

# Carbide Processors Inc.

## Newsletter

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### Make More Money

Here are three things we make and sell that can help you make more money. Please call for more information.

#### 1. Use High Impact Alloy

High Impact alloy works much better than regular braze alloys. This means you can: 1. Make better saws and reduce customer complaints. 2. Make better saws than your competition does and take sales away from them. 3. Make better saws and sell them for a premium especially if you use a more wear resistant grade of carbide.

#### 2. Filter Grinding Coolant

You buy much less coolant and spend less money on maintenance when you filter your coolant. Everyone seems to get at least double the life and most people get better than double. This pretty well means the filter system pays for itself in a year. These systems were originally built to improve quality and make a cleaner workplace. They do that. The fact that they pay for themselves is a really important bonus.

#### 3. Reduce Carbide Costs

When you buy treated carbide a small part of your cost and a big part of your delivery time is surface treatment. If we do your pretinning we will also do surface treatment free on orders of 1,000 identical pcs. or larger. If all you want is treatment you will get lower prices and much better service from us.

### High Impact Alloy

#### Increases wear life

A great deal of carbide dulling is actually caused by microscopic flaking and chipping of the carbide. Our High Impact alloy has been proven to prevent tip loss and tip breakage hundreds of thousands of times over the past year. Now we also have reports from customers that tips pretinned with High Impact alloy stay sharper longer.

The same science and technology that prevents the tips from breaking in pieces also prevents the little chipping and cracking that makes carbide dull in a hurry.

If you would like to try High Impact alloy or want more information please call us. (800) 346-8274

### Go to Boston

The ISKA (International Saw & Knife Association) convention is in Boston, August 6,7 & 8. This is a great organization. The members are hard working, take real pride in their craft and cooperate well.

We will be providing a breakfast at the convention. The meal is free to you but we are paying big city rates for a nice buffet so come early and hungry.

Call Einar Gustafson @ Keen Edge Sharpening in Calgary, Alberta, Canada. (403) 262-5727 or Karl Schmidt @ The Sharpening Shed in Newport, VA. (802) 334-5005 for information and reservations.

### A Baby

Michelle Jones, our salesperson, is pregnant. Everything is under control and the doctor expects a healthy delivery however he has recommended that Michelle work just half days for a while.

Michelle is arranging her schedule to fit the baby's needs. Right now this means that Michelle is in most mornings for a half-day. If you would like to talk to her you can probably catch her in the morning. Otherwise you can talk to Wendy, Pam, Debra or Tom.

Michelle is concerned that things will fall apart if she is not here every minute. She actually likes and respects the rest of us but she is really concerned about taking care of her customers.

There is a temptation to get silly and ask you all to call early and buy big. Instead I will just ask you to understand a little and put up with the rest of us if you cannot talk to Michelle. You may find that we are also charming and intelligent.

### Great Customers

A big part of the reason I love what I do is the really great customers.

We had a customer get caught in a flood last winter. They were shut down for quite a while and it really put them in hard times. They were good enough to write and tell us about their problems and what they were doing to make things work. (Cont. p.2)

Great customers (cont.)

After thinking about what they were going through, I wrote them a letter. I told them I did not want to add to their misery by pressing for money. I figured they could pull it out and I asked them to send what they could when they could. In less than a month they made a payment for about a third of what they owed us.

Two things really impress me about these folks. 1. They got hit by a true disaster and are managing to work their way back. The cost to them and the effort must be terrible. 2. Even when they are given a chance to slide on their debts they still want to pay them.

I told them I was willing to bet on them to pull things out. With this kind of hard work, pure guts and integrity it looks like a safe bet to me.

I thought about telling you who these people are but their bad luck is their own business. Besides, as impressive as these people are, our industry has a lot of hard working folks with a lot of guts. This definitely makes us pretty lucky.

### **Dave Medeiros surprises Multi Metals**

Dave Medeiros of Specialty Saw in Simsbury, Conn. @ (860) 651-5358 has a customer sawing stainless steel. Dave is always trying to do things better. A couple months ago Dave tried a new grade he thought might work. The saw he built with the new grade of carbide got four times the life in terms of inches cut than the previous saws.

The new carbide grade was a Multi Metals product. When Dave told the Multi Metals salesman about it the salesman said he would never have recommended that grade for that use. Like most of our readers, Dave is modest so Dave claims he

just got lucky. I asked him how hard he had to work to get lucky and he admitted he worked pretty hard.

There are some important points here. 1. Dave does well building saws for really tough applications because he is smart, works hard and really cares about giving his customers excellent value. He is not afraid to experiment and take chances. 2. The second point is that Multi Metals builds a lot better carbide than they advertise. In an industry that has seen a lot of big claims in the past it is really nice to see somebody who delivers more than they promise.

### **The Benny**

Benny Hare at Capitol City Sharpening in Montgomery, Al teases me. He once told me he was "The Only Benny". Anyway, I figured since he was a language expert he could help me with a problem. A bunch of us were truck drivers or loggers or worked in mills and shops. Now we are company presidents. The problem we have is how to express strong emotions and still sound like a company president. When I asked Benny about this, he laughed so he knew what I was talking about. I had a good time talking to him, as always, but I never did get an answer.

### **Apologies to Eagle International Carbide**

We made a mistake. We thought Eagle undershipped an order and they did not. We have a state of the art weigh-counting scale that we use to check box counts. It is an expensive scale that is really good. Unfortunately some times it would give an odd reading. When this happened to a shipment of Eagle International Carbide, Chris Comer called. As Chris put it, the shipment may have been short but they did not have any extra carbide lying around. We checked the first scale

with the second scale and found we had an intermittent fault. It happens rarely but it does happen.

What we are doing now is weigh counting on the first scale. If that agrees with the supplier's count then we accept it. If our count is different then we check on the second scale. If that count is different then we hand count. Then we will talk about a shortage.

### **One Ranger, One Riot**

One of my favorite stories is about a Texas cow town that was being torn up by a trail crew just off a drive. The town fathers wired the Texas Rangers for help. The Rangers wired back that they would have all the help they needed on the next train. The town fathers went down to meet the train and one guy got off. The town fathers started to panic because they had a big riot and they wanted a lot of help. The Ranger listened to them for a few minutes then he calmly said, "You only get one Ranger because you've only got one riot." I love the attitude.

What brings this to mind is that I finally met Gayle Kirkpatrick of Pac Hoe. I had been talking to him on the phone and I kept asking Michelle if he was mad at us. Michelle kept telling me that he was a really neat guy and that was just his style. Gayle called in early April and wanted to know how fast we could get some parts to him so I drove them down. Michelle was right. Gayle is an engineer with a really laid back, cut and dried approach to things on the phone. When you meet him in person he is a very charming man who tells a story well.

I run into so many blowhards that meeting someone with this "One Ranger, one riot" approach is really nice.

## **Idaho Saw builds better saws with new technology.**

Steve and John at Idaho Saw Service @ (208) 365-6362 have done really well with the new EZ 25 grade of carbide from Eagle International Carbide. When they combine this new grade of carbide with High Impact pretinning they build saws that outperform the non-carbide tipping you hear so much about. They get longer wear life with no breakage and no shoulder ripping. These saws are used for cutting through pallets, nails and all.

## **Dan Lines of South Coast Lumber in Oregon stopped by.**

Dan's wife is busy opening dollar stores. Dan says he helps her but you really get the impression that it is her idea and he is really proud of her.

Dan told us about filtering grinding coolant from non-carbide tipping. Cobalt has gotten some mention as a health risk but the Chrome in other alloys is both a health risk and a TCLP chemical (you have to test and meet certain levels before you can dispose of it) by EPA classification. If you are grinding an alloy with chrome in it then you need to make sure you are disposing of waste properly and that you are documenting how you dispose of it. If you just pour waste coolant from chrome grinding into the ground or a waste or sawdust pile then you could be asking for big trouble if you get inspected.

## **Apology**

I recommended Dan Silvestro at Prince & Izant as a good source for braze alloy. Unfortunately the spell check on the computer changed his name to Sylvester and I did not catch it. Call Dan Silvestro for a quote on alloy (800) 634-0437.

**Free carbide from Peerless**  
Peerless sells Sandvik carbide

including the DC grades. The DC grades give much longer life because they are very resistant to both wear and chemical attack. We have done some experiments with the DC grades and we think that they match very nicely with our High Impact alloy. Peerless will give you 100 free tips and we will pretin them free if you want to try the combination. We are initially offering this to the first five people that ask.

## **Equal time for Andy**

Andy Feucht is the West Coast rep for Eagle International Carbide. Andy teases me about warehousing Peerless carbide here. However Andy and I are both entirely serious about our staying neutral. We have offered to warehouse for Andy and Eagle if they want us to. For Eagle International Carbide (including the hot new EZ 25 grade) on the West Coast call Voight Enterprises at (800) 426-9346.

## **Patent Granted**

Carbide Processors, Inc. has been issued US patent # 5,624,626. **Method of Treating a Ceramic Body to Form a Wettable Surface**  
This specifically covers a surface treatment for tungsten carbide to make saw tips braze better and form stronger bonds on saws.

The technology is easy, simple and very effective. We are licensing rights to use this process. We have used this process with great success for over a year as our ECP process.

We got a patent on this process for several reasons. 1. Legal protection 2. To have something to license. It is a lot easier to sell something when you can tell people what they will get. 3. To prove it worked. We were making some big claims and people did not believe how simple, easy and cheap the process was. The process is every bit as

good as we said it was and even better.

## **A Lesson in Courage**

I worry a lot. I think most business people do. My mom says that when you own your own business you worry all the time.

I worry about looking silly when I try something new and it keeps me from trying new things sometimes. Last month, I learned a great lesson about worrying.

My son has been playing high school football for years. This year he went out for track in the shot put and discus. He is a junior and it is his first year in track so the other kids have a lot more experience. I saw my son get up in his first meet and throw the discus. He was not as good as most of the other kids and he was not as good as he had been in practice. His shots were short and he was disappointed and a little embarrassed. He took his first two throws and both were shorter than he wanted. He could have quit. Instead he stood back up in the next round and took two more throws.

He likes being good at what he does. He does not like looking bad in front of other people. In this case he was several years behind some of the other kids and they were obviously several years better and it showed.

What most impressed me was that he had the guts to stand up and try it. Then he kept trying it. He did not let inexperience; disappointment or embarrassment keep him from trying to do his best.

There are some new things I had been wanting to try but I worried about looking silly to my staff or my customer or the world in general. Thanks to my son I am going to try them.

# **Make More Money With Genuine Carbide Processors Technology**

You can make more money with High Impact pretinning because you will build better saws. You can take sales away from your competition. You can charge more for a premium saw and you will eliminate a great deal of complaints. If you buy one of our filter systems to filter your coolant you will extend coolant life, save on coolant purchased, make better saws and have a cleaner, safer shop. Our ECP pretreatment will save you the time and expense of having your carbide pretreated somewhere else.

## **Make sure You Get the Best technology**

Our technology is the best in the world. It works best. It does the best job for you. Other folks make things cheaper and they may sell it as something it is not. It may be an honest mistake or it may be that they are using cheaper alloys, cheaper labor, cheaper materials and cheaper equipment so they can make more money.

## **Just Ask**

Next time you place an order for pretinning make sure you ask for genuine Carbide Processors pretinning. Then make sure you get it. If they tell you that their stuff is just as good then ask them to prove it. If you want us to prove our point then call and ask us for our proof.

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## **Managing Machining and Grinding Coolants**

There are three common mistakes made with managing coolants.

1. Breaking environmental laws.
2. Endangering employee health.
3. Spending too much money

### **Breaking Environmental Laws**

The government is different than you and I. In business and real life we work to get things done the best possible way. The government works to follow procedures. The government is not so much concerned with what is done as they are in seeing that things are done according to laws.

It may make sense to dump your grinding waste in a sewer or on a sawdust pile for burning. It may even be legal. The problem is that you may have enough metal such as chrome in the coolant that it is a hazardous waste. This means that it has to be disposed of in an approved manner. Pouring it into water or sewers or a burning pile is dilution and is almost always illegal.

The problem is that you need to be able to show that it is legal. It is not enough to be legal. You need to do the upfront work to show that you know the laws and that you are in compliance.

### **Endangering employee health.**

Grinding coolant is generally dangerous to breathe. It gets worse if there are metals and particles of grinding wheels and saws in it. What can really make the coolant bad are chemicals added to control bacteria. These are often based on nerve poisons. They may kill bacteria but they generally are also harmful to people.

Coolants cause problems three ways. They cause rashes like dishpan hands. If you breathe in the mists then you can get these rashes in your throat and lungs.

Coolants dissolve metals. The dissolved metals can cause allergic reactions and scarring in your lungs which gradually causes of loss of lung function.

The particles in grinding coolant get recirculated when the coolant is recirculated. These little, sharp particles can get inhaled and plug up your lungs as well as cutting and scarring lungs.

Filtering grinding coolant makes the workplace safer. It does not make the workplace safe. Every workplace is different and you need to have individual assessments done to adequately ensure worker safety.

Metals are in grinding coolants in two forms. They are there as solid chunks and they also dissolve into the coolant. Filtering grinding coolant can remove over 90% of all recoverable cobalt and over 99% of all particles. Filtering removes particles completely and it helps prevent metals dissolving into the coolant by removing them.

Bacteria grow in coolant. They make it smell bad and they are a health hazard. Filtering removes the sludge that bacteria use to breed as well as removing tramp oils that bacteria eat and filtering keeps oxygen in the water. These are anaerobic bacteria, which means “non-oxygen” or non- air. They do not like air so keeping the coolant aerated helps prevent their growth.

### **Spending too much money**

Most companies are spending a lot more money on grinding coolant management than they should. In many cases the coolant is used three weeks and then hauled away as a hazardous waste at \$300 a barrel. In other cases a similar operation will use coolant six weeks or more. When it is dirty it is separated and hauled away to be recycled at \$75 to \$90 a barrel. Handling grinding coolant from most machining and grinding operation is not hard. It also saves a lot of money for the business.

## How to manage your coolant in three steps

### 1. Filter your coolant.

Simply filtering the coolant as little as one hour a day can double the life of the coolant. It will probably do better than double it but it almost always doubles coolant life. This cuts your costs in half immediately.

### 2. Classify your used coolant properly.

If your used coolant is classified as hazardous waste then it will be really expensive to have it hauled away. If it is ordinary coolant then it can be hauled to a recycler for a lot less money. Sometimes the difference is just in how it is classified. It can be to the hauler's advantage to classify your used coolant as hazardous waste since they can charge a lot more to haul it away. This is based on government regulations so it may not make sense. It works like income tax. You can deduct some expenses if they are business expenses but not if they are personal expenses. Knowing how to classify things can make a big difference.

### 3. Shop for a consultant

A good consultant can save you a lot of money the same way a good accountant can save you money on your taxes. You will save money by having your coolant legally classified in the cheapest disposal category. A consultant should cost you no more than \$500 to \$1,000 for a simple classification or characterization problem. You only need this done once. Find one who is familiar with the area of grinding coolant disposal and one who is familiar with your local laws. You need to find someone locally because there are state and local laws as well as federal laws and regulations that you have to follow.

We can supply information and will be happy to do so. We can also supply equipment and analytical services but you really need to talk to someone familiar with local regulations.

## Coolant Management

### Annual Cost Calculations

For this example we will use the following information:

30 gallon sump & Labor cost at \$20 / hr.

Coolant cost @ \$25 / gal 5% (app. 20:1) solution = \$37.50 per change

Disposal: Hazardous waste at \$300 per drum & Ordinary waste at \$100 per drum

	<b>Unmanaged coolant</b>	<b>Managed coolant</b>
	Change every 3 weeks	Change every 6 weeks
	17 changes per year	8.5 changes per year

### Costs

Coolant - 1.5 gal. @ \$ 37.50	= \$ 637.50	= \$ 318.75
Labor - ½ hr. @ \$ 10.00	= \$ 170.00	= \$ 85.00
Disposal 30 gal.(0.54 drums)		
Hazardous waste = \$162	= \$ 2,754.00	= \$ 1,377
Ordinary waste = \$ 54	= \$ 918.00	= \$ 459

If you change coolant every three weeks and have the used coolant hauled away as hazardous waste then you will spend \$3,561.50 on every grinder or machine with a thirty-gallon sump. If you change coolant every six weeks and have it hauled away as ordinary waste then you will spend \$862.75 per year for the same sump. This is an annual savings of \$2,698.75.

### Other benefits of filtering

Operational

1. Sharper grinds
2. Absolutely no burning
3. Faster cycle times
4. Longer wheel life

### Other savings

Filtering traps most of the solid particles. You can go smaller than one micron (1/25,000 of an inch). This can remove 20% of your waste and further reduce your costs. You may be able to throw the filter and trapped particles in the trash. The EPA and the Washington State Dept. of Ecology both classify the filter as an oil filter. It has to be drained and crushed as well as reasonably possible and then it can be thrown in the trash. This is a pretty widespread practice but you do need to check local regulations.

You can also sell your sludge. Our local metals dealer is willing to pay \$0.10 to \$01.5 per pound for the sludge because of the Cobalt in it. There are filters that allow you to collect your sludge and then sell it.