

# SMART CUT™ 1004

# Abrasive Cut off Saw

**SMART CUT 1004 Abrasive Cut off Saw is a perfect Laboratory or Production Saw for cutting a large variety of round and irregular shape materials / specimens. Used for cutting ferrous and nonferrous metals, ceramics, metal matrix composites, thermal spray coating, polymers, coal, glass, cermets, minerals, glass tubing & many other materials. The overhead design puts operator, in the best position to see and make accurate, precision cuts. High torque 1/4hp motor makes cutting fast and smooth. Adjustable pivot hinge eliminates all looseness and play for precision alignment. It's large versatility, and very affordable price makes it a must have for any Production or R & D facility.**

## Technical Info:

### Operation:

Manual Chop Cutting

### Motor Power:

1/4

### Blade Size and

### Speeds:

10" (254mm) Blades,  
3400 rpm (60Hz)

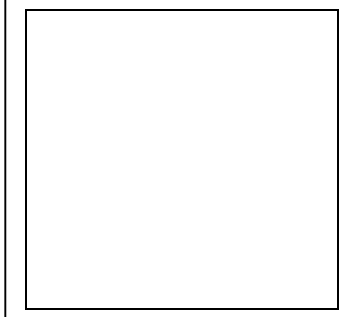
### Blade Types:

Diamond Cut off  
Wheels, Abrasive Cut  
off Wheels

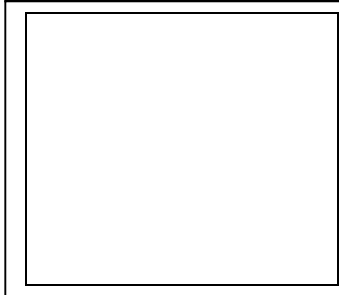
### Working Table:

13" x 12"

## SMART CUT 1004



## Accessories:



Vise / Fence attachment & assembly allows large and irregular shape materials/samples to be positioned and cut fast & accurately with ease.

## Features:

Affordable, heavy duty manual abrasive cut off provides excellent cuts quickly and consistently. Even on hardest materials.

- Minimizes cutting time while maximizing specimen capacity of up to 3.75" (95mm) diameter.
- Compact tabletop design fits most laboratory tables.
- Uses 10"(254mm) diamond cut off or abrasive blades and 2.5" (64mm) flange.
- Powerful 1/4 HP motor for sectioning various types and sizes of materials & metallographic samples.
- Heavy-duty cast aluminum base provides strong rigidity
- Large 13 x12 work table, to accommodate large & unconventional material types and shapes
- Lift out Coolant Tank makes cleaning fast & easy. Recalculates coolant with Submersible Pump Accessory.
- Smooth-Quiet Polyflex belt drive allows for fast and quiet cutting operation with minimum vibration.
- Large Coolant Capacity / Optional overhead lamp provides strong illumination of cutting zone.

**Perfect for large & unconventional material types and shapes**

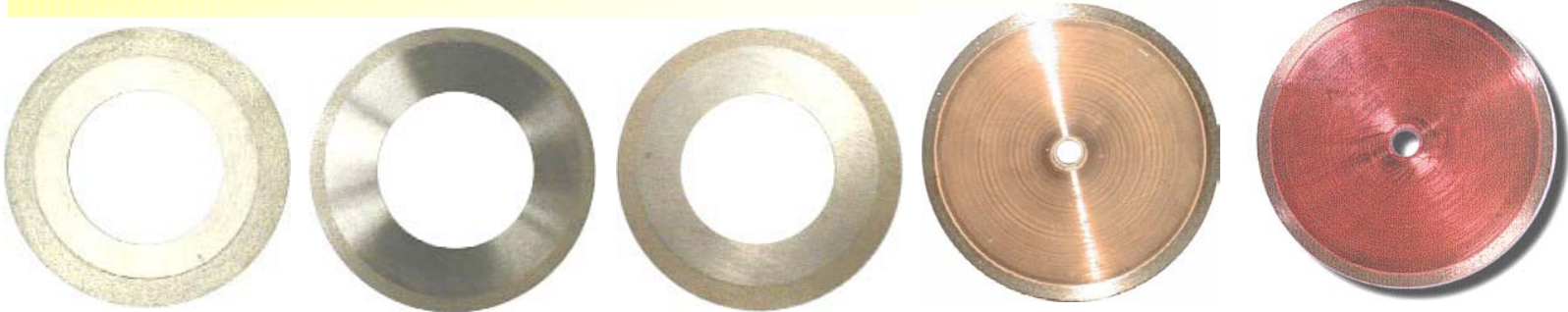
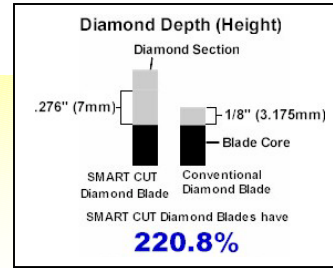


**Submersible Pump.** Oil filled, for use with oil or water coolants. Allows coolant to recalculate.



**UKAM Industrial Superhard Tools** Division of LEL Diamond Tools International, Inc.  
 25345 Avenue Stanford, Unit 211 Valencia, CA 91355 USA  
 Phone: (661) 257-2288 Fax: (661) 257-3833 www.ukam.com

**SMART CUT™ precision Diamond Wafering / Cut off Blades are designed and specially selected to provide the maximum possible blade life for your desired cut quality, and speed.**



**UKAM Industrial Superhard Tools** is one of the leading manufacturers of high Precision Diamond Wafering Blades in the world. From 0.5" to 72" OD, starting .001" TH and up. 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. In addition to manufacturing diamond wafering / sectioning blades for our own SMART CUT series Precision Diamond Saws. We manufacture many Diamond Wafering Blades used on other well know sectioning / wafering saws.

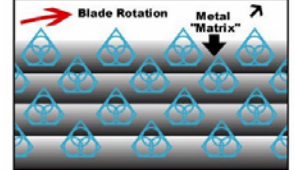
We recognize that the Diamond Wafering / Sectioning Blade by itself is perhaps the most important factor in your sectioning / precision diamond sawing operation. The diamonds impregnated inside the bond matrix of the wafering blade, are what actually participate in cutting action. No matter how precision or well made your wafering saw. You will not be able to obtain the material surface finish, and precision tolerances you need, if the blade you are using is not right for your application

UKAM Industrial Superhard Tools proprietary blade chemistry, precision manufacturing methods, modern quality control methods, allow us to control and regulate the dozens of variables that affect blade life, quality of cut, surface finish. Reducing and often eliminating additional steps often required after sectioning. All blades are manufactured to fit your specific material, application, and surface finish requirements. We will work with you to determine your needs, and develop the right bond formulation, concentration, and grit sizes.

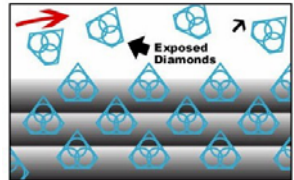
UKAM Industrial Superhard Tools has one of the **Largest Inventory of Precision Diamond Wafering Blades in the U.S.** With over 4,000 diamond wafering blades in stock, available in **different sizes, thickness, arbor sizes, diamond concentrations, diamond mesh sizes, and bond hardness's.**

**You are sure to find the Right Diamond Wafering Blade for your application in stock and ready for same day delivery. If you are not using these blades, you are paying too much.**

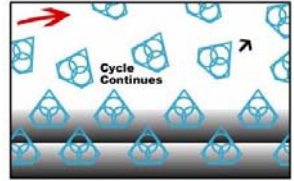
The sharpest and finest quality DeBeers diamonds that go into a Smart Cut Diamond Bond, immediately penetrate into the material, grinding and polishing as they cut.



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 affect 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™ technology.**  
 Advanced technology that redefines the standard in cutting.





**UKAM Industrial Superhard Tools**

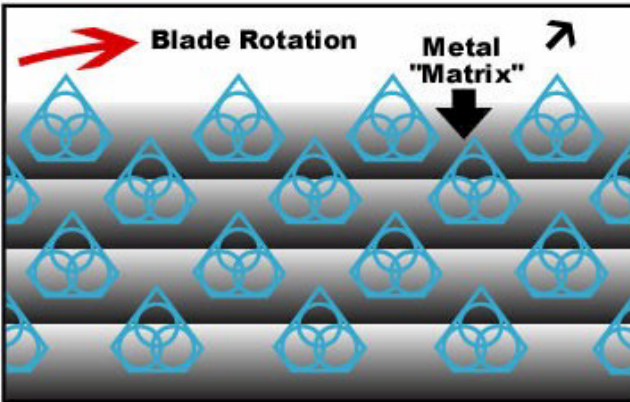
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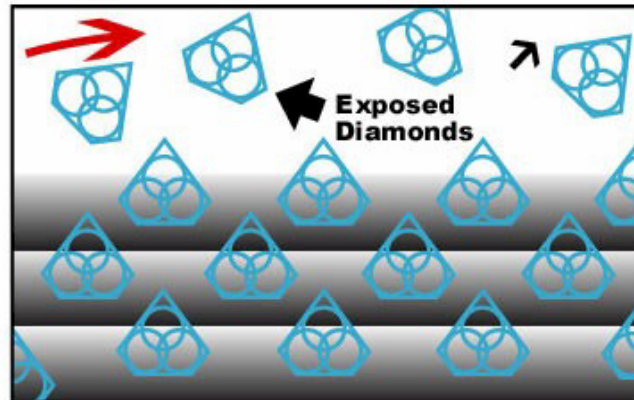
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## How Smart Cut Works?

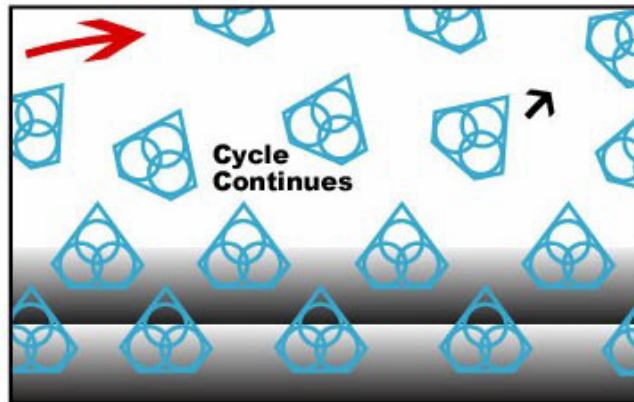
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UKAM Industrial Superhard Tools, Division of LEL Diamond Tools International, Inc. has recently introduced a new breakthrough:

**SMART CUT™**

technology in manufacturing precision diamond blades. 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 ....)

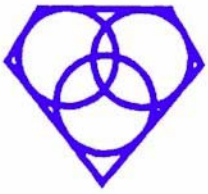
**maximum cutting performance** – each diamond works like a small work horse. Diamonds come in contact with the material in the right place and at the right time, working where you need them most. You get the maximum use out of diamond and bond. Some unique benefits & advantages of **SMART CUT™** technology:

**no glazing** – requires minimal dressing, the bond renews itself

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

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

7mm diamond depth allows the blade to last **80% to 40% on hardest materials.**



# UKAM Industrial Superhard Tools

*Division of LEL Diamond Tools International, Inc.*

## **HOW TO ORDER**



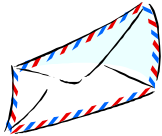
### **Order by Phone:**

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**

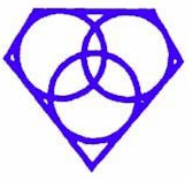


We accept Visa, Mastercard, and American Express. California Residents add 8.25% sales tax.

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

### **International Orders**

**25345 Avenue Stanford, Unit 211 Valencia, CA 91355 USA Phone: (661) 257-2288 Fax: (661) 257-3833**  
**[www.ukam.com](http://www.ukam.com) e-mail: [lel@ukam.com](mailto:lel@ukam.com)**



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*Division of LEL Diamond Tools International, Inc.*

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.

## **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.



# UKAM Industrial Superhard Tools

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## **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.