

DUSTY JOBS

ISSUE III

QUARTERLY

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STEVE

IMPERIAL SYSTEMS, INC.





DELTA MAXX™

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Our DeltaMAXX™ Cartridge Filter delivers exceptionally long service life, ultra-clean air, and unparalleled cost savings.



THE BECCA EDITOR

It's not in my official job title. It's not what I was hired for. Underneath my ordinary day job in aftermarket sales, I have another responsibility. I am The Editor.

If you read our blog, our brochures, our newsletter, or our published magazine articles, you've read my work. It doesn't have my name on it and I don't care. Being The Editor has given me a chance to learn more about our products, our customers, and this industry than I ever would have learned in sales.

Just about every person who works here has a wealth of knowledge and a unique story to tell. Putting those things into written form is what I do. I tap into the incredible resources I have all around me. I ask a lot of questions. Sometimes I get blank stares, and occasionally I get a "why exactly are you asking me this" look with raised eyebrows. But in the end, someone always has an answer.

The best thing about my secret job as The Editor is the pride I feel when our company's written material sounds professional, when our blog posts are helpful to someone, or when an industry magazine publishes an article. All of this represents the ideas and knowledge of many people; I put it in words and make it sound good.

In a way, that's how everything works here at Imperial Systems. Everything, from the products we make to the newsletter you're reading, is the work of a team. «



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IMPERIAL SYSTEMS GOES TO FABTECH

We recap our adventures in Chi-town during our time displaying our equipment at Fabtech.

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GOOD LUCK WITH THAT

Charlie is back with another story told in his own special way. This one is about Math and the way it use to be done.

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THANK YOU TO OUR VETERANS

We wanted to say thanks to the guys here at Imperial Systems that served in our armed forces.

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IMPERIAL SYSTEMS CHILI COOK-OFF

It was another close match this year with ground beef, tomato paste and kidney beans. Check out who won this year.

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TROUBLESHOOTING w/ SUNFLOWER SEEDS

Stuff happens and we are here to help. Check out how aftermarket helped with an odd story and how to stay safe.

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THE INTERVIEW WITH STEVE HIGBEE

Steve shares with us a little bit about himself as we attack him with questions. Our first of many Interviews to come.



IMPERIAL SYSTEMS GOES TO FABTECH CHICAGO

Fabtech is an annual metal forming, welding, and fabricating convention. It has some of the biggest names in the metalworking industry from all over the world displaying their new technology and equipment. Everything from robotics and welding to paint.



FABTECH is more than just a tradeshow. Sure, this is our largest exhibit every year, but going to Fabtech offers us so much more. Every year brings new technology, new machines, and new trends in the fabrication industry. Fabtech gives our staff not only the ability to sell but also to see, learn, and try something new. This year FABTECH was in Chicago at the center of our country's metal manufacturing industry. This year there were 1,700 exhibits and the event was attended by roughly 45,000 attendees from 120 different countries.

Much of the equipment that is sold at FABTECH may be considered "glamorous" or at least looks that way at these beautiful booths. What is behind many of those

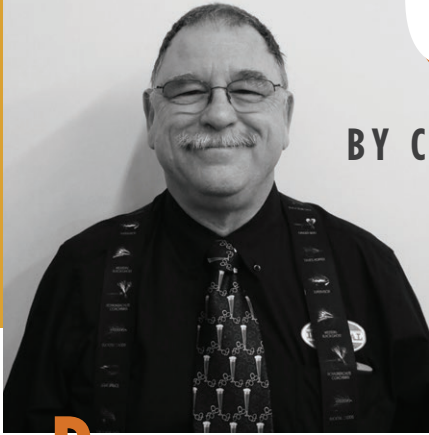
booths is what allows those machines to operate: a dust or fume collector. It is hard to show what our equipment does so we just went big for our exhibit to show the quality and craftsmanship that goes into the best dust collector in the industry.

FABTECH is not just work. At times, we even got out to enjoy the city of Chicago. We got to dine at some world class restaurants, taste some of what many consider to be the best pizza available anywhere in the world, and a few of us even went to the SkyDeck at the top of Willis Tower. We had an amazing show this year and hope you all can stop next year in Atlanta November 6-8 at the Georgia World Congress Center. <<



GOOD LUCK WITH THAT

BY CHARLIE MILLER



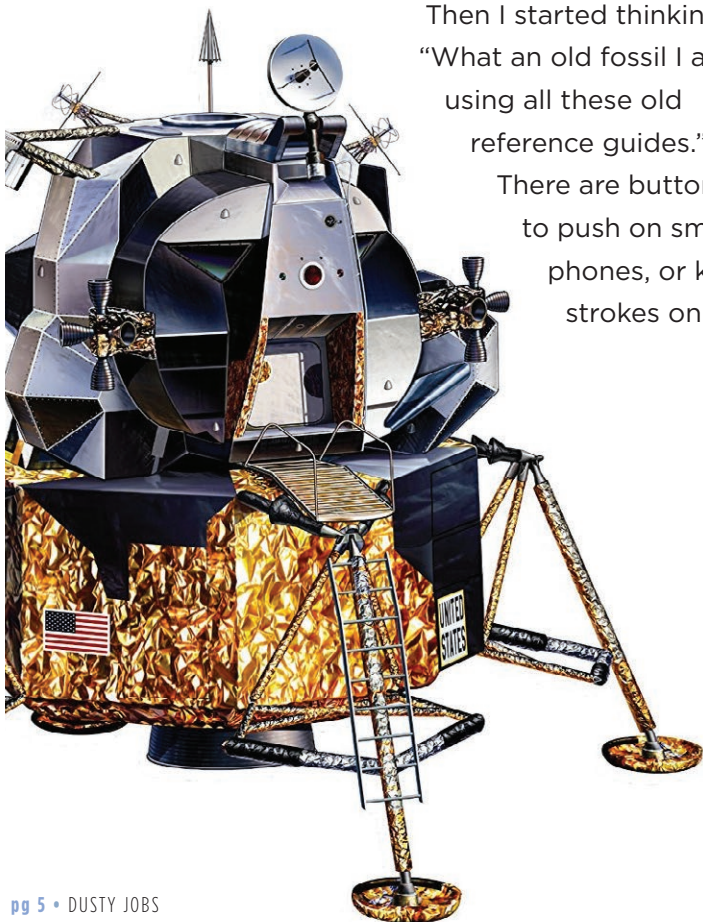
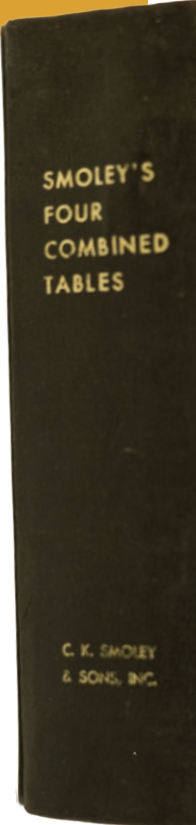
SMOLEY & OTHER OLD FRIENDS

Recently I saw a MEME on Facebook that said, “LIVED ANOTHER DAY WITHOUT NEEDING ALGEBRA!”. It made me chuckle because it reminded me of my 8th grade math class and thinking I would never, EVER, use Algebra when I got older. Why did I have to learn this stuff? It was hard for me to comprehend that $2X + Y$ could ever equal $Z!$ How wrong I was. Hardly a week goes by that I’m not pulling out my battered old copy of CarrLane’s Reference tables for the solutions of right triangles. Technically this is Trigonometry, but I won’t quibble semantics; math is math.

Then I started thinking, “What an old fossil I am using all these old reference guides.”

There are buttons to push on smart phones, or key strokes on

computers that would get me the answer faster. But, although I’m almost sure the answer would be correct, I would still have to check it the old-school way. The trouble is, I was taught things before there were smart phones and computers. We did things “long hand” in the dark ages. I have trouble putting 100% trust in a computer. After all, a computer only knows 0’s and 1’s. How smart can it really be? My friend’s three-year-old can even count to at least 36. When I was in High School, hand held calculators were still years in the future. And even then, the first TI’s could only do the four basic math functions and square root. I learned to do math using a slide rule, and got great two decimal point accuracy. Anything more than that is just a waste of digits. If You have seen the movie “HIDDEN FIGURES”, You would have learned of Katherine Johnson, a mathematician who used a slide rule to successfully calculate the trajectories that put a man on the moon. And yet, in 1999 we depended on a Cray Super Computer and crashed a 125 million-dollar space probe on the planet Mars. Who Knew?



“What an old fossil I am using all these old reference guides.”

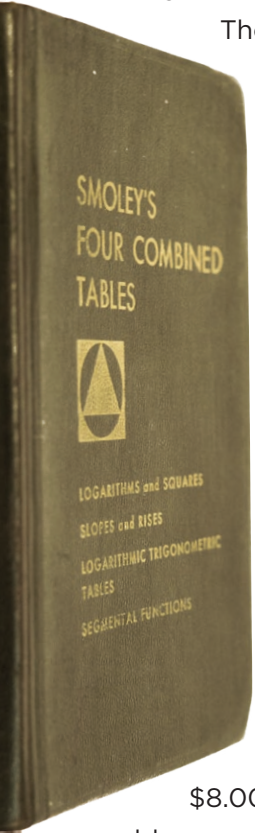
So, I keep my trusty old friends near-by. Probably my oldest friend is my copy of CRC Standard Math Formulas and Tables. This book is chock-full of good stuff and it got me through Standard Deviation in my collage statistics classes, as well as my Trig and Calculus courses. About all that I remember or calculus today is fx (pronounced F of X). But I still use Algebra, Trig, and Geometry a good bit at work.

The CARR LANE Reference Tables was a freebie from the Carr Lane company. I reference the little chart for right triangle solutions more than any other source I have.

Then I have my dear friend Smoley's Four Combined Tables. I purchased this book on June 27, 1978 and it has been a math bible sitting on the corner of my desk for many years. It looks a little like a bible too. This is a wonderful reference for logarithms and squares, slopes and rises, Trig tables, and Segmental functions (who needs calculus?).

My final friend is the Pocket Reference compiled by Thomas J. Grover. I purchased the 2nd edition for \$8.00 in 1997. This book has everything you could ever want a reference for, and it will fit in your pocket. The latest issue is the 4th edition and has even more references and information than mine. They are available from various sources. I even picked up one for a friend not long ago that was a freebee give-a-way at a trade show.

Some of today's Millennials may think they have no use for Algebra or Trig, but the fact is they use it every day; they just don't realize it. Whenever they use their computers or electronic games and devices they are using hundreds and thousands of calculations behind the scene with each one of those key strokes. I also use my computer and cell phone to perform various math functions. But if you are going to ask me to depend solely on electronic devices and give up on my old friends, good luck with that! «



A SPECIAL THANK YOU TO OUR VETERANS

As We Celebrate Veterans Day This Quarter

JOE MCMULLEN

Served 2004 - 2012



CARL CALLEN

Served 1972 - 1975



TERRY PARRISH

Served 1990 - 1995



JASON JACKSON

Served 1994 - 1996



RUSS RYLAND

Served 1994 - 1998





imperial systems chili Cook-Off 2017

The Imperial Systems Annual Chili Cook-Off has proved that we have many unexpectedly talented chefs among us (and a few whose wives are talented chefs and let them take the credit). The event also brings out our inner food critic as we walk around the tables, tasting each chili like it's a fine wine and debating the merits of each. From old-fashioned traditional chili to more unusual offerings, there is always something to satisfy every taste.

This year, for the second year in a row, Carl took home the trophy with his ever-popular (wife's) recipe. And for the side dishes, Chad claimed the prize with a pretzel salad dessert. We eagerly anticipate next year's Cook-Off, which will be in our new building. Perhaps next year someone will overthrow him, but for now Carl remains the reigning king of chili. <<





TROUBLESHOOTING WITH SUNFLOWER SEEDS

In the aftermarket department, we often get calls from someone who has had a problem. We've heard some interesting ones. In fact, the "our filters burned up" is pretty routine, coming from companies without good fire protection systems. But even the best safety systems can fail, and although you may be shocked to hear it, human error often plays a part.

We very rarely get calls about a problem with a spark trap. After all, this is a very mechanically simple device. It doesn't have any parts to break down. All it does is create turbulence in the air flow to extinguish sparks.

When we sell someone a spark trap, we do always talk to them about the type of dust they're dealing with. Spark traps aren't good for large or sticky particles, because in that situation they're not spark traps; they're fire hazards. Large particles can fall out of the airflow and accumulate.

The company in this example, fortunately, had exactly the right situation for a spark trap. They needed it for the very fine metal fumes coming from their plasma table. These particles are much too small to accumulate in the spark trap, so everyone had every reason to expect it would work properly.

ENTER THE HUMAN ERROR



On a downdraft table, dust and fumes from cutting are pulled downward and into the dust collection system. Fine dust from metal cutting should easily travel through the spark trap and cause no problems.

This did not, however, explain why this spark trap burst into flames. What did explain this, after some investigation, was that sunflower seed shells do not travel easily through the spark trap.

Apparently, folks had been eating sunflower seeds

and spitting the shells into the slats of the plasma table for easy disposal. Sunflower seed shells are exactly the type of material we warn against using a spark trap for: they are bulky and, having been chewed on, probably also rather sticky.

The sunflower seeds predictably accumulated in the spark trap, and when an actual spark made its way in, it found a generous supply of fuel waiting for it.

No one was injured in this incident, unless the sunflower shell spitter received capital punishment. But it does illustrate how the human factor can be a problem not just for dust control and air quality, but for all safety measures.

Do you have a sign next to your plasma cutting table warning people not to spit or toss combustible snack foods into it? I'm pretty sure we don't have one. Besides, every gasoline pump has a warning on it that gasoline and fire are bad together, and that didn't stop the kid at the pump next to mine from lighting up a cigarette while filling his tank this morning.

Dust and fume collection is one part of the broader industrial safety picture, but the human error factor can never be discounted. Small mistakes can have catastrophic consequences. Fatal accidents have been caused by things as simple as poking at the insulation around a pipe with a pole to see where it was leaking, pressurizing a tank and forgetting to open the emergency relief valve, or leaving material in a mixer overnight and trying to start it again in the morning.

Lessons to be learned from this incident: do not spit sunflower seed shells into your downdraft table. In fact, don't throw anything in your downdraft table. Do not allow flammable materials to end up where they don't belong (you'd be amazed at the damage a flaming pastry can do in a dust collector, but that's another story). Don't eat yellow snow. And stay safe: combustible dust is an often unrecognized hazard, but a dust explosion can kill. <<



THE INTERVIEW

with

STEVE HIGBEE

INTERVIEW BY BECCA WESCOTT

Steve has been welding for just about 44 years, with ten of those years being here at Imperial Systems. He enjoys hunting and will watch a Steelers game if it's on, but his medical treatment doesn't leave much time for other hobbies. He lives in the small town of Stoneboro with his wife and their three dogs, with his daughter living nearby.

Q *You've been here ten years. What was it like when you started?*

It was definitely different. There were only about eight of us at the beginning, and then we just kept getting more people. Pretty soon we were stepping all over each other, till they added the expansion.

Q *So what did you get during hunting season this year?*

Got a buck during archery and then a doe. You gonna put that in there too?

Q *All right, then... tell me about your dogs.*

You just want to talk about everything, don't you. We've got three dogs. One's a collie and the other two are yorkie-poos.

Q *Wait... yorkie-poos?*

(with a look daring me to say something about it). Yeah. Yorkie-poos. Half yorkie and half poodle.

Q *So tell me how you ended up here.*

I needed a job. I was working at another company, doing fabrication, and they pissed me off. They wanted me to use inferior material, and I wasn't going to do it. They told me I didn't have a choice, so I gave them my two weeks' notice. Nobody tells me I don't have a choice.

Q *So what's kept you here for ten years?*

They haven't pissed me off enough to leave yet. No it's not a bad place to work. Jeremiah is a good guy to work for.

Q *How long have you been doing metalworking?*

Since I was nineteen years old.

Q

Where did you learn to weld?

On the job. Had three weeks of training, and then I was out learning from experience. Working on railroad cars.

Q

Favorite kind of equipment?

I've used pretty much all of it. Miller, Lincoln, Hobart... I don't really have a preference.

Q

What's the one piece of equipment that helps you the most doing your job?

It's gotta be the hoist. The doors, once you've got them assembled, they're so heavy you can't move them. I couldn't do my job without that.

Q

What would you tell somebody who was interested in getting into it as a career?

I'd tell them to go into healthcare. But if it's what someone wants to do, I'd tell them to go for it. If it's what you love, you'll be happy doing it.

Q

You've had some experience with the healthcare thing. I know your daughter is a nurse, because she was yelling at you one day about taking care of yourself.

Yeah, she does get on me about that.

Q

Can we talk about the dialysis and being on the donor list for a kidney?

Sure. It's not a secret. Everyone around here knows about it. There have been two people who volunteered to be donors, but they didn't qualify.

Q

You leave here after work and go straight to dialysis, right?

I spend a lot of time there.

Q

I heard you're pretty popular there.

Well, that's because I don't walk in there like I'm half dead. First time I went in there it was like walking into a morgue. I bring some life into the place.

Q

You definitely aren't half dead.

(grinning). No, I'm not! <<





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