



President's Message

Everybody Likes the Girls

Last month I wrote about how some folks thought I was a pain because I was too fussy. That was me, Tom, and not the girls.



(My daughter Jacque, left, looking fetching in one of our free straw hats. Another daughter, Emily, right, with her shirt tail out rushing to fill a last minute order.)

I am Tom Walz and I own the company. I started in 1981 in my garage with my last \$500. Always loved science so I invented new stuff.

About 3 years ago Emily came to work for me and Jacque followed about two years later. They are bright, personable, charming, intelligent and hard working. (O.K. they are actually my step-daughters so I can't take any credit for any of that.

They answer the phone fast, keep promises and work really hard to help folks. They really want the business to succeed because, if it doesn't I will end up living in somebody's basement.

They keep me in the back doing research, failure analysis and inventing. This is probably just as well. I have just never been good at remembering names or faces. In addition, many of our customers are so incredibly good I am sort of in awe of them. I think maybe I come off as a little stiff. The girls are more like golden retrievers. They just love to talk to anybody.

Carbide Processors, Inc.

Northwest Research Institute, Inc.

Newsletter June, 2008

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



Spindkool Back in Stock

This is a great product line of all natural, fully biodegradable coolants. About 80% of the people who try it really like it. We were out for a while but we just got a new shipment.

Snook's Saw (503) 581-2570

If you want to try it, and you really should, call Snook's saw in Oregon or call us directly (800) 346-8274

Good Prices

We Sell silver solder (brazing alloy) and carbide at good prices.

We pay good money for scrap carbide and scrap Stellite®.

Brazing Video Controversy

We have a free brazing video on line and we can send you a disk if you wish. It was done by Russell and Jesse Hartley of Anthony Forest Products in Strong, AR and Don Wallinger of West Coast Saws in Tacoma, WA.

Recently it was shown at the Southern Saw filers meeting and caused some discussion about whether the methods shown were right or not.

We selected these two operations because they are extremely good. They have no tip loss and extremely little tip breakage. The way they do it is 'right' because it works very well.

However it is not the only right way. There is no single right or wrong way, just what works best for you in your operation.

Cut Carbide Costs



Super C carbide costs about the same as ordinary carbide but runs 2, 3 up to 5 times as long. It is tougher than C1 and runs longer than C4.

You can eliminate saw changes, buy half the carbide and reduce diamond wheel use. Super C dramatically reduces unscheduled saw changes.

Super C is really cheap because I made a mistake. I set the price before I knew how good it really was. Now we have so many people using it that we can't really charge what it is actually worth. Besides Emily and Jackie love selling it because it makes the customers happy. (800) 346 -8274

Standard Edger Saw 20" 24 tooth
- \$100



Edger Saw with Cermet 2 tips

20", 24 tooth lasts 2, 3 even 5 times as long, uses half the carbide, needs half the sharpening, needs less hammering & teeth don't break \$107 – only seven dollars more.

\$0.30 for regular carbide \$0.59 for Cermet 2. No idea how expensive Stellite® is now.

Equipment, Ltd.

Carbide Saw Grinding Machinery



Akemat U6-R2
Automatic face and top grinding machine with automatic loading system
*Simple, convenient operation

- *Wide range of operations
- *Intelligent sequence organization
- *Fast loading processes, short distances, fast, simple exchange of the loading carriage
- *Tooth face, tooth top, hollow face



Akemat B10
automatic face grinding machine
New – diamond wheel lift-off system
*Automatic wheel protection

- *Hydraulic saw blade clamping
- *Automatic safety return feature
- *Full machine enclosure and full flood coolant



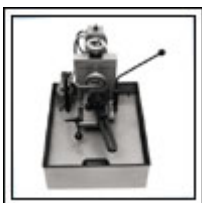
Akemat F10 CNC
double side grinder
2 new grinding programs to do radius side grinding and polygonal side grinding

- *3 CNC controlled servo motor driven axes
- *Capable of using 3" or 4" diamond or CBN wheels
- *Full machine enclosure
- *Automatic central lubrication system



Akemat U10 CNC
top/face grinder
Original periphery grind system
*3 CNC controlled servo motor driven axis

- *New - oscillation program for top grinding
- *New – steel relieving program
- *New – repaired tooth program
- *Automatic central lubrication system



F 1600 / F 1700
manual side grinder
Simple set-up, high precision side grinder
*1/2 hp poly-v-belt driven spindle

- *Able to grind strobe inserts with 7" stroke on fl-700
- *Saw blade diameter from 2" to 26"
- *Radial angles from -20 to +20
- *(scoring saws, v-groovers)



Kirschner grinding machines
Manual and automatic double side, strob and universal grinding machines

- *Easy operation
- *Rapid set-up time
- *High removal rates

New Equipment



Vision Works IS800
Saw Blade Inspection System

For inspecting saw blades from 6" to 32" diameter. Complete with multi stand and spindle with 5/8" arbor and one set of 3.5" flanges, computer with 19" flat screen monitor, video acquisition and measuring hardware and software, Panasonic camera with 5X to 50X lens, dual bundle fiber optic light set and light box. Wireless keyboard, mouse and ink jet printer. Complete with Vision Works software version 2.



Ceia USCM 1G 2400 / USCM 1G 1400
HIGH PERFORMANCE
ULTRASONIC
CLEANING UNIT
High Efficiency and

Reliability
Stainless Steel Construction
Consistent Cleaning Quality in All Working Conditions
Four-Level Power Adjustment

Special Equipment



Ilmetch Automatic Knife Grinders for high speed steel and carbide tipped knives
Adjustable front stop alignment bar for

quick knife set-up
Dual blade holding system
Automatic wheel down feed



Kirschner Brazer LG-HF 800
MANUAL
Functional and Space Saving Design
Modern and Powerful High

Frequency Technology
Water Cooled Brazing Tongue
Quick and Easy Handling



PLA Automatic & Manual Saw Polishers
quality finish
easy-to-use
Full Flood Coolant
Integrated Wheel

Dressing Device
100 RPM Polishing Table
10" Polishing Wheel



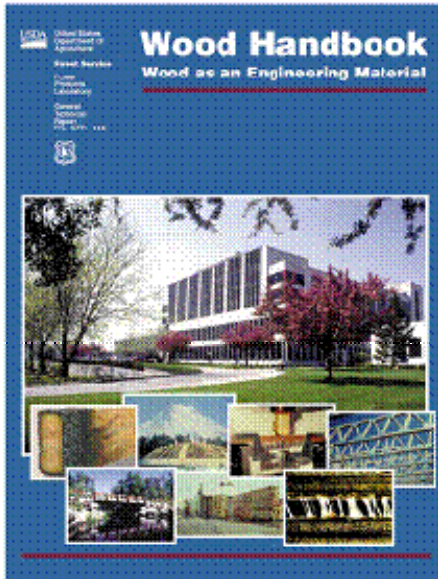
SK Series Automatic Sand Blasters
inexpensive, easy-to-use, automatic sand blaster - Two Nozzle System - Three Nozzle Option -

Automatic Timer for Blast Cycle - Foot Valve Activated Saw Clamp

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Great Free Technical Resource



Wood as an Engineering Material
Free from the USDA

<http://www.fpl.fs.fed.us/documnts/fplgtr/fplgtr113/fplgtr113.htm>

Don't Turn Your Back on Great Service, Quality and Prices



Call us today 800 346-8274



True Friendship -from Dave Garrett

Are you tired of those sissy 'friendship' poems that always sound good, but never actually come close to reality? Well, here is a series of promises that actually speak of true friendship. You will see no cute little smiley faces on this card, just the stone cold truth of our great friendship.

1. When you are sad - I will help you get drunk and plot revenge against the sorry bastard who made you sad.
2. When you are blue - I will try to dislodge whatever is choking you.
3. When you smile - I will know you are thinking of something that I would probably want to be involved in.
4. When you are scared - I will rag you about it every chance I get until you're NOT.
5. When you are worried - I will tell you horrible stories about how much worse it could be until you quit whining.
6. When you are confused - I will try to use only little words.
7. When you are sick - Stay the hell away from me until you are well again. I don't want whatever you have.
8. When you fall - I will laugh at your clumsy ass, but I'll help you up.
9. This is my oath.... I pledge it to the end. 'Why?' you may ask; because you are my friend.

Send this to 10 of your closest friends, then get depressed because you can only think of 4.



Apparently Dave has the same kind of fishing buddies that I do.



Proof that Men are Smarter Than Women

Ray and Bubba were standing at the base of a flagpole, looking up.

A woman walked by and asked what they were doing.

"We're supposed to find the height of the flagpole," said Bubba, "but we don't have a ladder."

The woman took a wrench from her purse, loosened a few bolts, and laid the pole down. Then she took a tape measure from her pocket, took a measurement, announced, "Eighteen feet, six inches," and walked away.

Ray shook his head and laughed. "Ain't that just like a woman! We ask for the height and she gives us the length!"

Recognizing Runout Problems



Holes in the braze alloy

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**

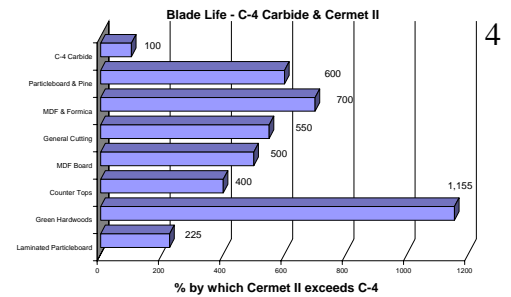


**Cermet II®
8 days
instead of 5
in MDF**

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 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

Several times the life in a window and door plant.

3 times the life in Corian.

8 days instead of 5 in MDF and we have an even better grade coming.

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 sharpen 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 sharpened? We normally have our carbide tipped blades sharpened every week.

The new Cement II blade normally last 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

ICE - IN CASE OF EMERGENCY

From Dave Garrett, Mike West and Linda Murphy

Apparently this is a standard procedure all paramedics follow at the scene of an accident when they come across your cell phone.

ICE - "In Case of Emergency"

We all carry our mobile phones with names & numbers stored in its memory but nobody, other than ourselves, knows which of these numbers belong to our closest family or friends.

If we were to be involved in an accident or were taken ill, the people attending us would have our mobile phone but wouldn't know who to call. Yes, there are hundreds of numbers stored but which one is the contact person in case of an emergency? Hence this "ICE" (In Case of Emergency) Campaign. The concept of "ICE" is catching on quickly. It is a method of contact during emergency situations. As cell(mobile) phones are carried by the majority of the population, all you need to do is store the number of a contact person or persons who should be contacted during emergency under the name "ICE" (In Case Of Emergency).

The idea was thought up by a paramedic who found that when he went to the scenes of accidents, there were always mobile phones with patients, but they didn't know which number to call. He therefore thought that it would be a good idea if there was a nationally recognized name for this purpose. In an emergency situation, Emergency Service personnel and hospital Staff would be able to quickly contact the right person by dialing the number you have stored as "ICE."

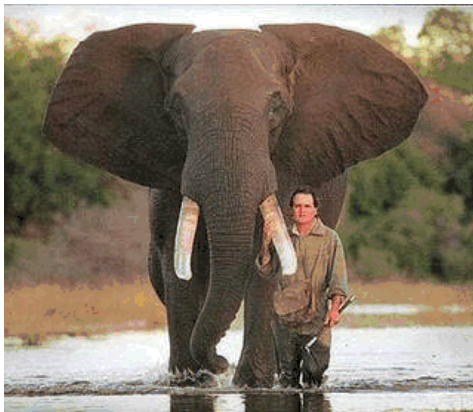
For more than one contact name simply enter ICE1, ICE2 and ICE3 etc.

Please forward this. It won't take too many "forwards" before everybody will know about this. It really could save your life, or put a loved one's mind at rest. ICE will speak for you when you are not able to.

Animal Gratitude

From Sonoma saw through Dave Garrett at Warm Springs

Wow...you have got to read this all the way to the end...awesome!!!!



In 1986, Peter Davies was on holiday in Kenya after graduating from Northwestern University.

On a hike through the bush, he came across a young bull elephant standing with one leg raised in the air. The elephant seemed distressed, so Peter approached it very carefully.

He got down on one knee and inspected the elephant's foot and found a large piece of wood deeply embedded in it. As carefully and as gently as he could, Peter worked the wood out with his hunting knife, after which the elephant gingerly put down its foot. The elephant turned to face the man, and with a rather curious look on its face, stared at him for several tense moments. Peter stood frozen, thinking of nothing else but being trampled.

Eventually the elephant trumpeted loudly, turned and walked away. Peter never forgot that elephant or that day.

Fifteen years later, Peter was walking through the Chicago Zoo with his teenaged son. As they approached the elephant enclosure, one of the creatures turned and walked over to near where Peter and his son Cameron were standing.

The large bull elephant stared at Peter, lifted its front foot off the ground, and then put it down. The elephant did that several times then trumpeted loudly, all the while staring at the man.

Remembering the encounter in 1986, Peter couldn't help wondering if this was the same elephant.

He summoned up his courage, climbed over the railing and made his way into the enclosure. He walked right up to the elephant and stared back in wonder. The elephant trumpeted again, wrapped its trunk around one of Peter's legs and slammed his stupid ass against the railing, killing him instantly.

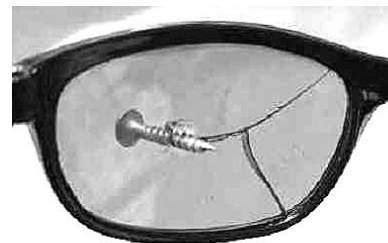
Probably wasn't the same elephant.

This is for my friends who send me all those heart-warming stories. Reality!



I Know This is True

I took a blackberry thorn out of my Golden Retriever's paw. When my back was turned he ate my sandwich.



Cheap Foreign Carbide

Why we went the High Tech, High Performance direction instead.

Everybody is all excited about cheap Chinese carbide. It is a little cheaper but a lot of it is really bad. It will get better eventually and some of it is now pretty good. However China has problems because carbide from India is cheaper yet and India has problems with even cheaper carbide from Pakistan. They all have problems because their material costs are going up and labor costs are really going up.

Mike West, Cascade Hardwoods, sent me a book called The World is Flat. One of the things it says is that everybody in the world is competing with everyone else. That also includes labor. Chinese workers making flat screen TV's want to be able to buy one. China has one of the highest rates of wage increase in the world so cheap carbide won't stay cheap for long.



I think America was attacked when the Twin towers were destroyed just as it was at Pearl Harbor. Somebody doesn't like us and wants to destroy us, our families and take everything we have.

I think somebody is also trying to destroy our economy. Our balance of trade is terrible, the dollar is getting weaker and our debt level is horrible and getting higher.

America has always been slow, horribly slow to react when threatened. We are real nice folks who want to live and let live. If the terrorists hadn't blown up the twin towers we wouldn't be fighting them. Those threatening us economically are smart to take it slow.



This is a picture of the USS New York which was built with steel from the World Trade Center.

It travels 500 miles a day carrying a Marine anti-terrorist battalion (about 700 Marines) including M1A1 Abrams tanks, amphibious assault craft and a huge variety of transport and attack helicopters. These Marines possess capabilities such as intelligence, counter-intelligence cells, combat engineers, enhanced nuclear, biological and chemical teams, and riflemen trained in urban combat.



This is a Marine Abrams tank



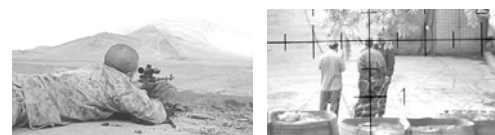
A tank going over an enemy roadblock



This is an Apache helicopter. Those are missiles under the wings and Gatling guns in the nose.



These are Marines at work



America has always been slow to react when threatened. Once we do react we send the finest troops with the finest weapons. America has always won through advanced technology. A big part of it was manufacturing technology. One Tiger tank was better than one Patton tank but not nearly as good as ten Patton tanks.

We are not only losing our manufacturing base we are actively rushing to give it away.

Two Great Online Discussion Groups

Industrial Cutting Tools

Tim Cook runs a discussion group on Yahoo. "This free forum is EXCLUSIVELY for professional sharpeners and tool manufacturers who enjoy sharing information about the sharpening or manufacture of industrial cutting tools. Discussion is open to any topic relating to cutting tools used in the machining of any material used by industry."

<http://finance.groups.yahoo.com/group/IndustrialToolSharpening/>

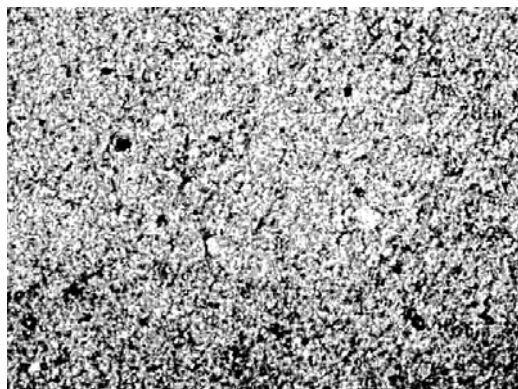
Primary Wood

Mike West has an email group he runs through email messages.
westwm@chwa.com

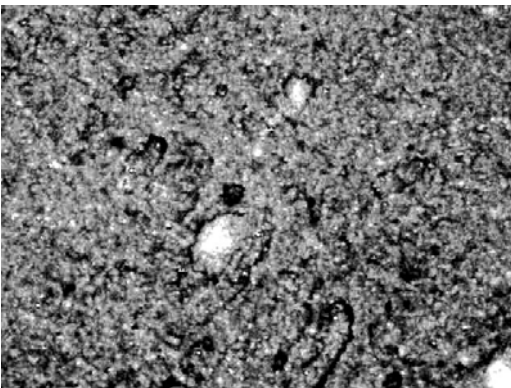


Purified Flux

30% To 100% Better Braze Joints



Purified flux at 50x magnification



Standard flux at 50x magnification
Smooth, even and consistent
Large grains of foreign material

You can see and feel the difference immediately.

Purified flux is black flux that has had extra processing steps. These

processing steps take the black article out and leave the flux a rich, creamy brown color. If you take a little of each flux and rub it between your fingers you can feel that Purified Flux is not only smoother but the particles are smaller and there are no extra large particles.

Flux is made to prevent oxygen from getting to the parts as they are heated. Steel and especially tungsten carbide oxidize at room temperature. The hotter they get the more they oxidize. Above 1,000 F tungsten carbide oxidizes extremely rapidly and forms an unbrazable surface. Purified flux is good for more time at higher temperatures, up to 1,700 F.

The original idea with flux was that it was to be applied on top of the braze area. No special effort was made to purify the flux because it worked well and they wanted to keep the cost down.

However the critical part of saw and tool brazing is what goes on inside the braze joint. Ordinary flux is inexpensively made and has up to 10% odd size particles and non-active minerals in it. These odd size particles and non-active minerals get lodged in the braze area and can seriously effect the strength of the braze joint.

Purified flux is cleaner, smoother, creamier and much more effective.

5 # jars

Case (6 jars @ 5#) \$ 464.31

Single jar \$ 87.39

Flux and Cleaning

From the AWS Handbook

Fluxes are not designed or intended for the primary removal of oxides, coatings, oil, grease, dirt, or other foreign materials from the parts to be brazed.

And 2 paragraphs later. Oxides are the principal source of surface contamination. The dissolution and removal of oxides during brazing are the most common functions of a flux.

AWS Brazing Handbook 4th edition FLUXES AND ATMOSPHERES

The purpose of a brazing flux' is to promote the formation of a brazed joint by protecting the base metal and filler metal from oxidation. The brazing flux may also serve to remove surface oxides and therefore reduce surface tension to promote freer flow of filler metal.

When metals are exposed to air, chemical reactions occur. The rate of these reactions generally is accelerated as the temperature increases. The most prevalent reaction leads to formation of oxides, though nitrides and even carbides are formed in some instances. The rate of oxide formation varies with each metal composition and the nature of the oxide. Oxide tenacity, structure, thickness, and resistance to removal or further oxidation are all factors that need consideration. Oxide formation in air on some metals such as aluminum occurs instantaneously, even at, or below, room temperature. In almost all conditions, such surface oxides or other compounds create barriers to the formation of brazed joints.

FLUXES

Fluxes are not designed or intended for the primary removal of oxides, coatings, oil, grease, dirt, or other foreign materials from the parts to be brazed. All parts prior to brazing must be subjected to appropriate cleaning operations as dictated by the particular metals (Chapter 7).

In making a braze, the flux is often needed to combine with, remove, or dissolve those unwanted residual compounds or products of the brazing operation which would otherwise impair filler metal flow.

Oxides are the principal source of surface contamination. The dissolution and removal of oxides during brazing are the most common functions of a flux. So as not to impair metal flow, the flux must also be fluid and displaced readily by the molten brazing filler metal. Wetting ability and viscosity of a flux at brazing temperature, therefore, are important properties.



Not only pretty faces but also great customer service
800 346 - 8274

Here are Jackie and Emily are always perky and always happy to help. 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.

Get Cash for Scrap

We are regularly mailing checks for over \$1,000 and as much as \$3,000. You can ship a lot of scrap for \$8.95 in a US Postal Service flat rate box.



One on Every Machine

Wall Mount filter system for straight oil

This is the unit that Jackie has sold 62 of these units to a single customer who sues them after a centrifugal filter system. With the price of machines and diamond wheels you cannot afford to be running dirty oil.

Cut Carbide Costs

Our advanced grades last 2, 3 even 5 times as long as the ordinary grades everyone else sells.

The Super C is a real bargain because I made a mistake and set the price too low. (See front page)



This is good pretinning. It is ours and it is what you should be buying. Demand it (well, ask for it, anyway) wherever you buy carbide. If they won't ship to us we'll get it for you direct and save you time and money.