**UKAM Industrial can help you get there faster.**

### **Largest Inventory & Selection**

with over 2,000 different types & specifications of precision diamond products available from inventory. You are sure to find what you are looking for in stock and ready for same day delivery.

- Over 4,000 Precision Diamond Blades in stock
- Over 1,000 Diamond Drills & Drilling Accessories in stock
- Hundreds of Diamond Dicing Blades in stock

If we don't have it in stock. Chances are no body will. Call: ( 6 6 1 ) 2 5 7 - 2 2 8 8

### **Manufacturers Direct Prices**

SMART CUT precision diamond products offer the best value & performance. In most cases UKAM Industrial Superhard Tools can meet and beat a competitors price on products of same quality & performance. If you are not using one of our products, chances are you are paying to much.

### **Research and Development**

UKAM Industrial Superhard Tools has over 50 years of experience in manufacturing, research, and development of new and advanced technologies to keep up with your increasing challenges.

## **Technical Support**

We are committed to helping you improve and optimize your cutting and drilling operation to the outmost level of efficiency. If you have a special application, that requires a custom solution. Send us a piece of your material, and we will analyze it in our laboratory and design a bond formulation for your particular requirement.

You can rely on us and our group of authorized application engineers to assist you in your cutting requirements, answer any questions, and provide you with the personal attention you deserve. Please, feel free to contact our Technical Support Team at Phone: (661) 257-2288 from Monday to Friday 8:00 to 6:00 p.m. PST.

## **Incredible Value**

UKAM Industrial Superhard Tools offers you real value and savings. Our Precision Diamond Products manufactured utilizing **SMART CUT** technology will

- save you money
- save you time
- save you material
- improve overall performance

Try a precision Diamond Product with SMART CUT technology TODAY!!!

## **Custom Manufacturing**

Can't find what you are looking for? Let us know. We can manufacture it for you or redesign our products to better fit your needs, standards, specifications, and requests.

## **New Generation & Technology**

UKAM Industrial Superhard Tools is a LEADER in developing new products. We are constantly engaged in Research & Development to better meet your needs and expectations. And continue to raise standards for the whole industry. With UKAM you can rest assured you're getting the latest, cutting edge products you deserve.