



President's Letter

**Superfilers**

**Barry Miller**

Saw Performance Specialists  
Columbia Falls, MT

**Wes Wilcox**

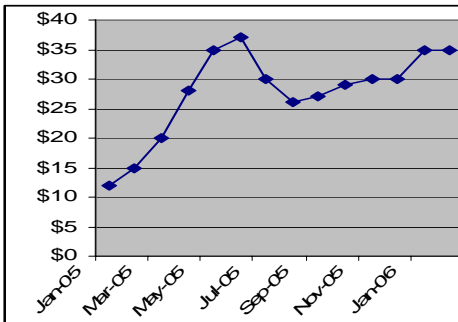
The Cutting Edge  
Billings, Montana

Barry Miller called about gas flux. He was trying it and wanted my opinion. It sounds really good so I bought a unit to test and we are now selling them. (See inside)

Wes Wilcox bought 25 Comet tips for a test.

Thank goodness we're not a big outfit. If we were a big outfit we wouldn't be allowed to sell 25 tips. The truth is we probably lost money selling these even at our size. But Wes is a bright guy who is willing to put his money on the table to run a test. However he doesn't want to spend more than he has to. We are betting that he will like the tips and buy more in the future.

**Tungsten Carbide Raw Material Prices**  
What you can do P.4  
Also Help for Stellite© Users



\$12 - \$35 in the last fourteen months.

# Carbide Processors, Inc.

Northwest Research Institute, Inc.

Newsletter April, 2006

3847 S. Union Ave. Tacoma, WA. 98409 (800) 346-8274

sales@carbideprocessors.com [www.carbideprocessors.com](http://www.carbideprocessors.com)

## Super C grade Carbide

### 95 % Re-order rate

A truly good new, generation of carbide to replace conventional grades from C-1 to C-3

Hardness (HRA) 92.3  
T.R.S. (psi) 537,000

Call Emily and try 500, 800 346-8274

**May we please supply you with tips and pretinning. We will do a really good job. Honest, we will?**



Top quality Carbide



Beautiful Pretinning



We are really good on small parts

## NEW – Water Soluble Oil Coolant

We started selling Grindz-all because we had complains about the smell of Rustlick as well as the price of Coollube 220. Call Emily

Cost per gallon: \$ 89.00 for 5 gallons and you mix it 40:1.

Coolube 220 is \$ 190.00 for five gallons and you mix it 20:1.

If you get bad carbide or good carbide with bad pretinning it peels off like ice on a stop sign.



## Vollmer Parts and Repair

A lot of folks have been using Burl Swiger for parts and repair of their Vollmer and Cascade Southern Grinders. Burl Swigar / Triple S 503-803-6838

## New Grinders

If you are interested in a new grinder you might try Norm Brown of Simonds. Their grinders are selling very well. Norm Brown Cell: (360) 589-9030

## Cal Saw Canada- wow!

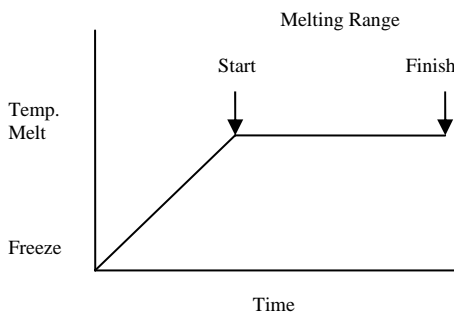
I went up to Cal Saw Canada on a research project. I can't tell you what we did or how they do things. But I can tell you that they have some extremely smart innovations to improve quality in both round saws and bands. Plus they have some of the best people I have ever seen. (Hi, Alastair). Call Cliff Gordon (503) 580-3253 for more information

# Melting Energy

When we tell you that braze alloy melts at 1270 F or 1305 F that is true. However there is more to it.

When something goes from a solid to a liquid it requires extra energy. Solids are a low energy state and the molecules are locked together pretty tightly. A liquid is a higher energy state and the molecules move much more freely. That is why liquids flow and solids don't.

Once you get something to the melting temperature you have to put more energy into it to get it to melt.



The same thing happens when you braze or weld. Once you get the metal hot enough you need to hold it at that temperature until it fully melts.

## Ice Cube Melting

When you drop an ice cube into boiling water it melts. But it doesn't melt instantly.



Hot water on hot plate, stop watch and ice cubes.

Heat the water to boiling on a hotplate and drop an ice cube in it. Keep track of how long it takes to melt with a stop watch.

How long it takes something to melt depends on how much heat you put in

and how fast you do it as well as much heat melting takes out.



Ice cube over boiling water



Half melted ice cube

We ran two tests. In the first test it took 36.29 seconds for the ice cube to melt. In the second test it took 38.59 seconds.

This is a standard ice cube in about an inch of water. The difference in temperature between freezing and boiling is pretty small. If you have a small piece of material you are brazing or welding and you are using a torch at 4,000 degrees the melting energy will be achieved much faster but it will still take some time and you need to allow for that.

## Really Good Brazers Can Be Too Good

Braze alloys melt over a range that can be as long as 100 degrees. Some brazers are so experienced that they see flow at the low end of the range and stop heating before the braze alloy is fully heated.

## Automatic brazers may or may not hold the alloy at the melt point

An automatic brazer set to heat the parts up to melting temperature and then quit may not hold the parts at the melting temperature long enough.

## Identity Theft Precautions

The next time you order checks have only your initials (instead of first name) and last name put on them. If someone takes your check book they will not know if you sign your checks with just your initials or your first name but your bank will know how you sign your checks.

When you are writing checks to pay on your credit card accounts, DO NOT put the complete account number on the "For" line. Instead, just put the last four numbers. The credit card company knows the rest of the number and anyone who might be handling your check as it passes through all the check processing channels won't have access to it.

Put your work phone # on your checks instead of your home phone. If you have a PO Box use that instead of your home or Never have your SS# printed on your checks.

Photocopy the contents of your wallet, both sides of each license, credit card, etc. You will know what you had in your wallet and all of the account numbers and phone numbers to call and cancel. Keep the photocopy in a safe place. I also carry a photocopy of your passport when you travel.

## When Identity Theft Happens

1. Cancel your credit cards immediately using the number you saved when you photocopied your wallet.
2. File a police report immediately in the jurisdiction where it was stolen, this proves to credit providers you were diligent.
3. Call the three national credit reporting organizations immediately to place a fraud alert on your name and Social Security number. :  
Equifax: 1-800-525-6285  
Experian (formerly TRW): 1-888-397-3742  
TransUnion: 1-800-680-7289
4. Social Security Administration (fraud line): 1-800-269-0271

## Saw blade census data

<http://www.census.gov/prod/ec02/ec0231i332213t.pdf>

# IndustrialToolSharpening@yahoo.com

This is a really good discussion group. I received a call from Chris Miller of Whiteside Machine Company. He and I were talking about the group and we both agreed that we didn't understand a lot of it but we were both impressed by it and were learning a lot from it.

One suggestion is the following from Chuck Hicks of Southeast Tool, Inc. When you are recycling carbide and coolant you can also recycle sludge if it is dry and has enough of the right metal. (carbide is good, steel is no good.)

Here is a suggestion from Chuck. Make a green house out of a 55 gal drum, cut it in half long way, like some people make grills and put glass (green house) on top with some kind of contraption to stir the sludge. After about 2-3 days in the Summer, it dries out and you can scoop it out into a drum for later sale back to carbide companies. Most carbide companies will make you send them a sample first to see exactly what you have and the content b-4 they will tell you how much they will pay.

Editor's note: any material held for recycling is, by law, not hazardous waste. If you wish to know more contact me and I will send a couple pages of relevant federal regulations.

**Bernie Paulson of Simonds, Portland**  
Bernie is a purchasing agent and a good one. We got an email from him. He had been told something was impossible and thought he ought to see for himself. He asked if we would help him and we are happy to.

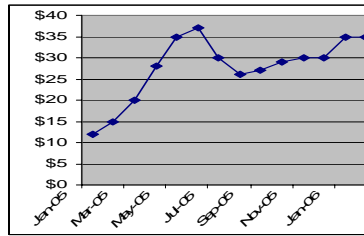
**Please Specify Us For Pretinning**  
Ask for us where you buy carbide or call us directly



We are really, really good at pretinning small parts

## Tungsten Carbide Raw Material Prices

What you can do



Tungsten Chrome and other metals are increasing dramatically. There are several things you can do.

### 1. Buy better quality carbide.

Buying carbide is like buying a screwdriver. We are doing spring clean up. Part of what we are getting rid of are cheap hand tools. We bought them because we thought "for the price, how could we lose." What we got were cheap tools that slipped, bent and broke. We replaced them with tools that cost a little more but they work and don't break.

We have some new grades of carbide that are well worth testing. Our Super C grade has a very good harness for long wear and it has an incredibly high transverse rupture strength which makes it very hard to break and also contributes to much longer wear.

### 2. Recycle and Sell

Because prices are high for new powder there is a much greater market for used carbide. We are paying up to \$5.00 per pound for scrap carbide. This price changes daily and different kinds of carbide (inserts, tips, braze alloy on it, etc.) sell for more or less. This price changes every day so call Emily for a quote 800 346-8274.

### 3. Use less Carbide

A. Buy better quality carbide with tighter dimensions so it needs less grinding.

B. Use just what you need. We were working on a project for customer who wanted a less expensive, more effective stump grinder tip. Ron analyzed the old part and realized that all the wear was on the edges. The part is dished so that it digs better.



Tool left, old solid carbide in middle and new design on right.

Since all the wear is on the outside all the carbide in the middle does is add to the cost.

Ron designed a ring and we came up with brazing method so we actually get a much stronger bond with a ring than they did with a thick disk.

Ron Mills  
China Pacific Carbide, Inc.  
Phone: 714 692 8492 ext. 203  
ron@chinapacificcarbide.com  
<http://www.chinapacificcarbide.com/>

**Filter Systems Available Through Top Quality Distributors such as**



Peerless Saw Co., Smith Sawmill Supply, Burton/Fitt Saw & Supply, Equipment Ltd., Jack Sigrist, Moon's and wherever you buy saw supplies

**Braze alloy – top quality at very good prices**  
[www.brazealloy.com](http://www.brazealloy.com)

**Catalog**

World's Best Brazed Tools  
 Supplies & equipment for those that build them



**Sawfiler Brand Tools & Supplies**



High quality and unique tools, supplies and technology to make your job easier and your products superior

3847 S. Union Ave. Tacoma, WA. 98409  
 800 346-8274  
 President@carbideprocessors.com  
 www.carbideprocessors.com

**Supplies, Products & Services We Offer**

**Carbide Grades & Shapes**  
 Talonite® Cast Saw Tips, Blanks and Bar Stock  
 All Standard grades  
 High Performance Grades  
 "Super C"  
 Comet "M"  
 Comet "X"  
 Special Carbide Services  
 Brazing  
 Custom grinding  
 Custom lengths  
 Custom shapes  
 Presharp  
 Pre-sizing  
 High shine surface  
 Slick surfaces for easy feeding  
 Rough surface for easy handling  
 Custom boxing  
 Custom labels  
 Exact counts  
 Pretinning  
 Wire, shim and paste  
 22 different alloys available  
 Regular and cold process  
 pretinning  
 Cadmium free alloys  
 Cadmium alloys  
 Hi impact pretinning with manganese  
 High strength high silver alloys  
 Trimetal shims any thickness  
 Patented surface treatments  
 Really pretty tips  
**Braze Alloys (Braze Alloy / Silver Solder)**  
 Flux

**Filter Units**  
 Coolant Test Instruments  
 Coolant  
 Proscope - Digital Microscope  
 High Wear Metals For Knives and Scrapers  
 Talonite® cobalt / chrome alloy  
 Impervium is a minisweeper grade, non-galling stainless steel.  
 Lubricium is Impervium that has been "cold reduced", hammered to create a tighter structure.  
 Talonite® round tipping rod - premium quality  
 HIPed to be void free & precision ground.  
 Talonite® comes as round rod for automatic tipping machines. This material can be welded on and then ground to shape.  
 1. Bare welding rod - This is "as cast" rod. It is the lowest cost rod. The tolerances are close and generally this feeds well in automatic tippers. This rod is mostly void free but it may have occasional voids.  
 2. HIP ed rod - this rod is void free. HIP ing is Hot Isostatic Pressing. You warm the rod to a couple thousand degrees until it starts to get soft then you squeeze it with a couple thousand pounds of pressure until you squeeze all the voids shut.  
 3. Sawtip rod - void free and ground to size. This is rod that is first HIP ed and then ground to an exact size. This is the best for automatic equipment because it feeds the best, each tip gets a piece of rod exactly the right size and it grinds the most consistently.  
 Talonite® advantages  
 Talonite has the advantages over carbide of being harder to break, possibly having less drag (lower coefficient of friction) and Talonite can be ground with less expensive wheels. Carbide requires diamond wheels and Talonite can be ground with CBN (cubic boron nitride) wheels.  
 You can get about the same thin kerf with Talonite as you can with swaged steel. Figure 0.060" - 0.070" while tungsten carbide is pretty well limited to a low end of 0.100" - 0.110" in primary wood.  
 Talonite® is made with a mixture of Cobalt, Chromium, Tungsten, Iron, Silicon and Carbon. It has a Rockwell of C 68, tensile above 100,000 lb/in. and it is extremely acid resistant. Talonite® has excellent high heat, wear and corrosion resistance. Talonite® forms Cobalt - Chromium carbides when it is welded. This gives it strength and wear resistance. This gives Talonite superior strength and wear resistance. The cobalt forms a soft and strong matrix that holds the carbide grains in place.

**NEW & FREE CATALOG**

Here are pages from our new catalog. Call Emily to get one you can read 800 346-8274

**Carbide Grades & Shapes.** All Standard grades, High Performance Grades, "Super C", Comet "M", Comet "X"

**Talonite® Cast Saw Tips, Blanks and Bar Stock**

**Special Carbide Services**

Braze treating  
 Custom grinding  
 Custom lengths  
 Custom shapes  
 Presharp  
 Pre-sizing  
 High shine surface  
 Slick surfaces for easy feeding  
 Rough surface for easy handling  
 Custom boxing  
 Custom labels  
 Exact counts

**Pretinning**

Wire, shim & paste  
 22 different alloys available  
 Regular and cold process pretinning  
 Cadmium free alloys  
 Cadmium alloys  
 Hi impact pretinning with manganese  
 High strength high silver alloys  
 Trimetal shims any thickness  
 Patented surface treatments  
 Really pretty tips

**Braze Alloys (Braze Alloy / Silver Solder)**

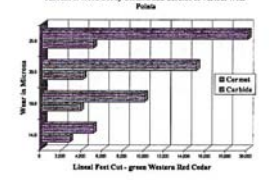
**Filter Units**  
**Coolant Test Instruments**  
**Coolant**

**And much, much more**

**Carbide Grades & Shapes**  
 Our history, starting with Weyerhaeuser is saw tips. In twenty five years we have added a tremendous ability to supply custom shapes in advanced grades that are uniquely ours.  
**Carbide saw tips**  
 Alternate top angles  
 Aluminum cutting  
 Band Saw Tips  
 Bits and blanks  
 Canadian style tips  
 Cast saw tips  
 Comet grade reinforced carbide  
 Cutoff saw tips  
 Drill bits  
 Edger tips  
 European style tips  
 Extended wear grades  
 Frozen lumber  
 Hollow Face  
 Hollow top  
 I.T.C.O. tips  
 Metalworking saw tips  
 Nail cutting grades  
 Pallet cutting  
 Right & left handed tips  
 Slasher Teeth L & R  
 Rail back  
 V-back  
**Special carbide shapes**  
 Special grinds  
 Square back American STB  
 Rectangular Strips  
 Square blanks & strips  
 Strung grinding  
 T/C/N true corners  
 Trim saw tips  
 High Precision for Automatic tipping  
**Uses & Industries**  
 Agriculture applications  
 Drill bits  
 Drill Tips  
 Form tools & misc.  
 Router tips  
 Saw blades  
 Special tools  
 Tile scoring & snippers  
 Wear and cutting edges  
 Woodworking carbide

**Filter Units We Sell**  
 These are our standard designs.  
 We are scientists & engineers and love to build custom units.  
 CP 1000 - \$599 High performance, long life, low cost. A submersible pump drops in the sump and pumps through a bag filter. This gives very good filtering and very good filter life in small shops. Designed for use with manual equipment.  
 CP 2000 - \$1,198 - Single pass, fine filtering - Optional sump for laser crystals, military, etc. Works very well in high capacity saw & tool shops but will need a filter change about every three days. Best with a separate sump where ultra fine polishing (2,000 grit) is needed.  
 CP 2002 - \$2,038  
 One-month filter life in saw shops. Best model for saw & tool shops. The result of 7 years of constant development with a couple hundred saw and tool operations from one man shops to major international manufacturers.  
 Wall Mount unit - \$675 - Same life & effective filtering as CP 2002 - runs off coolant pump on grinder. This unit mounts on the wall and uses the coolant pump on the grinder. If your grinder has a small coolant pump you may need to upgrade to a larger pump.  
 CP 2002-2 \$2,454 3 way - Turn 2 valves and filter 2 sumps - Mighty Max motor add \$480 Makes it very easy to switch from one sump to the other by just switching two valves. Not for filtering two sumps at the same time  
 CP 2020 - \$2,398 - 4 times filter life of 2002 - Mighty Max motor add \$480 is solid, proven, hardworking, with a huge capacity. (6 times the capacity of the CP 2002). The unit has a bag filter followed by a cartridge filter and is easily configured as a polishing unit after a centrifugal system.

**World's Best Sawblades And Other Custom Tools**  
 We supply the best brazed tools in the world.  
 We have twenty five years working with the very best saw and tool builders as well as the finest tool technology firms in the world. In addition we have our own unique technologies and materials.



If you have a special need we will design a tool exactly for your machine, your materials and your cutting needs.  
 If you have an unusual application of just want the very best please contact us.

Wear Resistance	Carbide vs. Cobalt
Time (min.)	1.00 0.21 0.2
	15 0.5 0.6
	20 0.8 0.5
	24 0.84 0.55
	30 0.81 0.58



**Grades - All Standard Grades**  
 Ordinary tungsten carbide - individual grains glued together with cobalt  
 Comet Grades - A solid substance with reinforcing like rebar (dark lines) in concrete  
**High Performance Grades**  
 "Super C" Hard as a C-3 and tougher, a lot tougher than a C-1. This is a sub-micron grade tip with special additives and incredible performance values. A Transverse Rupture Strength of 537,000 P.S.I. and a hardness of 92.3 HRA  
 Comet "M" - Super tough, Extra high wear C-3 and C-4 Comet Grade "M" for Macho  
 12% cobalt - 3 micron grain size (88.8 Avg. HRA)  
 Grade M is extremely tough and is best used in saw tips that require toughness and resistance to fracture (applications where impact or interrupted cuts are involved). Ideal for frozen lumber and lumber with foreign materials such as nails and staples. Excellent for impact.  
 Comet "X" - Extended wear -6% cobalt - submicron grain structure. (93.5 Avg. HRA) Comet X is used in applications requiring very high wear resistance. Grade X is a very hard grade, ideal for masonry materials, MDF, fiberboards, etc., where there are no foreign materials. Very high wear characteristics but not suitable for impact applications.  
 X grade results  
 Particleboard 100%+ better  
 Hard aggregate 20% better  
 Green oak 100% better  
 Sawmill 1,000% better  
 Copper tube 400% better  
 Fiberglass 50% better  
 Nail sawn long way  
 Stump Cutter  
 Nail Cutter  
 Pallet Graders  
 Cermets  
 Alumina  
 GRAIN SIZE INFORMATION:  
 Ultra Micro Grain 2 to 5 Micron  
 Sub Micro Grain 5 to 7 Micron  
 Micro Grain 7 to 10 Micron  
 Fine Grain 1 to 1.4 Micron  
 Medium Fine Grain 1.5 to 2.5 Micron  
 Medium Grain 2.5 to 4 Micron  
 Coarse Grain 4 to 10 Micron

**Special Carbide Services**  
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 Brazing  
 Custom grinding  
 Custom shapes  
 Presharp  
 Pre-sizing  
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 Cadmium alloys  
 Hi impact pretinning with manganese  
 High strength high silver alloys  
 Trimetal shims any thickness  
 Patented surface treatments  
 Really pretty tips  
 If you resell carbide we provide  
 Custom Packaging  
 Custom labels  
 Boxes of candy with your name on them  
 We will box pretinned tips in boxes of 500 each with a custom label on it. We can generate a label with words and art in black on white. We can also provide warning labels.  
 We will be happy to do demo boxes for you. We can provide sample boxes with your name on them and candy inside.  
 Precision Equipment  
 Wire cutter  
 Weigh Scale  
 Really pretty tips

**Proscope - Digital Microscope**  
 Installing the Proscope  
 Plug the scope into the USB port  
 Insert the CD, close the CD and let it run  
 When you get a message saying that the software is not proven to be compatible with Microsoft click "continue anyway"  
 Installation will finish automatically  
 To start the camera - Run the camera in Go to the start menu in the lower left hand corner of your monitor screen  
 Click Start  
 Click settings  
 Click control panel  
 Click printers and other hardware  
 Click scanners and cameras  
 Click the Scalar USB Shot  
 If you do not have the Proscope plugged in then nothing will show up  
 What you get in the small package  
 The scope all ready to plug into a USB port.  
 A 50x lens with LED lighting. A good solid, tripod and a really nice Samsonite soft case.  
 The software loads in minutes.  
 Really Easy to use - Rest the hood right on what you want to see and a picture shows up on your monitor. Here we are taking a picture of the "on" key  
 Package 1: \$ 468 Basic USB computer package  
 Comes complete and ready to use with: Proscope, Installation DVD and 50x lens with standard internal lighting  
 This unit plugs directly into a USB port on a computer.

CP 3000 - \$2,158 with 3rd filter & \$2,638 with Mighty Max motor - ultra clean filtering & long filter life.  
 The third filter serves as a polishing filter for ultra clean coolant.  
 Turbo 2000 - \$4385 - in stainless steel. Holds 10 - 10" filters. The open interior causes turbulence that increases efficiency by shifting flow to the most suitable area. An excellent unit for use as a polishing unit with a centrifugal filter system  
 Optical shops & Lab unit - \$1798, general lens grinding & other uses where appearance is essential. Quiet, clean pump & clean, white cover  
**Coolant Test Instruments**  
 All you need for monthly coolant tests  
 Recommended  
 Digital Brin Refractometer \$369.00 complete  
 pH Test Strips \$75 per tube of 100  
 Bacteria & Fungus Test Kit - Box of 10 - \$91.40  
 Graduated Cylinder \$19  
 Complete starter kit \$559.30 save \$21  
 Also available  
 Optical Refractometer 0 - 32% \$170  
**Coolant**  
 Coolube 220 - 5 gal. - \$190.99  
 Rusticool - is a synthetic high performance diamond wheel grinding coolant which combines high rust protection while minimizing cobalt leaching from carbide. Carbide Power Grind is highly resistant to bacteria and fungus.  
 Cobalt remover 4 oz. \$5.95

**Brazing Services**  
 Torch  
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 Environmental consulting  
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 Coolant Testing  
 Filtering Grinding Coolant  
 EPA compliance  
**Testing of Grinding Coolant**  
 Government certified testing  
 1. Particle size and count \$60  
 2. Turbidity \$30  
 3. Viscosity \$30  
 4. pH \$20  
 5. Conductivity \$34  
 6. Cobalt levels \$34  
 7. Chromium levels \$34  
 8. Cadmium levels \$34  
 Total lab test \$272.00  
 Books \$50 on line, \$100 printed & coil bound  
 Books we sell  
 1. Building Superior Brazed Tools  
 267 pages, 271 illustrations covering more than seventy topics.  
 2. Failure Analysis In Brazed Tools  
 97 pages and 165 illustrations.  
 3. Managing Coolants From Machining And Grinding Operations  
 T shirts  
 Coffee Mugs  
 We Buy Carbide Scrap and Grinding Swarf

# Gas Flux - A Great Product But You Have To Be Very Careful

- ✓ It may catch fire spontaneously.
- ✓ You can't put the fire out with water, you need foam.
- ✓ The container may explode.
- ✓ You need full protective gear including self contained breathing apparatus if it spills.
- ✓ It should be stored under Nitrogen.

We had a flier call about a product he was trying called Gasflux. He really liked it because it put flux into the torch flame and he didn't need any other flux. He had trouble getting it to the underside of the saw blade but he was working on that.

We found the Gas flux company on the Internet and contacted them. They sent a unit on a 30 day, money-back guarantee.

When Rick was putting it together he noticed that the directions made it very clear that you had to be 35 horizontal feet from any power source or heat source including switches, motors, transformers, hot pipes etc.

I read the MSDS and the warning didn't look that bad so I figured they were just being very careful.

Just to make sure I went online and did some checking. I also called my insurance agent and the local fire department. The fire department came back and determined that I would have to put in an automatic alarm system and automatic fire suppression, preferably foam but sprinklers would do. A quick estimate was \$35,000 for sprinklers in 4,000 sq. ft.

The research I did on the Internet revealed other MSDS sheets that gave a different impression. Different people have different opinions of the dangers of things. That doesn't make either one right or wrong.

Gas flux contains Methyl alcohol, Acetone and Trimethylborate. Methyl Alcohol and Acetone are both very flammable and pose serious health risks. Trimethylborate is much worse.

**Flash point** is the lowest temperature at which a liquid can form an ignitable mixture in air near the surface of the liquid. The lower the flash point, the easier it is to ignite the material. The source of ignition need not be an open flame, but could equally be, for example, the surface of a hot plate, or a steam pipe.

**Autoignition** is the lowest temperature at which vapors passing from the substance into the air will catch fire spontaneously if a small flame is present.

<u>Flash point</u>	<u>Autoignition</u>	
Trimethylborate	17.6 F - <u>Spontaneous ignition in air</u>	
Acetone	-4 F	688 C
Methanol	54F	851 F
Acetylene	64F	581 F

## **Trimethylborate MSDS**

Aldrich Chemical Company MSDS  
<http://hazard.com/msds/f2/bkn/bknmr.html>

### Health Hazards

Acute and Chronic:

Acute: may be harmful by inhalation, ingestion or skin absorption. Vapor or mist is irritating to eyes, mucous membranes & upper respiratory tract. causes skin irritation.

### First Aid Measures

Eyes: immediately flush w/copious amounts of water for at least 15 min.  
Skin: immediately flush w/copious amounts of water for at least 15 min while removing contaminated clothing / shoes. Remove & wash contaminated clothing promptly.

Inhalation: remove to fresh air. Support breathing (give oxygen by artificial respirator, call MD.

Ingestion: call MD immediately.

### Fire Fighting Measures

Flash point: 17 F

Extinguishing media: CO2, dry chemical powder, alcohol or polymer foam. Water may be effective for cooling, but may not extinguish the fire. Fire fighting procedures: wear NIOSH/MSHA approved SCBA (Self contained breathing apparatus) & full protective equipment. Prevent contact w/skin & eyes.

### **Extremely flammable.**

Use water spray to cool fire-exposed containers. Unusual fire/explosion hazard: Vapor may travel considerable distance to source of ignition & flash back. Container explosion may occur under fire conditions. Forms explosive mixtures in air.

### Accidental Release Measures

Spill release procedures: evacuate area. Shut off sources of ignition. Wear NIOSH/MSHA approved scuba, rubber boots, heavy rubber gloves. Cover w/activated carbon adsorbent, take up & place in closed containers, transport outdoors. Vent area / wash spill site after material pickup is complete. Neutralizing agent: none specified by manufacturer.

### Handling and Storage

Handling and storage precautions: store in cool, dry place under nitrogen. Keep away from heat, sparks & open flame. Keep tightly closed. Do not breathe vapor. Use non-sparking tools. Other precautions: moisture sensitive. Irritant. Avoid contact with eyes, skin and clothing.

I think this could be a very good product if you can handle the risk. It would void our insurance and the fire department wanted us to install about \$35,000 in sprinklers. So we won't be using it yet.

Bryan Machovina  
The Gasflux Co.  
Phone: 440-365-1941  
Fax: 440-365-3495  
800-253-7932  
E-mail: [gasflux@alltel.net](mailto:gasflux@alltel.net)  
PO box 1100  
Elyria, OH 44036



**Not only a pretty face but also great customer service**

Here is Emily, who is always perky and always happy to help customers. Emily's job is to help people find carbide, silver solder, filter systems and everything else we sell. If we can't supply you but we know who can we will refer you. No matter what you want we will work really hard to find it.

**\$1.50 a pound for Stellite® scrap.**

We had a customer who wanted to sell his scrap and got a quote of less than a dollar. Emily went to work and got him better than twice as much.

**The Brazing Book from Handy & Harman**

This is a really good reference on brazing available as a book, CD or online and it is free-  
<http://www.brazingbook.com/>

[www.therightcarbide.com](http://www.therightcarbide.com)

[www.carbideprocessors.com](http://www.carbideprocessors.com)

**A Truly Classy Guy**

**Ned Wood**

**Weyerhaeuser  
Warrenton,  
OR**



Hello to all at Carbide Processors.

I am Ned Wood, Al Bouchard's round saw filer. I have been tipping saws for two weeks now with the latest tips tinned by you. I wish to say that I am very pleased with the results. So far all of the tips look bright and well tinned. I have not had the problem with tip loss that I had experienced with some half dozen bags from last year. I have been able to turn the heat back down on my Hanna tipper. I have only lost a few tips from the bag labeled #2. Albert said that batch was done while he was there and you were experimenting with the temperature. So I must thank you all for helping us solve the problems we were experiencing.

Thank you to; Verna, Carmen, Tiana, Elisha, Licelda, Breanna, L.Grant and everyone else there who has worked on our tips.

Thank you  
Edwin (Ned) Wood  
Roundsaw Filer  
Weyerhaeuser, Warrenton

**Looking for a Bench man/ Saw filer.**  
Bay Area Saw & Service – Hollister,  
CA – 831-637-3940

**Used Equipment for Sale**

ICE 24" Knife grinder; FOLEY- Retipping fixture; Cincinnati - #2 Cutter Grinder with tooling, Cincinnati- Powered Work Head OLIVER- Ace Cutter Grinder with tooling call Marvin Miller at Midwest Sharpening Holton, MI 49425 (231)924-5953

**Nice free mugs.** The nice folks at Cherokee Saw & Tool in Coolidge, AZ sent us some nice mugs. The people at Cherokee have a really good reputation for quality and service. In addition they are innovative than most. You might give them a call 800-243-4342 520-723-5135

**Don't Worry About Bothering Emily – She works with her Dad**

We had a customer call Friday afternoon. He really, really needed parts for Saturday morning and no one else could help him. It took a couple calls and, on one of them he asked Emily if he was bothering her. Quick as a flash Emily said, "You're not bothering me, I work with my Dad."

I'm not sure exactly what she meant (and not sure if I want to know) but I do not that the whole reason we are here is to help folks.

**Carbide Processors, Inc.**  
**Northwest Research Institute, Inc.**  
**3847 S. Union Ave.**  
**Tacoma, WA. 98409**