



Sorry it has been a while for this newsletter. We did a lot of work for the Western Saw filers meeting. Then Emily had a baby. Finally we have been busy taking care of customers.

This is Emily's New Baby



Little Aaron Gray



Here are Emily and Aaron. Both are happy and healthy.



We have a strict "No Babies at Work" Rule. This is my office on Day 5 of that rule.

Westley Wilcox of The Cutting Edge in Billings, Montana has passed away after a long and courageous fight with cancer in various forms. To the end he was a gentleman and a big favorite of the girls here. He was a fine, hard-working, honest man. We liked him and we miss him.

Carbide Processors, Inc.

Northwest Research Institute, Inc.

Newsletter Holidays, 2011

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

sales@carbideprocessors.com www.carbideprocessors.com

Carbide is Cheaper Online See P. 5

<http://www.carbideprocessors.com/pages/sawtips.html>

Free, Free, Free Safety Glasses



This is our president, Tom, in a pair of our new safety glasses from Wolf Peak who are the makers of Edge Eyewear. The safety glasses come in dark, clear or with a light, antireflective coating. If you want a pair, e-mail sales@carbideprocessors.com or call 800 346-8274 and we will be happy to send them to you.



Safety glasses that fit over glasses without rubbing on the lens.

These are incredibly stylish and comfortable. They are also fully safety approved by ANSI (American National Standards Institute) and meet military specifications. They are rated by the military for a shotgun blast from 22 feet. (Don't try this. Just take their word for it.) We have full safety certification we would be happy to supply. These safety glasses are often seen on TV in shows about extreme sports.

800 346-8274

We Buy Carbide Scrap We Buy Grinding Sludge

Water based or Oil based coolants
Any coolant is fine

Sell Scrap and Sludge Now!
The price is expected to drop soon
It is still about \$250 - \$300 per 2# coffee can but that is down from \$350.
Call 800 346 - 8274 for quote.

Ship Scrap Cheaply

USPS Flat Rate boxes. We recommend 11 x 8.5 x 5.5 size with tape on it. It costs \$10.95 to ship anywhere in the US. It holds maybe \$400 to \$500 worth of scrap. Scrap prices vary daily. Today, December 1, we are paying \$8.25 with braze alloy on it and \$9.00 per pound with no braze alloy. It helps if you put the scrap into coffee cans, boxes, or plastic bottles and then put those in the box.

China Is Raising The Price Of Your Carbide – We can Help

China shipped 405 tons (tungsten contained) of ammonium tungstates to the United States in the first three months of this year, accounting for nearly 88 percent of total U.S. imports and prices have risen due to a crackdown on exports. There is a shortage of material because of their internal demand. For the past 20 years they've been trying to move away from exporting raw and intermediate materials to making more finished products, and as a result the export quotas for APT have decreased every year," an end-user said.

Better Carbide at Better prices

We deal with 26 suppliers and sell 126 different grades. We can solve problems and save you money on carbide and braze alloy. (See P. 5)

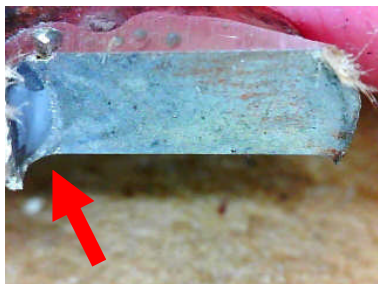
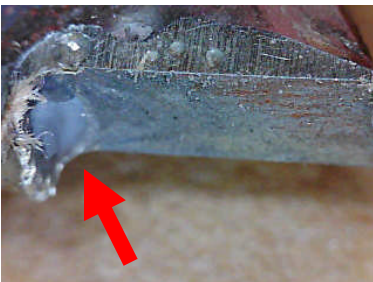
Classic Bad Surface Tip Loss

This is the most clear and obvious case I have ever seen.

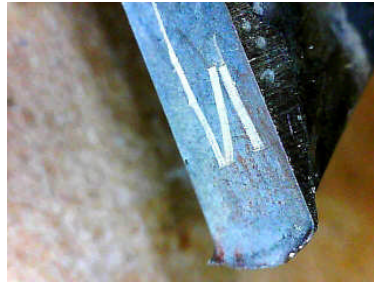
These tips had been plated to make them wet and braze well. The plating did wet and braze well but the plating did not stick to the tungsten carbide saw tip at all well. This is entirely the fault of the manufacturer of the carbide saw tips and in no way reflects on the user.



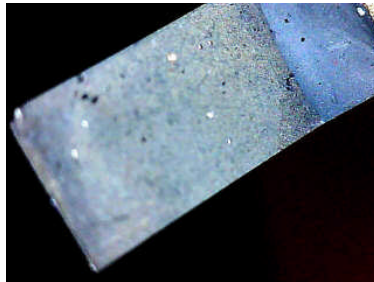
1. Here are two pictures of representative notches in the steel saw body where the tips failed. Two features are significant here. At the left of either picture you can see where a small bit of carbide did adhere. On the rest of the notch you can see a sort of textured gray layer. This is the underside of the plating applied to the tungsten carbide. The braze alloy stuck to the steel and the plating stuck to the braze alloy and not to the tungsten carbide.



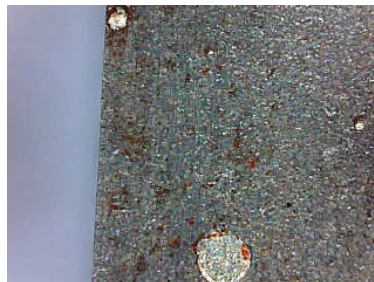
2. Below is a photograph of one of the notches on the steel saw body. I took a small box knife and scratched it. The plating came off readily exposing the gold layer of braze alloy underneath it.



3. You can see the same thing in the four pictures below. The top two pictures below show two notches from the saw blade. On these pictures you can see the gray layer the plating as well as little gold specks which is the braze alloy. The braze alloy held to the tungsten carbide wherever you see the gold spec. This may be as much as 1% of the total surface area but it appears to be much less.



4. The following picture is a close-up to give you a better view of the gold dots. You can clearly see that are braze alloy exposed through holes in the plating.



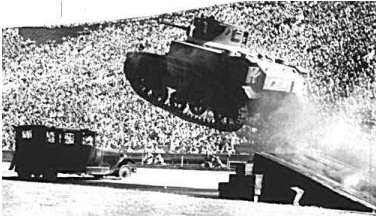
4. Below are two pictures of the butt end of the saw tips. Both pictures show essentially the same failure mode for the carbide. At the very bottom of the pocket the carbide actually snapped instead of having the surface plating peel off.



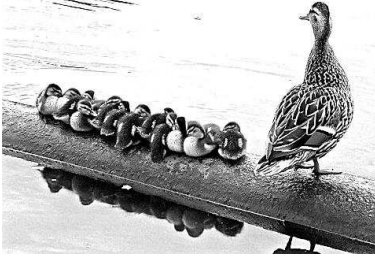
5. Below are pictures of the very edges of two of the failed saw tips. The top picture most clearly shows the failure mode. You can see where the braze alloy has been lifted off the tungsten carbide surface. If these tips had been properly prepared you would've seen nothing but ruptured carbide as in the four pictures above.



Saw Filer Meeting



I drove down to Portland for the Western Saw Filers Educational Association 50th Meeting.



The meeting was at the Monarch Motel. The Monarch did a really nice job. They really had their ducks in a row.



They worked hard and the quality of food and service really showed it,



Friday night was a social get together.



Lots of old friends reconnecting



Lots of guys brought their wives for the shopping.



Pictures of Elk, fish and grandkids were very popular



Vendors had booths set up to show off new products

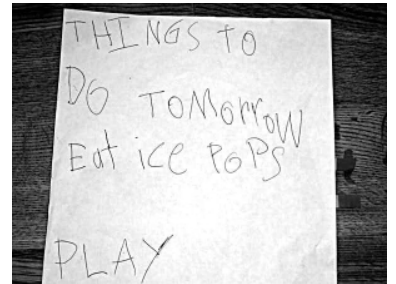
Saturday was Training & Instruction



I had done some computer work setting up a web site, Facebook and YouTube for the saw filers so they asked me to explain what I had done to the group.



It was a very large group this year.



The board had a great agenda laid out.



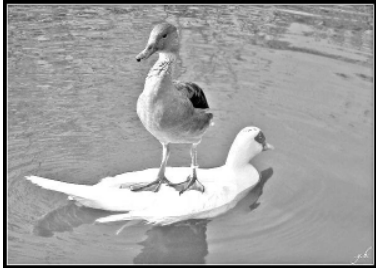
The attendees were sharp and they were there to learn. (Seriously, the folks who attended were there to work hard. They were bight, very interested and asked great, tough questions.)



It was all business, all day.



A lot of information and opinions were exchanged over lunch.



A recurring theme was the advantages of saw filers working together.



There were lots of discussions about strategy and ways to do things better.



As always, safety was an essential part of every discussion.



It was a very successful event and everyone was well pleased.

Women vs. whiskey

1. A real woman is a man's best friend.
2. She will never stand him up and never let him down.
3. She will reassure him when he feels insecure and comfort him after a bad day.
4. She will inspire him to do things he never thought he could do; to live without fear and forget regret.
5. She will enable him to express his deepest emotions and give in to his most intimate desires.
6. She will make sure he always feels as though he's the most handsome man in the room and will enable him to be the most confident, sexy, seductive and invincible...

(No wait...Sorry. I'm thinking of whiskey. It's whiskey that does all that stuff. Never mind.)

The Pilot and the Priest

A priest dies and is waiting in line at the Pearly Gates. Ahead of him is a guy who's dressed in sunglasses, a loud shirt, leather jacket, and jeans. Saint Peter addresses this cool guy, 'Who are you, so that I may know whether or not to admit you to the Kingdom of Heaven.' The guy replies, 'I'm Jack, retired airline pilot from Houston.'

Saint Peter consults his list. He smiles and says to the pilot, 'Take this silken robe and golden staff and enter the Kingdom.' The pilot goes into Heaven with his robe and staff.

Next, it's the priest's turn. He stands erect and booms out, 'I am Father Bob, pastor of Saint Mary's for the last 43 years.'

Saint Peter consults his list. He says to the priest, 'Take this cotton robe and wooden staff and enter the Kingdom.'

'Just a minute,' says the good father. 'That man was a pilot and he gets a silken robe and golden staff and I get only cotton and wood. How can this be?' 'Up here - we go by results,' says Saint Peter. 'When you preached - people slept. When he flew, people prayed.'

I knew you'd like it!

Scientific American September, 1911

Horses and Heat

"The health department of New York city, which has the task of removing dead horses, reported that during the six working days of the hot period of July, 171 horses died each day—a total of 1,026. These horses represented over half a million dollars cash value, which was entirely wiped out in a single week. It is estimated that the money would pay for a sufficient number of electric vehicles to do all of the work done by the horses, and do it more efficiently and economically."

Scientific American September, 1861

"The British merchant ship Star of the East, while on her passage from Bombay for Liverpool, was lost while beating through the Mozambique Channel. At the official inquiry into her loss, the first witness was the sailmaker of the ship, who stated that when she struck she was about a mile off the shore. Whereupon Mr. Tyndall, the attorney for the government Board of Trade, says to him, 'Didn't you think it strange that the ship should be so close in shore?' Witness—'We're not allowed to think; there's only the cook and the captain allowed to think on board a ship.' The answer was a sockdologer, and the representative of their lordships, after this brief exposition of sea law, made no more interruptions."

Navy SEAL Quote of the Week

Dana Perrino (Fox News) describing an interview she recently had with a Navy SEAL. After discussing all the countries he had been sent to, she asked if they had to learn several languages.

His reply: "Oh no ma'am, we don't go there to talk."



Carbide and Silver Solder (Brazing Alloy) is Cheaper Online

GO TO:

<http://www.carbideprocessors.com/pages/sawtips.html>

The prices you first see are full retail prices. Call or email for your own discount code to use at checkout.

There is an automatic 5% discount on repeat orders.

Explanation:

We can't do much about China controlling the market but there is still a bunch we can do for you.

Three of our biggest costs are: having an inventory, people answering the phone when they don't need to and loaning money at no interest especially to people that pay late.

The Internet solves all these problems so we can afford to sell for less money.

If you buy online with a credit card we will give you a discount. It is easier for us and we get paid upfront.

We sell quantities of 100, 250, 500 and 1,000 online. There are lower prices as the quantities get larger.

There is an automatic 5% discount for returning customers.

You can have your own, extra discount based on the volume you do.

The lower prices are only online. You cannot call and get the lower prices.

You can call or email to get explanations and get set up, of course.

You can always call 800 346-8274 and we will explain the process to you as well as giving you your own discount.

We will be happy to add more products as you wish.

The online prices you first see are full retail prices for anyone.

This is a new project and we are sure there are things we could do better but we won't know what they are until we try this in real life.

<http://www.carbideprocessors.com/pages/sawtips.html>

China is Raising Carbide Prices cont.

Supply is very low, prices are very high, choices in sizes and shapes have been much reduced and delivery is all too often uncertain.

To cope with this we have several times the largest inventory in house we have ever had. We have had to do this because we just can't count on delivery. We keep certain sizes and grades on the shelf for particular customers. We order well in advance for replenishment to make sure we have them. Now we are finding that a promised 4 to 6 week delivery may be three months.

It has gotten so bad that we are using a list of 26 carbide suppliers to try and fill our customers' demands on time and at a good price. We seem to be doing better than most judging by customer comments and our increase in sales. However the labor commitment is huge so our transaction expense is high. Things may ease in the raw material side of the industry between 2013 and 2015. However that raw material still has to be refined and manufactured into saw tips, router bits, rods, etc.

We currently sell 126 different grades of carbide on a regular basis. Whatever problem you are having, we have a solution.

What you can do:

Here are some suggestions from Johan Holm. If you have problems getting what you want when you want it he suggests that you consider the following: 1. Accept later delivery 2. Different grade of the same product 3. Larger size of the same product 4. Other style 5. Metric size instead of inch size.

Rick Driver

Desert Cutting Tools Inc
Bright and proactive

I got a call from Mr. Driver.

He was having a problem and wanted to know if I'd heard of anybody else having a similar problem. I won't make his problem public because that gives his competition an opportunity to say unfair things about him.

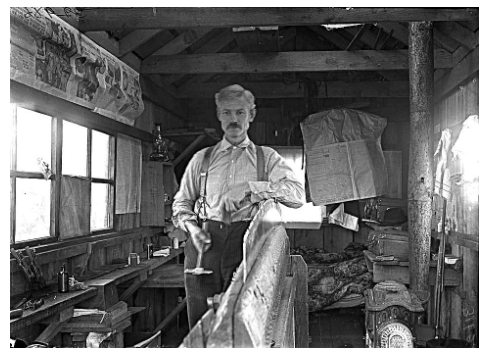
Anyway, he was having a problem and, when I asked around I found other people were. It seems to be an ongoing, intermittent problem with sawblades made by one of the large manufacturers.

This is where people in the saw business, even competitors, acting together can make a huge difference. One of the very best places to do this is the Industrial Tool Sharpening Forum <http://sharptools.ning.com/>

If you don't want to go on there and post that you have a problem then contact me and I'll go post. I pretty well think that everyone realizes that I don't make or sharpen saws or tools but I do a lot of failure analysis.

Our policy on this newsletter is to only say nice things about people. As an example, I have said that Rick Driver is bright and that, when he has a problem, he goes out and looks for a solution. I consider those both admirable qualities.

Railroad Car Sawfiling – note bunk in background



There is no rule that Saw Filers have to be handsome people. It just seems to turn out that way.

Review of Kid's Tool Boxes

The grandkids are growing up and they like using tools. I went on line looking for kid's tool kits. All I found were from Lowes so I bought four.

Kid's Tool Boxes – The Box



I bought the Lowes online for \$5.97. This is the box on the right. I tried to stand on it and it broke as soon as I put any weight on it. So I went to Home Depot and spent \$6.97 on a bigger tool box that I could stand on without breaking it.

Lowes RTB PLASTIC TOOLBOX

\$ 5.97 Pretty flimsy box. Plastic is just too thin. Another \$0.50 worth of plastic would have really helped. **Home Depot** - \$6.97 Tool box - Real tool box that a 240# man can stand on.

Kid's Tool Boxes – Lowes 8 piece set



RTB 8PC TOOL SET \$ 11.22 8+
Saw is pretty flimsy. Pretty likely to get bent and crimped. Real, sharp teeth. It will cut pretty well until it gets bent. Maybe a couple minutes. Tape measure is pretty accurate. Snap back spring is too strong. Likely to snap somebody's finger. No real injury, just some pain. Real hammer head but looks dorky and doesn't balance well. Not much leverage. "C" clamp with handle. Pretty nice little clamp. Has release so you can slide the screw in and out without twisting it. Screwdrivers are pretty good. They are magnetized which is pretty cool. Wood rasp is a real rasp. Teeth stick out to far to be

easy to use. How often does a kid need a wood rasp?

20PC CARPENTERS TOOL KIT FOR KID \$9.98 Ages 7 – 12

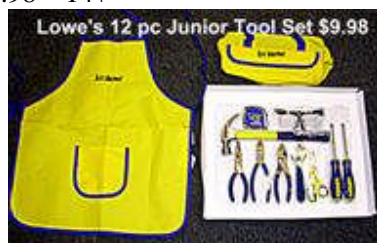


Little gloves – o.k. Little tool belt. Not sure it would fit 12 year olds. Flimsy, plastic T square and ruler. Marks are not inked so very hard to read. Not accurate. Worse than useless. Little hammer where the head is pinned in place. Do not like this at all.



Flimsy tape measure with really rough recoil. 3 oblong pencils and sharpener to sharpen oblong pencils. Sharpener is pretty clever. 1 stubby, reversible screwdriver with Phillips and straight ends. 2 little plastic clamps. Pretty weak. Swivel ends keeping flopping into the jaws and interfering with closing. Hard hat - Halloween costume quality or less. Not much adjustment. It will be uncomfortable to wear. Rainbow suspenders are pretty cool. 2 flimsy carabineer clamps with springs that are too strong.

Lil' Helper 12pc Junior Tool Set \$ 9.98 14+



Apron is vinyl lined so it will be uncomfortable in warm weather. Neck strap is O.K, but thin. Well sewn. Can't pull it apart or pull pocket off. Nice little bag with Velcro pocket on the side. Tape measure is pretty flimsy and release button is way too stiff. Real

hammer. Toy scissors. Adjustable wrench works but is really loose. It is going to be really frustrating to use. Slip joint pliers are o.k. but I don't like slip joint pliers. Needle nose pliers are pretty good. I like the magnetic screwdrivers. Side cutters are pretty dull. Won't cut much. At 14 a kid needs real tools.

So that is what I got from Lowes.

These are sold as tool sets but they are much more toys than real tools. I think a kid should have real tools. My boy used to come to work with me on weekends. When he was 5 or so I gave him a hammer, a coffee can full of assorted nails and scrap lumber. He was happy as a clam

Tom's Tool Set

I really didn't like any of the tool sets. They seemed more like poor quality toys than anything else. The set for a 14 year old was insulting. I went to home Depot to see what I could do.



2 little ratcheting screwdrivers	2	\$2.00
Hammers	2	\$9.88
Torpedo level	1	\$2.88
tape measure	1	\$2.94
pliers	4	\$6.88
Adjustable wrenches	3	\$6.88
2 pulleys	2	\$4.76
screwdrivers	10	\$6.88
locking pliers	2	\$6.88
nails	1	\$4.27
screw assortment	1	\$4.41
fastener assortment	1	\$4.41
screwdrivers	10	\$3.00
clothesline	1	\$6.50
Tool box	1	\$6.97
flexible rulers	2	\$3.94
44 total tools	44	\$83.48

I bought mostly the special purchase, Work Force Stuff. I have better tools and I sure sell better tools but these are still real tools. I got a little carried way. A couple hammers, some real nails, a couple old pallets and some scrap lumber would be a great "tool set" for kids.

Super "C" Carbide Grade

Tougher than C1 - Better wear than C3

What Makes Super C Tips Truly Superior

1. Superior Abrasion Resistance - Abrasion or straight wear is countered by smaller, better grain size.
- 2 & 3. Superior Adhesion and Diffusion Resistance (corrosion and chemical attack) Super C grade of carbide has an extremely fine structure so there is very little binder presented to the material being cut. This, combined with the special metallurgical formulation the Super C binder (hint - it's not just plain Cobalt) creates an extremely wear and corrosion material for use in wood, plastic or non-ferrous metals.
4. Superior Fatigue Resistance

And People Really Like Them - Call Today To Try Them - Most Sizes Readily Available

Super C	Hardness (HRA)	T.R.S. (psi)
92.2 - 92.4		530,000 +

Typical C2 values

	Hardness (HRA)	T.R.S. (psi)
C2	92.1	334,000
C2	91.8	334,000
C2	91.5	377,000
C2	90.4	435,000

Typical C Values

	Hardness	T.R.S. (psi)
C1	89 - 92.4	350,000 - 360,000
C2	91.2 - 92.9	250,000 - 400,000
C3	91.4 - 93.6	270,000 - 350,000
C4	89.6 - 93	260,000 - 450,000

Sawmill Grade Tips

- * Transverse rupture strength well above 500,000 psi.
- * Rockwell A hardness above 92
- * Alloy binder for corrosion resistance
- * Grain structure to inhibit both crack initiation and crack propagation
- * Micro grain or mixed grain for superior wear

Carbide Processors, Inc.
800 346-8274

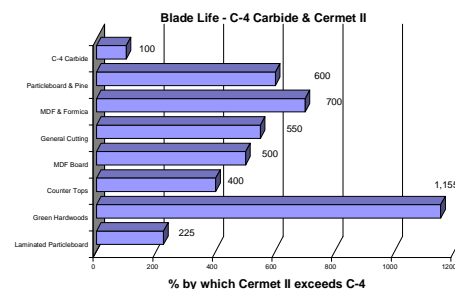


Cermet II® 8 days instead of 5 in MDF

Three weeks and three full loads of double side melamine laminate instead of 1 week and 1 load with carbide

1. 5 blades with standard C-4 carbide cutting 45 lb. single and double sided vinyl-laminated particle board
* Cermet II - 15,088 meters / old grade - 6706 meters for **225% as much run life**
2. KM-16 industrial saw cutting 101.6 mm x 152.4 mm (4" x 6") Green hardwoods, oak, hickory, maple and walnut using 11 blades with standard C-4 carbide
* Cermet II / 462 hrs / old grade - 40 hrs **1,155% as much run life**
3. 406 mm (16") 100 teeth cutting countertops
* Cermet II - 4 weeks / old grade - 1 week (4 times) **400% as much run life**
4. 406 mm (16") 80 teeth cutting MDF Board
* Cermet II - 10 days / old grade - 2 days (5 times) **500% as much run life**
5. 305 mm (12") 100 teeth TCG Miter cutting oak, Compressed Fiber Board, Plastic
* Cermet II - 154 hrs / old grade - 28 hrs (5.5 times) **550% as much run life**
6. 305 mm (12") 60 teeth cutting MDF, High Pressure Laminate (Formica)
* Cermet II - 56 hrs / old grade - 8 hrs (7 times) **700% as much run life**
7. G 1060A on Chop Saw cutting Particle Board and Pine Dowel Rods
* Cermet II - 48 hrs / old grade - 8 hrs (6 times) **600% as much run life**

Use Cermet 2 instead of carbide and make your life much easier



Cermet II® Successes

1. Several times the life in a window and door plant.
2. 3 times the life in Corian.
3. 8 days instead of 5 in MDF and we have an even better grade coming.
4. Twice the life in beetle killed Lodge Pole pine.

Benefits You Get

- * Grinds like regular carbide
- * Gives a better edge than carbide
- * Stays sharper longer than carbide
- * Great increase in fracture toughness.
- * More corrosion-resistant
- * Better at high temperatures
- * Cuts faster
- * Cuts faster & longer yet is tougher
- * Longer runs and less downtime.

Report from Marvin Windows

On the saw that we tried. How many times we resharpen a blade before we order new or have retipped we are not sure. Most blades get damaged by hitting something so we have the carbides retipped a lot. How often do regular blades have to be resharpened? We normally have our carbide tipped blades sharpened every week.

The new Cement II blade normally lasts twice as long before it gets damaged. The best so far is four weeks and one and a half million cuts before we changed it out which is four times longer.

Hope this helps and keep up the good work on those tips.

Nathan Hull, Grinderman
Marvin Wood Products

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Carbide and Silver Solder (Braze Alloy) is Cheaper Online

If you buy online with a credit card we will give you a discount. It is easier for us and we get paid upfront.

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**The lower prices are only online.
You cannot call and get the lower prices.**

You can always call 800 346-8274 and we will explain the process to you as well as giving you your own discount.

Much Better Carbide Grades

You really should try our Super C and Cermet 2 grades of saw tips.

Super C replaces all grades from about a C 1 1/2 to a C 3 1/2. It gives much longer life and is much harder to break than any of these grades.

Our Cermet 2 replaces C-4 and gives much, much longer life. The Cermet 2 is much better than the original cermet grades. Cermet 2 grades braze and grind just like C-4 carbide but stay sharp a lot longer.

**Braze Alloy in Small Quantities at
Good Prices**
800 346-8274

We Also Sell Flux
White, Black and Purified Black

Want \$1,000.00 or more?

We Buy:

Carbide Scrap

Grinding Sludge (any kind of coolant is fine)

Old Carbide inventory

Inside this Issue:

1. Analyzing and Preventing Tip Loss
2. Saving Money on Carbide
3. Saving Money on Braze Alloy (Silver Solder)
4. Review of Kid's tool sets
5. Make Money Selling Your Grinding Sludge (any coolant is acceptable).
6. Make money selling scrap carbide
6. Make money selling old carbide Inventory

Plus some pretty good jokes, funny pictures and pictures of Emily's Baby. (A fine, big, boy. He is big enough and handsome enough to be a Saw Filer some day.)