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#### ALL THINGS AUTOMECHANIKA CHICAGO

NETWORK



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AUTO BODY REPAIR

#### SHOW FEATURES

# AXALTA, GFS TO HOST INTERACTIVE PAINT BOOTH

BY ABRN STAFF

Repairers can test new materials and technology on the Automechanika Chicago show floor.









y ago va: 5

#### FEATURE

#### **DON'T FORGET THE LABOR COSTS** FOR THE WIRING HARNESS

BY ART HARRIS | ABRN BLOGGER

Be sure to charge for the labor when you replace a liftgate/ tailgate in Audatex by manually adding a line.

[CON	IMUNIT	Y PULSE	-/~	-/^-/	$\sim \sim$		12
BEST OF The blogs	AUDIO Webcasts	TOP HOW <sup>2</sup> Videos	READER Photos	INDUSTRY Calendar	MESSAGE BOARDS	INDUSTRY GROUPS	VIDEO Webcasts
	•))			31	Ð	<b>\$</b>	

#### **NETWORKING CONFERENCES**

#### **PASSION FOR CARS DRAWS MOBILE TECHS TO CHICAGO**

Mobile technicians from across the Ň country will converge on Chicago to get the training they need to succeed at Automechanika Chicago.

Talk Shop Anytime

AUTOPRO WORKSHOP

#### **INSURANCE MATTERS**

#### **ASE. AUTOMECHANIKA CHICAGO PARTNER TO PROVIDE TESTING**

ASE testing will be available April 24-25 R onsite at Automechanika Chicago on a first-come, first-serve basis for attendees

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ENTER [INSURANCE] SEARCH THOUSANDS OF ARTICLES ON THESE AND OTHER TOPICS

#### EXPERT OPINION, INPUT FROM THE FIELD, FORUM COMMENTS & SOCIAL MEDIA

#### FEATURED COLUMNS

#### THE SHOP OWNER

**BY MIKE LEVASSEUR** READY, SET, GROW

**16** Deciding where and how to add new shop locations are vital decisions for business success.

#### THE PROFIT MOTIVE

**BY TOM MCGEE** 

#### MAKING MONEY ON PAINT AND MATERIALS

**30**Focus on the details of your shop. Focus on the details of your repair plan

#### THE LAST DETAIL

**BY MIKE ANDERSON** UNDERSTAND YOUR SHOP LIABILITY

**78** What an insurer will or will not pay has no impact on your legal responsibilities to customers.

WHAT IS ABRN COMMUNITY? The ABRN community is an online NETWORK for your business. It's a place to go to post articles , blogs, videos, photos and audio clips to share ideas with other collision repairers. Community content is used in ABRN's twice weekly e-newsletters. Check it out at http://workshop.search-autoparts.com



#### **BUSINESS MANAGEMENT INSIGHTS, BEST PRACTICES & IMPLEMENTATION**



#### **MINDING YOUR BUSINESS**

#### **DELIVER MORE THAN THE VEHICLE** BY STEVEN FELTOVICH | CONTRIBUTING EDITOR

Customer value processes open the focus to include quality, cycle time and pricing.

N THE NEXT ISSUE OF ABRN

-Inlist a quick changeover approach to eliminate or reduce non-value-added activiites.



#### THE SHOP PROFILE CARSTAR JEREMIAH'S COLLSION AND PAINTING; OKLAHOMA CITY. OK JAMES E. GUYETTE / CONTRIBUTING EDITOR



**2** Award winning shop owner Jeremiah Graham has worked his way through the ranks to establish his own business with a focus on easing customer stresses.



#### **TECHNICAL TRAINING**

BY LARRY MONTANEZ | TECHNICAL EDITOR Your guide to aluminum repair procedures and techniques

#### **TECHNICAL FOCUS** A/C REPAIR BY TIM SRAMCIK

**CONTRIBUTING EDITOR** 

48 Reacquaint your staff with the basics of air conditioning work.





FROM ABRN CONTRIBUTING EDITOR AL THOMAS. **GET A FREE SCAN APP** WWW.SCANLIFE.COM

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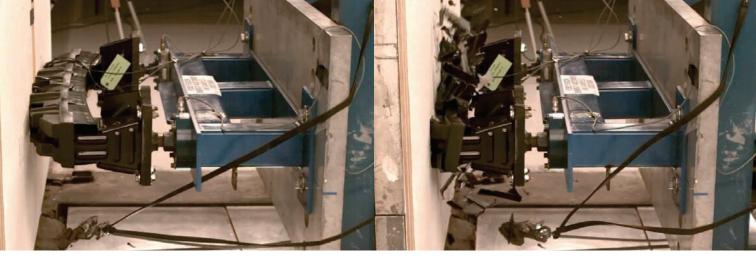
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# automechanika CHICAGO

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#### THERE'S MORE ONLINE:

TRENDING

#### NATIONAL INSTITUTE FOR AUTOMOTIVE SERVICE EXCELLENCE PARTNERS WITH AUTOMECHANIKA CHICAGO TO HOLD ONSITE ASE TESTING

Automechanika Chicago and the National Institute for Automotive Service Excellence will provide ASE testing April 24-25 during the show at McCormick Place West in downtown Chicago. Testing is available on a first-come, first-serve basis. *»» ABRN.COM/AMCASE* 

#### DISTRIBUTORS EXPECT TO GAIN VALUABLE CONTACTS AT AUTOMECHANIKA CHCIAGO

Distributors who are either attending or hosting a booth at Automechanika Chicago will find numerous avenues for reaching targeted markets. Expecting more than 400 exhibitors and 8,500-plus attendees coming through the turnstiles, Automechanika Chicago is showcasing the industry's entire spectrum.

»» ABRN.COM/AMCDISTRIBUTORS

#### AUTOMECHANIKA CHICAGO TRAINING PERKS

Automechanika Chicago Presents Motor Age Training Live already is a world-class training event, offering more than 100 sessions led by more than 50 of the best instructors in the business. What could make it better? How about certification. Each class attendee will be provided a certificate of their attendance. If you're an educator, classes you attend at Automechanika Chicago can be used for your CE credit requirements.

»» ABRN.COM/TRAININGPERKS

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#### ENTER (KEYWORD)

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# automechanika chicago

GLOBAL REACH

## Axalta, GFS to host interactive paint booth

Automechanika Chicago has partnered with Axalta Coating Systems and Global Finishing Solutions (GFS) to provide an interactive paint booth at the trade show, taking place April 24-26 at McCormick Place West in Chicago, III.

GFS, a paint booth manufacturer, will erect the paint booth directly on the show floor for attendees to test. "We are excited to bring our technology to Automechanika Chicago and show the automotive community GFS' capabilities," says Brandon Lowder, Vice President of Auto Refinish at GFS.

Axalta, liquid and powder coatings manufacturer, will perform coating demonstrations within the GFS paint booth to introduce event attendees to innovative refinish technologies available to the industry. Additionally, collision professionals will have the opportunity to experiment with the products. "Allowing technicians to step in and test new products and techniques under the watchful eye of our expert trainers is a great way for us to educate end users about the latest innovations available in coatings," said Jim Evans, Axalta North America Training Director.

"Providing a platform to gain hands-on experience and education for the automotive community is an important objective of our show," said Bridget Ferris, Automechanika Chicago Show Director. "We are thrilled to have Axalta and GFS on board to help us achieve that."

## BREAKING NEWS

#### PASSION FOR CARS DRAWS MOBILE TECHS TO CHICAGO

BY **PETER F. MEIER** | DIRECTOR OF TRAINING

Most mobile diagnostic techs share common attributes — a desire to work for themselves and a passion for fixing cars right the first time.

But what might surprise you is that most report the majority of the problems they are paid handsomely to pinpoint could have been solved without their help had the tech followed a logical process and invested in education. In other words, master the basics and get trained.

Mobile technicians from around the country are converging on Chicago to get the training they know they need to stay current.

And it isn't just mechanical shops that call for help. Nearly half of their business comes from collision repair shops. Continue at ABRN.com/MobileTechs.

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## BSR HELPS SHOPS ACHIEVE CONTINUOUS WORKFLOW IN THE PAINT DEPARTMENT BY ALMOST ELIMINATING DRYING WAIT TIMES

BY KRISTA MCNAMARA | MANAGING EDITOR

## **ABRN:** Tell me about Bodyshop Revolution's Exico technology.

**PO:** Our technology is gas catalytic drying technology. It is the introduction of cold gas through a precious metal membrane with air movement that allows for the production of an infrared wavelength at 3.5 microns, which allows products to be cured almost 100 percent — typically a 30-day process. We are able to use and cure products at their purist state, not accelerated products, which are the least expensive products. Energy created at this wavelength is the most effective to cure products rapidly and fully.

# **ABRN:** Are paint companies also working to create fast-drying paint products?

**PO:** Paint companies are producing faster drying clears, however they are very expensive, and every time you accelerate a product, there are consequences. As far as a waterborne base, these products need to be air dried, and that is why in our industry they use either air movement blowers or, in many cases, shops are baking the base in order to pull the water out. Many times this is a 15-20

minute process. With our technology, we can completely extract water from the base in 2-4 minutes, so by the time the painter puts his clear in his gun, the base is ready for the application of clear.

## **ABRN:** What other benefits do the Exico systems provide?

**PO:** The technology allows for continuous work flow. We do not need to move a car except for shipment to the paint booth and back. When you can cure filler in one minute, you do not need two cars to work on; when you can do paint prep and cure primer in one minute in the body technician's stall, you also do not need to work on other cars. And if vour car will be out of paint and back into your work space in 1.5 hours or less, you do not need to work on another car. Some very big benefits are also a 70 percent reduction in energy and using less expensive products at their purist form, which gives the best finish and longevity.

# **ABRN:** Bodyshop Revolution sees roll-on primer as the future. Why?

**PO:** We see roll and spray primer as viable. However, the objective is to get

continuous workflow. When we can cure primer in one minute using roll-on primer, it allows for us to continuously work on the car without moving it to a primer or prep deck. This also enables us to work in that space in a safe and environmentally friendly space. Rolling does not allow over spray or isocyanates in the air.

## **ABRN:** How important is efficiency in the paint booth?

**PO:** The efficiency in the paint booth is critical. In our process, we can paint 10-12 cars per booth in 8 hours versus 4-5 — you can do the math. Also in our process, it is critical that, if a shop can, they always have two vehicles ready at all times to paint. For every 40-50 minute cycle a shop misses, the company looses roughly \$1,000 that they can never recover. So we always want cars in front of the booth ready for paint. We want to run 10-12 cycles per day every day. So efficiency is critical in all aspects of the production process, and in the estimate and parts process. You cannot do continuous workflow if you have written a poor estimate and you do not have all of the parts.

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# COLLISION REPAIR INDUSTRY Stats& Trends

**400** — the amount of exhibitors

#### Automechanika

Chicago has exceeded, and the amount of dollars you save if you register for training at

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AMCRegistration



# Don't forget the labor costs for the wiring harness

Be sure to charge for this when you replace a liftgate/tailgate in Audatex

#### BY ART HARRIS | ABRN BLOGGER

hen you R&I or replace a liftgate/tailgate in Audatex, are you creating a manual line for the labor to remove or loosen the wiring harness? Unlike the doors, the labor for a liftgate does not include addressing the labor required for the harness, so you must create a manual line. The information can be found in the Audatex DBRM on page 108 for the liftgate and page 93 for the doors.

The DEG has been in contact with Audatex and asked why time for the harness would be included in the doors but not the liftgate. Audatex was unsure of why there would be a difference, but guessed that when the original information was written most liftgates may not have been power.

Audatex also commented that "most" doors and liftgates have a quick release wire plug located at the pillar or roof area. The DEG has been in contact with several shops and they stated most vehicles do NOT have a quick disconnect plug.

The outcome is that Audatex is going to research why the time would be included in one operation and not the other.



As for the quick disconnect, the DEG has reached out to several OEMs to see if they have data on which of their vehicles do have a quick disconnect. We have only had one response so far and that OE does not have

the data for this.

In an effort to provide Audatex with accurate data, the DEG is collecting this information manually on which vehicles have a quick disconnect for doors and liftgates. Once the DEG has a good pool of vehicles we can provide Audatex with the facts of how many vehicles do have a quick disconnect.



BECOME A BLOGGER

#### BEST OF THE BLOGS are articles written by bloggers on ABRN's community pages

#### Scaring the consolidators Brad Mewes

The collision industry is a \$30 billion market in the U.S. But not a single company accounts for even \$1 billion in sales. There is a race to get to the \$1 billion in sales mark.

The quickest way to get to the \$1 billion mark is to acquire other businesses that already generate a few million dollars in sales. So the consolidators need independent shops and small MSOs – but they are also afraid of you.

They are afraid of you because you lack experience.

The large consolidators by their very nature are incredibly cautious. They are backed by some of the largest financial institutions in the world and are stewards for hundreds of millions of investment dollars. They unfortunately cannot just "take your word for it."

Sure you have been in business for years. You have long-term employees. You have long-term referral accounts via DRPs or dealer referrals and repeat business.

But you are inexperienced in their world. It is likely you have never engaged in a multi-million dollar transaction before. You likely have never integrated a business into a multi-million dollar enterprise. You likely have never made a 100day plan, or been responsible for building a pro forma financial statement, or outlining the working capital required to sustain your business for the next 12 months.

Experience and credibility is earned over time. In a business

transaction situation, time is in very limited supply. Thus, when you approach a buyer, or a buyer approaches you, you must be able to quickly demonstrate credibility in a professional way. In a way that means something to a multi-million dollar institution.

It is imperative that you do the following four things in order to ensure your success. And even if you are not planning on a transition any time soon, you will be no worse off as understanding these four things will help you run a better business.

Understand their KPIs. The largest consolidators in the nation are backed by financial institutions with billions of dollars of assets under management. So while on an operational basis, cycle time and CSI are important, they are going to throw terms out like EBIT-DA, CAPEX, Enterprise Value,

Enterprise Value, clawbacks, seller carry backnotes, etc. Even if you are not planning on selling any time soon, understanding these terms and how the big players manage their business will help you mange yours better.

ROIC.

Get your financials in order. Lack of financial clarity and integrity is one of the most common hurdles in any transaction. It is up to you to go out of your way to create this clarity. Build a financial book that shows your financial operating history. Build pro forma financials around future growth.

To continue reading this blog, visit ABRN.com/Experience.

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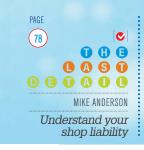
#### APRIL'S FEATURED VIDEO





30 THE PROFIT MOTIVE TOM MCGEE Making money on paint, materials

PAGE



Hopefully after they receive the information they can readdress the procedures in their P-Pages.

Similarly, I recently wrote about ensuring you also correctly allocate full frame body replacement to ensure proper payment.

When replacing the full frame on a vehicle, portions of the job are mechanical, while others are body or frame work. All three estimating systems require users to allocate this labor, but we can only use one labor operation.

Currently, the three estimating system providers have not reached a solution, aside from the manual line. Hopefully there will be a better solution in the near future. To read more on this discussion and learn about other database issues, see the DEG blog online at ABRN.com/FrameReplace.

#### 📯 abrn TOP VIDEOS



Montanez talks Automechanika Chicago training SEARCH OUR ARCHIVES OF OVER 800 ONLINE VIDEOS

noteworth

Reader feedback to the article,

Repair," ABRN February 2015,

by ABRN Technical Editor Larry

"I just got done reading your latest article in ABRN.

your vast knowledge and expertise in our industry.

"I am done working directly with staff companies

who don't care about training their people on how

to prepare the correct estimate to repair a vehicle.

All they worry about is their bottom line, which from

a business standpoint is understandable, but there

are many ways to protect that bottom line and still

do the right thing. Most companies have so much

dead wood and waste going on inside their offices

that if they streamlined, it would allow the 'qualified'

person on the road to prepare the correct estimate.

Companies need to hire, train and pay the correct

professional for his/her knowledge. Unfortunately,

appraisers alike - tarnish the pride we take in our

the community-

join the discussion

the greedy people in our industry - shops and

Excellent. There is no price tag that you can place on

"Estimating the Aluminum

ABRN.COM/AMCMONTANEZ

Montanez:

 Focus on these 7 areas in your shop for optimum success
 AudaExplore's Don Mikrut talks with ABRN's Krista

McNamara about the seven areas collision repair shops should focus on in order to best handle the winter-weather business boom. Mikrut also reviews AudaExplore's newest software offerings for your shop. [ABRN.COW/TAREAS]

• Are you ready for aluminum repair? Rick Miller, assistant vice president of operations for CARSTAR Auto Body Repair Experts, and Shawn Collins, senior technical service director for 3M Automotive Aftermarket Division and I-CAR instructor, tackle the biggest questions, myths and concerns about repairing aluminum and aluminum-intensive vehicles and how you can prepare your shop. [ABRN.COM/ALUMINUMREADY]



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#### **READER FEEDBACK TO ABRN ARTICLES**

profession. Shame on them

"Thank you for the excellent article. I look forward to reading the remaining articles in your series."

#### -Joe Nobilione, independent appraiser

"It isn't very often that an article gets me to respond, but the one you did for ABRN deserves just that. The article is very well written and probably the most unbiased set of information I have seen in a while. I enjoyed reading useful information and get aggravated when at about the second paragraph of an article you realize it is nothing but an advertisement disguised as information.

"So hats off to you for a well researched and well written, unbiased and informative article. I look forward to the continuation of the series."

#### - Joe Simon, service coordinator with Altra Products Supply, Inc.

The latest in Montanez's 6-part series of aluminum repair articles, "Aluminum Repair for Today's Technician," can be found on page 32.

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Welding for Success Presented by VeriFacts; 2-5:15 p.m.

Steel vs. Aluminum: Fact and Fiction Presented by Ken Boylan; 2-5:15 p.m.

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Becoming a Successful Entrepreneur, Multi-Shop Owner & Operator Presented by Greg Sands and Sherri Sands; 8:30-11:45 a.m.

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How to Use Digital Marketing to Grow Your Business in a Consolidating Market Presented by Frank Terlep; 8:30-11:45 a.m.

**Post Repair Inspection Analysis** Presented by Larry Montanez; 8:30-11:45 a.m.

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Presented by John Parmenter; 8:30-10 a.m.

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Reading and Writing Skills in the Automotive Classroom Presented by Tim Dwyer and Judy Wax; 8:30-11:45 a.m.

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THE SHOP OWNER

## **COMMUNITY BUSINESS ISSUES**

BY MIKE LEVASSEUR COLUMNIST

mikel@keenanautobody.com

# Ready, set, grow

Deciding where and how to add additional shop locations for your company

**"WE PREFER** 

THROUGH THE

TAKEOVER. WE

TAKE OVER AN

**EXISTING SHOP** 

THAT HAS BEEN

STRUGGLING

**OR THAT HAS** 

FAILED."

**TO GROW** 

e recently opened our 12th location and are deep in the process of working toward No. 13, which in this case is a good number. In doing so, we've developed a pretty good system for selecting new locations and getting them up and running within a reasonable amount of time.

It's something MSOs talk about and that I often get asked questions about: How do you decide where to open? Do you prefer greenfield, brownfield or acquisition? What

type of facility, layout and equipment do you prefer? How do you ensure there are both staff and cars on Day 1?

It's a big topic, so one I'm going to take several columns to discuss. Some of what I'll share are our company's personal preferences, the things we look for and require in a location and our unique processes. The ideal size of a facility you may be interested in may be different from ours, depending on your particular business model. But the general concepts I'm going to lay out should apply whether you're looking to add your second shop – or your 102nd.

With acquisitions being announced in the industry weekly, let me start by answering the question: Do you prefer to build a new shop

from the ground up (a greenfield), to convert an existing building to a body shop (a brownfield) or to buy an existing collision repair business with one or more locations (an acquisition)? The answer for us: None of the above.

We've added shops through all of these means, although we haven't acquired an existing collision repair business since 1997. We've done mostly brownfields since then, but we actually prefer to grow through a fourth means: the takeover. We take over an existing shop that has been struggling or that has failed.

The biggest upside to this is that it often requires far less of an upfront investment. We don't have to build a facility or convert a building – and we don't have the expense of compensating someone for his or her client base and business. In a take over, you may just be moving into a space where the landlord has kicked out another shop. You may be compensating a former operator for some of their equipment – or in some cases, that compensation may involve taking over some of the previous owner's accounts payable. But often not a lot is required other than rebranding (and often some equipping) of the location, so it's nowhere close to the same initial investment the other methods of growth require.

Finding a takeover opportunity is perhaps one of the biggest challenges to this method of growth. For us, it's generally been word of mouth. A broker or a realtor we've worked with in the past might call me. A vendor representative might pass along word. In today's business environment, there's a lot of movement out there.

One key to a successful takeover is to recognize why the business failed at that location. It may just be the owner lost interest, or failed to keep up with changes in the industry. It could be because the demographics of the area changed. But no matter how inexpensively you could open a shop there, it's important to do the same sort of homework on the location as you would with a brownfield, greenfield or acquisition.

What does that location homework entail? We first look at the visibility and traffic count that location offers. For us, we want a minimum average of 25,000 to 50,000 cars passing that location every day.

Next, check out the demographic information for the area: population density, average income levels, etc. Look for trends over three, five and 10 years – and get a projection of what the next 3-5 years may bring.

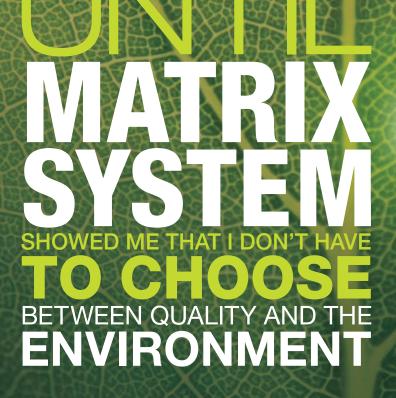
Where can you get all this information? Your paint company most likely has it. We've worked with two different paint companies over our decades of growth, and both offered us assistance in evaluating potential new locations.

There are several more key pieces of homework you need to do before moving ahead with a new location, whether greenfield, brownfield, acquisition or takeover. I'll discuss those in my next column.



Mike LeVasseur is president and COO of Keenan Auto Body, which has 12 shops in Pennsylvania and Delaware.

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#### SHOP MANAGEMENT | BEST PRACTICES

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MINDING YOUR BUSINESS

IN THIS SECTION 24 The Shop Profile 30 The Profit Motive

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# JUST THE VEHICLE

#### CUSTOMER VALUE PROCESSES OPEN THEIR FOCUS TO INCLUDE QUALITY, CYCLE TIME AND PRICING

BY **STEVEN FELTOVICH** | CONTRIBUTING EDITOR

**TALK TO ANY** shop owner or manager and they will tell you that their shop has well-defined processes in place. As a business consultant, I have visited many shops and have concluded that there is still an incredible opportunity in the area of building a customer value process. While some improvements have been made industry wide, few organizations have taken full advantage of the opportunities to achieve significant results from their efforts.

The keywords are customer value process. What is a customer value process? This is a process that is capable of delivering customer value in terms of quality, cycle time and competitive pricing. Today's digital customer is more informed, empowered and they are also more impatient. They have little time to invest in poorly managed businesses full of disconnects and interruptions during the interaction. James Womack and Daniel Jones in Lean Solutions echo the voice of today's consumer: "Don't waste my time. Minimize my total consumption, which is the price I pay plus my time and hassle."

With this said, processes that deliver customer value in short order are paramount. Unfortunately, most shops' processes are still riddled with errors, mistakes and delays. Yes, the collision repair industry has lots of variables and that's all the more reason to have tightly controlled processes in place in order to minimize and control the amount of variation.

The optimum, well-defined process will enable your organization to get it right the first time and every time. The right processes will be tied to measurements, which enable them to be monitored closely and the processes improved upon. Measurements such as supplement reduction and decreasing the percentage of parts being returned to suppliers clearly indicate the stability of your damage analysis and estimating process.

#### Solutions — controlled environment

A shop I visited had achieved very impressive results in the area of damage analysis and estimating. Their process was yielding one parts order at 100 percent accuracy for each repair order. How was this possible, especially on high-line vehicles? They had implemented a bulletproof process of disassembling each vehicle to the last bolt and retainer clip that would be necessary in order to repair all the damage. Their effort was laserfocused on discovering everything upfront that they needed to rebuild the customer's vehicle prior to ordering the parts. They had become the best performer in their market when ranked



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by insurance company metrics.

This same shop a few years earlier had a large parts room filled with part returns, but during this visit it was quite surprising to see that their parts room for handling the returns had been reduced to only a small plastic storage bin, holding a few labels and emblems. No large parts of significance were being returned any longer. This equated to full optimization of their damage analysis and estimating process.

Think about the time this shop was able to save by no longer needing to produce two or three supplements, order additional parts and track parts that had to be returned on every repair order. Additionally, the shop benefited from these time-saving efficiencies by avoiding customer dissatisfaction that

	"Can you really to buy a K	
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866-516-6888 • customer.us@kaeser.com • kaeser.com/ABRN ©2015 Kaeser Compressors, Inc. Built for a lifetime is a trademark of Kaeser Compressors, Inc. would have been caused by not being able to deliver vehicles on the scheduled dates. After months of continuous improvement, the tasks and activities associated with damage analysis and estimating were streamlined into this one consistent and reliable process.

## People — empower through knowledge

Why do 70 percent of all major transformation efforts geared toward process improvement fail? The reason is most organizations do not engage their workforce effectively. Management generally dictates to the people doing the work what specific changes they want to make. A shop in Chicago that I visited demonstrated a new management philosophy by allowing the employees to participate in solving the production problems. The people doing the work were the architects of the new process.

By capturing the creativity of your people who are doing the work, it enables you to build a more robust business model solely on your own shop's efforts. All employees need to feel that it is part of their job to constantly come up with better ways of doing things, so that process innovation becomes just a way of doing business. And with the employees' ownership tied to the processes, there is ongoing motivation to continually improve the processes and systems.

The right processes will always deliver the right results! Business transformation is a radical re-think of what the conventional processes are and how they should be, to improve operational performance.

#### **Profitable process**

Several years ago, while I was touring some shops in the U.K., I found a number of them were obsessing over production processes at the time. Many of them had made substantial equipment and information technology upgrades at their facilities, but their real focus was now concentrated on the workshop process. This isn't to say that they had neglected to improve their front-end administrative processes as well. Actually, they had worked on these processes first, and now were resolved to improve the actual repair processes.

The U.K. shops that embraced the power of process improvements stayed their course through the dramatic decline in collision repair facilities over



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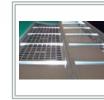
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the last 12 years. Only the most process-driven shops were the repairers who were able to meet the new detailed service requirements. The forward-thinking repairers in the U.K. have re-engineered their processes to deliver completed vehicles in average cycle times as low as 3 days. They have also tracked results of 6-hour average touch times and 10 vehicles painted in a single booth per day.

Building the most efficient and effective business processes in the U.K. was no longer optional; it was absolutely mandatory for future survival. The industrialization of collision repair in the U.K. drove the shops away from the old "craft" style technique of repair to the new world of deliberate, well-defined processes for repairing vehicles.

The investment shops are making in training, equipment and information technology is always considered to be a smart investment. But now is the time to consider investing resources in building process solutions to address present workshop inadequacies. This must be accomplished in order to meet advancing vehicle technologies, customer demands and insurance company requirements.

At some point, insurance companies and customers will no longer tolerate businesses operating with broken processes simply because they have a choice. There are many shops in the U.S. and Canada that are re-engineering their processes to meet the customers' needs and expectations, while doing so in an efficient and cost-effective manner.

#### **Getting started**

You don't have to attempt beginning this journey alone; your shop can get help from various industry consultants and many paint companies offer help as well. Make sure you secure advice from someone who has knowledge of lean production principles and the ability to assist with implementing new processes at your facility. A great starting point is to commission someone to perform a complete impact assessment of your facility and current processes; this outside perspective is an invaluable resource for getting your organization geared up for the transformation necessary to drive customer value in the 21st century.

#### Things to do

1. Work closely with a consultant (lean production expert)

Read *The Toyota Way*, Jeffery Liker
 Attend lean management train-

ing classes

4. Value stream map your current processes to identify areas that need improvement

5. Take study tours of facilities that have implemented lean processes  $\mathbf{M}$ 



Steven Feltovich is Manager of Business Consulting Services for Sherwin-Williams Automotive Finishes Corporation. He has been a consultant to top industry executives at collision centers in the U.S., Canada, Central America, and the U.K. for 19 years.

**≢**=**7** E-mail Steve at steven.j.feltovich@sherwin.com

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SHOP MANAGEMENT | BEST PRACTICES

**SHOPPROFILE** A snapshot of one of the industry's leading shops

abrn OPERATIONS

> **CARSTAR JEREMIAH'S COLLISION AND PAINTING /** OKLAHOMA CITY, OK



# A personal touch

Award-winning shop owner eases customer stresses

#### BY JAMES E. GUYETTE | CONTRIBUTING EDITOR

rapidly rising career in body shop management came sooner rather than later for Jeremiah Graham after a chance encounter with a kindly mentor who immediately grasped Graham's business potential.

"I'm probably the youngest shop owner in Oklahoma City, and maybe the entire state," says Graham, who at age 33 owns CARSTAR Jeremiah's Collision and Painting along with his wife Elizabeth.

Graham got his start in the industry during the summer following his high school graduation. At the time he was waiting on tables. "I was in my driveway when a lady was moving in three houses down. She asked if I could help unload a few heavy pieces. While I was unloading, her dad was watching me," he recounts. The father overseeing the move turned out to be Hugh Dooley, who with his wife Della, owned a local Maaco franchise.

"He asked me if I liked cars and if I was interested in a career. I said, 'What's a career? I'm only 18.' I kind of blew it off at the time. A few weeks later his daughter stopped by. She said her dad was impressed with me, so I finally went to talk to him, and he offered me a job."

Coming on board as a customer service representative, over the next 15 years Graham moved up to estimating and then became a managing partner under Hugh and Della's tutelage. "I was interested in it, and I wanted to keep going. I wanted to learn more and be better."

Hugh and Della were both astute business operators eager to mentor Graham and pick up the tab for his ever-advancing I-CAR training. "They saw something in me and gave me the confidence to move forward on my own."

Upon Hugh's death, Della decided to retire. Graham purchased the Maaco shop's assets and established his own business, conducting a major remodel and overhaul of the facility in the process.

"We were independent for about a week," Graham notes, before becoming a CARSTAR franchisee in 2012. In short order Jeremiah's clinched the corporation's company-wide Rookie of the Year and Marketer of the Year honors.

#### **Constructive debates**

Graham has combined his people skills and never-ending quest for education to reap an annual gross of \$1.5 million at the 12-bay shop with 11 employees.

Graham believes his ability to relate to those around him is an "innate" quality that aids in steering the success of the enterprise. "I genuinely care about what's going on with people," especially when a

#### AT A GLANCE

CARSTAR Jeremiah's Collision and Painting Name of shop

Oklahoma City, Okla. Location

Jeremiah and Elizabeth Graham

Owners

1 Number of shops

**2** Years in business

11

Number of employees

5; 4 fleet accounts Number of DRPs

**27,000** 

Square footage of shops

Number of bays

\$1,840

Average repair order

**15-20** No. of customer vehicles per week

> 8 days Average cycle time

\$32,000

Average weekly volume

**\$1.5 million** Annual gross revenue

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customer is undergoing the stress of being in a car crash."

This affable manner melds with extensive industry knowledge to achieve productive negotiations with insurance providers, according to Graham. "I definitely believe I catch more flies with honey than vinegar," he explains. "I have educated myself so we can have 'constructive debates.' I can explain it to them in a way that they understand."

#### A comfortable atmosphere

The shop's five direct repair program (DRP) affiliations amount to about 20 percent of the revenue, with four fleet accounts netting another 15 percent. "I would like to have companies with large fleets think of me. It can also turn into more business when their employees see how e take care of people. A lot of times they will bring their personal cars to me."

Graham continues to seek additional commercial vehicle clients and DRP relationships among smaller insurers. Offering assistance to insurance representatives is an important element. "We provide a comfortable atmosphere for them. We have a designated area for them to inspect vehicles. We have work areas for them to sit down and take care of their business," he says. "We let them use our WiFi and printers. We just try to be as friendly and helpful as possible."

A similar approach is taken with vendors. "My policy is 'treat us fair; do the



right thing for us and we'll do business with you.'"

Graham is currently en route to becoming an I-CAR instructor, and Jeremiah's frequently hosts on-site training sessions that jobbers support via sponsorships or paying for the students' meals. Manufacturers are also invited to present in-house classes and conduct certification procedures

"When it comes to training, it's not as much of a requirement as it is them wanting to learn more," he says of his staff.

"I remind my guys that things are always changing and we must stay current. If they come to me about something they want to learn more about, I'll do everything I can to get them more resource material or get them extra training. Our plan this year is to go for more OE certifications. I pay for their training and for their time while they're in training."

Graham does point out that "one of my challenges right now is finding and



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developing good people. We have some great people in our shop right now, but it's always a challenge to find someone with integrity that you can trust."

#### Charting productivity

Each morning at the shop begins with a staff meeting to discuss the day's tasks. Jeremiah's is in the process of implementing a 5S workplace organization system that applies the principles of Sort, Straighten, Shine, Standardize and Sustain.

Production boards are used to chart the progress of body work and painting,



and parts carts are used throughout the shop floor. "When it comes to other services, we offer paintless dent repair," Graham reports. "That has been pretty popular, and it's a great way to upsell while a customer already has their car in our shop," he says.

"We also have a mechanical guy. We've done some brake jobs and oil changes, but mechanical is not something that we advertise. But if a customer needs something done while their car is here, we try and accommodate that request."

Some 65 percent to 70 percent of the clientele consists of either referrals or repeat customers, "so we really market to them with great service. We try to wow them during the time that their car is here." Patrons are provided with photos depicting the repair process.

"One customer set a special ringtone on his phone for our text messages. Every time his phone went off, everyone in his office would gather to see the progress on his car," Graham reports. "I see that as a great marketing message, the way our customer service reputation can spread." The shop is heavily involved in charitable and civic events that include sponsoring an elementary school reading program for low-income students and contributing to other community causes. Graham has joined the National Auto Body Council (NABC) and is gearing up to participate in the Recycled Rides program.

"I am part of CARSTAR's EDGE Performance Group, which is a great asset for a young owner like myself," he observes. "As the owner, my role is to pitch in everywhere, from estimating, to running production, to scrubbing the toilets if needed. I'm not an off-site owner. I'm very involved." **M** 



James E. Guyette is a long-time contributing editor to ABRN, Aftermarket Business World and Motor Age magazines.

**≢=**<sup>7</sup> E-mail Jim at JimGuyette2004@yahoo.com

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**PROFIT MOTIVE:** YOUR COMPASS TO FINANCIAL SUCCESS

# Making money on paint and materials

Focus on the details in your repair plan to drive profits

#### BY TOM MCGEE | CONTRIBUTING EDITOR

ow much profit are you making on paint and materials? Increasing profit on paint and materials can be as easy as focusing on the details in the repair plan. As you create a more detailed repair plan, know that your unsupported opinion doesn't matter to the insurance company.

Share all documentation that you can gen- **7. Paint labor hou** 

erate to support your position.

#### **Considerations for profit**

OPERATIONS

Below are several areas to consider in your repair plan to capture additional refinishing hours and paint and material sales.

**1. Standard operating procedures.** Do you have a paint problem or a body repair problem? For example, is the bodywork being prepared to the proper grit, or are your painters required to use a larger quantity of primer to cover for this?

**2. Inventory controls.** Are materials going home, used on personal vehicles, or lying partially used around the shop?

3. Waste. Look for materials being used and not properly reflected on the estimate. Look for other wastes. Are painters mixing more material than they need for each repair? Are you using more basecoat, clearcoat, primer or sealer than you should?

4. Material grade. You may think you are saving money by not using premium grade sandpaper, but you may be using twice as much material to compensate.

**5. Accounting.** Are materials properly reflected on your profit or loss statement? Consider using a paint and material invoicing program.

7. Paint labor hours. If you calculate materials costs based on refinish hours multiplied by an hourly rate, increasing the number of paint hours on each repair will increase your material reimbursement.

8. Blending versus panel refinish. Do you make more money by blending into an adjacent panel or by panel refinishing?

9. Job costing in your paint mixing system software. Are you being reimbursed for what you are using?

#### **Estimate audits**

Below are areas often overlooked on repair plans that should be considered.

Adjacent panel weld damage: If a welded-on part is being replaced, then the repair plan needs to include the repair and refinish of weld damage done to the adjacent parts. Remember paint times need to include inner and outer surfaces!

**Raw bumper preparation:** With unprimed bumpers increasing, it is critical that shops capture the labor and materials for preparing these parts for refinishing.

Mask interior openings: It may be necessary to provide additional masking for interior door openings, windshield and back glass openings, trunk or cargo areas.

Denib: This is required to remove small

surface imperfections.

Seam sealers: If original seam sealers are removed or damaged, include the costs of replacing these. To match the appearance and function of original sealers, some repairs will require more than one type be applied.

**Paint additives:** When refinishing plastic parts, you may have to use additional additives such as flex additives or adhesion promoters. If these materials are not included by the estimating system, make sure to itemize them on your repair plan.

**Feather prime and block:** While this has been debated for years, information indicates that it is a non-included operation. Be sure to add it.

#### Additional sources

For additional help capturing refinish labor hours and material reimbursements, visit www.DEGweb.org; www.estimatescrubber.com; or see the SCRS Guide to Complete Repair Plan.

You can also download estimating guides for the major estimating systems from the DEG website. These will give you a listing of the included and not-included operations for each system.

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Develop sets of supporting documentation for items where you encounter resistance. Use the documentation to support your position and as a tool to share your education and knowledge.

We have attached a documentation sample for preparing unprimed bumper covers for refinishing. See it free for a limited time at www.ationlinetraining.com/ abrn1504. **■** 

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FOR TODAY'S TECHNICIAN

### YOUR GUIDE TO ALUMINUM REPAIR PROCEDURES AND TECHNIQUES

BY LARRY MONTANEZ | TECHNICAL EDITOR

Wow — that is how we will start. In the past two years, we have seen the manufactures of aluminum repair equipment triple, along with the slick, tricked out offerings to save money on new purchases of tools and a lot of misinformation, bordering on outright lying. Metallurgy is an important part of being on top of your game, and this has never been more true. We have all started to understand the differences between mild steel (MS), high-strength steel (HSS) and advanced high-strength steel (AHSS), such as boron-alloyed steel, but contrary to popular belief, automotive grade aluminum is NOT all the same. Let's look at the differences we need to know.

#### Aluminum tempers and series

In the aluminum fabrication industry, the basic tempering designations are as follows:

 $\bullet$  F – As fabricated, which applies to products of a forming process in which no special control over thermal or strain hardening conditions is employed.

• O – Annealed, which applies to product that has been heated to produce the lowest strength condition to improve ductility and dimensional stability.

 $\blacksquare$  H – Strain hardened, which applies to products that are strengthened through cold working (shaping, bending, hammering). In addition to the work hardening process,

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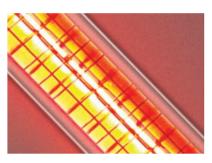
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some supplementary thermal treatment, which produces some reduction in overall strength, may be applied for desired strength. The "H" will always be followed by digits.

• W – Solution heat treated, which is an unstable temper applicable to alloys that age spontaneously at room temperature after heat treatment.

• T - Thermally treated producesstable tempers other than capable in F, O or H treatments. This applies to products that have been heat treated, sometimes with supplementary strain hardening to produce a stable temper. The "T" is always followed by digits.

In the collision repair field, we will only deal with two tempering designations, strain hardened "H" and thermally treated "T" aluminum alloys in wrought ad cast components.

The families, or series as they are called, for wrought aluminum are:

 1000 series, which is 99 percent pure aluminum

 2000 series, which is alloyed with copper  3000 series, which is alloyed with silicon

 $\hfill 4000$  series, which is alloyed with silicon

5000 series, which is alloyed with magnesium

 6000 series, which is alloyed with magnesium and silicon

7000 series, which is alloyed with zinc

The second single digit (xXxx), if different from 0, indicates a modification of the specific alloy, and the third and fourth digits (xxXX) are arbitrary numbers given to identify a specific alloy in the series. Example: In alloy 5554, the first number 5 indicates that it is of the magnesium alloy series, the second 5 indicates that it is the 5th modification to the original alloy 5054, and the 54 identifies it in the 5xxx series.

The only exception to this alloy numbering system is with the 1xxx series aluminum alloys (pure aluminums), in which case, the last two digits provide the minimum aluminum percentage above 99 percent, i.e., Alloy 1350 (99.50 percent minimum aluminum).

The series for cast aluminum are as follows:

 1xx.x series, which is 99 percent pure aluminum

2xx.x series, which is alloyed with copper

 3xx.x series, which is alloyed with silicon, copper and/or magnesium

4xx.x series, which is alloyed with silicon

5xx.x series, which is alloyed with magnesium

 6xx.x series, UNUSED for cast aluminum

7xx.x series, which is alloyed with zinc

The second and third digits (xXX.x) are arbitrary numbers given to identify a specific alloy in the series. The number following the decimal point indicates whether the alloy is a casting (.0) or an ingot (.1 or .2). A capital letter prefix indicates a modification to a specific alloy.

Example: Alloy - A356.0 the capital A (Axxx.x) indicates a modification of



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alloy 356.0. The number 3 (A3xx.x) indicates that it is of the silicon plus copper and/or magnesium series. The 56 (Ax56.0) identifies the alloy within the 3xx.x series, and the .0 (Axxx.0) indicates that it is a final shape casting and not an ingot. But, in the collision repair field, the only numbers we are concerned with are the series number — 1000 through 7000 series.

Now let's cover the series and temper designations. If we consider the different series of aluminum alloys, we will see that there are considerable differences in their characteristics and applications, many of which are proprietary to each OEM (secrete). There are two very different types of aluminum the series are categorized into, as we mentioned. These are the heat-treatable aluminum alloys (those that gain strength through the application of heat) and the non-heat treatable aluminum alloys (those that gain strength through forming and work hardening). This distinction is particularly important when considering the effects of arc welding on these two types of materials and



Right rear uni-rail replacement procedure

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reparability. Wrought (sheet) can be repaired in certain situations, while cast and extrusions cannot be repaired. But sheet, extrusions and cast can be welded for replacement procedures. Cracks, tears or other types of damage can never be welded in cast or extrusions. Repairs to cracks and tears in sheet aluminum are extremely limited. One thousand, 3000 and 5000 series wrought aluminum alloys are nonheat treatable and are strain hardenable only. Two thousand, 6000 and 7000 series wrought aluminum alloys are heat treatable, and the 4000 series consist of both heat treatable and non-heat treatable alloys. The 2xx.x, 3xx.x, 4xx.x and 7xx.x series cast alloys are heat



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treatable. Strain hardening is not generally applied to castings.

Heat-treatable alloys acquire their optimum mechanical properties through a process of thermal treatment, the most common thermal treatments being solution heat treatment and artificial aging. Solution heat treatment is the process of heating the alloy to an elevated temperature (about 990 degrees F). After heating, quenching generally follows, usually in water or other liquid, at room temperature. Solution heat treatment is usually followed by aging. Aging is the precipitation of a portion of the elements or compounds from a supersaturated solution in order to yield desirable properties. The aging process is divided into two types: aging at room temperature, which is termed natural aging, and aging at elevated temperatures, termed artificial aging. Artificial aging temperatures are typically about 320 degrees F.

The non-heat treatable alloys acquire their optimum mechanical properties through strain hardening. Strain hardening is the method of increasing strength through the application of cold working or work hardening. The temper designation system addresses the material conditions called tempers. The temper designation — the "T" or "H" — and number digit follows the series. Examples: 6061-T4, 6061-T6 or 5052-H32, 5052-H50. For example, many European manufacturers use 6061-T6 or 6111-T6, while Ford utilizes 6111-T4 for many of their aluminum components.

#### Aluminum equipment

Equipment is a real area of debate. From what we have read and seen, there is a definitive divide in information and interpretation of the information. Hopefully, we can clear it up. Here are the basic requirements for the aluminum certified repair facilities and, in actuality, anyone who wants to be involved in repairing aluminum. Some of the information is proprietary for some OEMs, so we will talk generally.

• Dedicated structural realignment apparatus, such as Celette, Car-O-Liner, GlobalJig or CarBench. Ford has those manufactures listed and approves Chief. Chief is not approved for the European programs. As of this, writing Spanesi has received some apSouthern Polyurethanes Inc.



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provals for certain programs, but we have not received confirmation.

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between steel and aluminum, but it is not recommended. Power tools must be kept separate and dedicated to one or the other.

### Metal shaping, fillers and repair times

Misinformation in the market is rampant. It is funny that someone made up the requirement of two hours to set up a vehicle on a frame machine, which is inaccurate, and now others are saying you double the repair time for aluminum, which is only partially true. When shaping aluminum, there are few things to remember.

1. Aluminum-dedicated hammers and dollies should be wood, plastic, aluminum or coated steel. The steel and aluminum hammers and dollies have rounded edges and polished faces. Hammer-off dolly techniques must be used. Aluminum is not easy to move, as it has no memory. The hammer must be stuck so the face lands flush and not on an angle, where more deformities can be formed.

2. Heat must be used on aluminum. You cannot repair cosmetic damage on aluminum — unlike steel — cold. Heat is the primary way to remove most of the damage. As far as structural components, there is generally no pulling or realignment allowed by the OEM. Ford is one company that allows secondary or indirect misalignment to be pulled. The reason Ford allows this is because of their use of T4 alloy tempering verse; other OEMs generally use T6 alloy tempering, which is much harder.

3. P80 grit is the coarsest sand paper you can use and is like 50 grit on steel. Most of your sanding will be performed with P100 grit paper and finished with 120, 150 and 180. Although you will use aluminum specific steel-coated files in some situations.

4. What you think is repairable on steel may not be repairable on aluminum and what you think is not repairable on steel may actually be repairable on aluminum. Remember backside access is paramount on aluminum, and you must watch out for bonding adhesives and foams, just like steel components, which would make the damage unrepairable and require component replacement. Additionally, like with steel, filler

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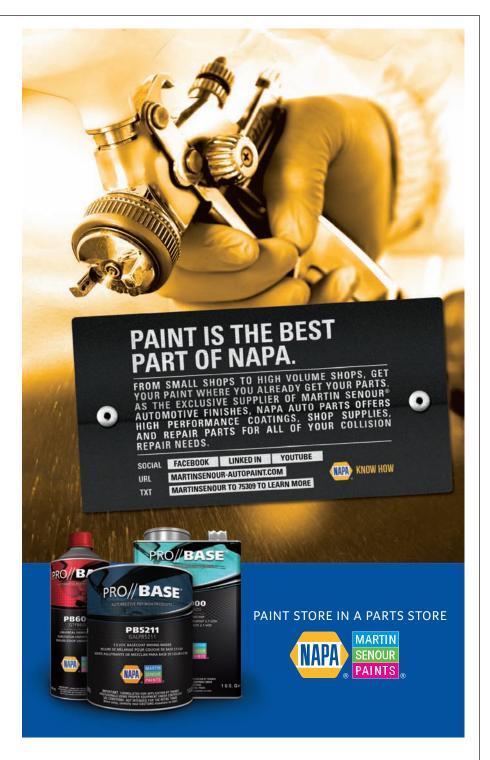
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should never exceed 2mm to 3mm maximum. Thinner is better.

5. Some OEMs require an aluminum- or OEM-specific filler to be used, while others allow the same filler used on steel components. It is recommended that you use separate containers of filler and mark them for the purpose.

6. Aluminum dent-pulling pins are

used after heat applications and attempts to remove the damage. Additionally, when welding the pins on, you will generally use only a few, as opposed to steel panels where you may use 15 to 20 pins. Aluminum pins are one-time use and cannot be twisted off. The pins, when done with pulling, are cut and filed down, otherwise you could make



holes and then the panel would most likely require replacement.

7. Back to repair times. Deformities on aluminum can be removed in minutes or can take hours of applications of heat and massaging with hammer off dolly techniques, when compared to steel. Filler and sanding times are the same; you are metal shaping, not sculpting, the repair area. For example, if we all agreed a dent on the center of a GM door panel (mild steel) is 2.0 hrs, when compared to the same exact dent on a Toyota door panel (HSS), it may be 3.0-4.0 hrs due to the elasticity and ductility of the substrate. But on an Infiniti door panel (aluminum), that same exact 2.0 hr dent may be 1.0-8.0 hrs, or unrepairable. An experienced, well-trained technician can only determine the actual amount of repair time required.

#### Dos and don'ts

There are many things to remember when attempting to repair an aluminum-intensive vehicle. Some of these dos and don'ts will not make everyone happy, but they are something to consider. Some of the more important things to know are as follows:

• Don't use aftermarket parts, although many are not available. Additionally, used parts are a don't. Most OEMs have position statements against their use. Used structural components must never be used.

• Do get the OEM repair information from their website or a third party, like ALLDATA. The OEMs have very specific repair procedures and protocols you must adhere to.

• Don't be fooled or foolish. Just because you have purchased equipment for one OEM program, it does not mean you can repair all vehicles.



Flow Drill Screws (FDS) installation with structural adhesive (blue glues) on outer rear lower uni-rail

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For example, many of the approved Ford aluminum program tools and equipment are not approved for the European vehicles; this would be true if you are an Audi aluminum facility and you have a Mercedes-Benz aluminum-intensive vehicle. This includes cosmetic damage. Although the equipment and tools are similar, they are not the same. Additionally, you need to understand most aluminum OEMs restrict structural components for sale only to approved program shops. Many times if you start disassembly and repairs to a restricted aluminum-intensive vehicle, you may have caused irreparable damage even from jacking the vehicle incorrectly. This could mean you will have to purchase the vehicle, as it is now deemed a total loss.

#### Certified program overviews

Much of the OEMs' certified program information is proprietary, so we will list general rules. The rules for most of the European and Asian (Nissan GT-R and Lexus LFA) OEMs are as follows:

 Dealership sponsorship is required, and a working relationship is needed. Additionally, there are requirements as to how many outside shops (non-dealer owned) may be sponsored, and there are requirements as to how many miles from the dealer the shop is located.

 Equipment purchases must be obtained from the certified program provider and some of the equipment can only be sold to the sponsored program facilities. For example, welders, rivet guns, hand tools, windshield removal and installation tools, frame equipment, etc.

 Insurance coverage, facility appearance, signage, hours of operation, uniform and dress appearance, parking and towing requirements must be met.

 Shops must fulfill training requirements from I-CAR, ASE certifications and OEM specific training and welding certification. OEM training is generally one day online training prior to attending a 3-, 4- or 5-day training course on a specific vehicle or range of vehicles. Welding requirements can be a 5- to 10-day course, where all test samples are sent to an engineering lab and must pass the ISO 9606-2 standard. Recertification can be once every 6 months to once every two years, based on the OEM program requirements. The cost can be upwards of \$16,000 for initial testing.

 Quarterly visits to check on the facility, checks of OEM repair information documentation and customer service reviews



Flow Drill Screws (FDS) installation with structural adhesive (blue glues) on inner rear lower uni-rail

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From right: Plastic hammer, rubber hammer, steel dolly, stainless steel wire brush and file

are required. Specific OEM-only parts and materials usage, proved with invoices, will also be examined and verified.

• There will be surprise spot check visits from the OEM certified collision repair program managers.

• You must meet the requirements of dealer service for computer rests and wheel alignment.

• Specific parts ordering software programs and management of order and receiving dates is required. All restricted parts are drop shipped to the certified facility.

For the Ford F-150 program, currently the following would apply:

• Dealership sponsorship is not required for all shops, only those in the certified program. Anyone can purchase the parts, but it is recommended that all procedures and protocols are followed.

• Equipment purchases can be obtained from the certified program provider or from the equipment provider listed in the Ford F-150 Program list, which includes welders, rivet guns, hand tools, windshield removal and installation tools, frame equipment, etc.

• Insurance coverage, facility appearance, signage, hours of operation, uniform and dress appearance, parking and towing requirements have to be met by the certified facilities. Non-certified facilities are not required.

• Training requirements are provided by I-CAR, and are open to all facilities. The training program is 8 hours. Welding requirements are provided by I-CAR; it is a 6-8 hour course conducted at your facility. Equipment requirements must be met prior to the test.

• For the certified facilities, a visit from Assured Performance Network is required. Non-certified shops are not required to have an inspection.

We hope this second article, in a six-part series, has helped you understand some of the differences and dispel

some of the myths associated with repairing aluminum-intensive vehicles. This is an overview, and we will delve deeper into each area in detail in our following articles throughout the year.



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### REACQUAINT YOUR STAFF WITH THE BASICS OF AIR CONDITIONING WORK

Although climate control systems have become significantly more advanced, restoring fresh, cold air conditioning to a vehicle can be manageable if you stay educated.

#### BY TIM SRAMCIK | CONTRIBUTING EDITOR

As a vehicle owner, there are few feelings worse on a hot summer day than turning on your air conditioning only to get a blast of warm air or barely any airflow at all. It could be your A/C system just needs recharged or has a small leak. Then again, you also could be looking at replacing an expensive compressor or evaporator.

As a repairer, there are few tasks potentially more aggravating than tracking down the source of an A/C problem. There's a good chance that source could be something obvious, like a damaged component, hose or O-ring. At the same time, you also could be looking at wiring damage or a complex diagnostic and repair issue with a vehicle's sophisticated climate control system that may require computer scanning.

Tangling with an inoperative A/C system entails many of the same challenges of any damaged mechanical/electronic automotive system. In most cases, you turn this work over to a certified A/C tech (mandated by law) at your shop or sublet it to a mechanical repair facility. That doesn't mean you should keep information on A/C repairs solely in the hands of those who perform the work.

Customers and insurance reps can have plenty of questions surrounding A/C repairs that estimators, customer service reps and managers will need to address. Additionally, air conditioning maintenance can provide your business with a significant revenue stream these same employees could be upselling.

It's time to take another look at the cold, hard facts and repair information surrounding A/C work. Refer to the following steps to keep your employees educated.

#### Step 1: Learn the system

A vehicle's air conditioning system works by creating a



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super-cold element and then circulating air over it and into the vehicle cabin to remove the hot air from the vehicle cabin. The circulation is the product of a fan. Creating the cooling element is the difficult part.

This is accomplished by transitioning an A/C refrigerant (typically R-134a) through a series of gaseous and liquid states that turn it ice cold.

The refrigerant is stored in the A/C system as a gas. When you flip the A/C on, this gas is compressed, causing it to liquefy. The liquefied refrigerant then flows through a high-pressure line to a radiator-like component that condenses it and removes any heat.

The cold liquid flows through a valve into an evaporation unit where it becomes a gas again. The cold gas turns this unit into a cooling element that air can be forced over to produce air conditioning.

The refrigerant warms as it is used here. To keep the cold air flowing, the refrigerant is sent back to the beginning of the A/C system where it is com-



U.S. vehicles such as the 2014 Jeep Cherokee are now using the refrigerant 1234yf, which should eventually replace R-134a.

pressed again and transitions once more through the air conditioning cycle.

#### Step 2: Know the parts

Most A/C systems consist of five basic components, along with sensors and refrigeration lines. These components are:

**Compressor:** As its name suggests, the compressor pressurizes the refrigerant and is the first and last stop in the air conditioning process. An engine belt powers the compressor. An electrically operated clutch turns the compressor on and off as the demand for cold air increases.

Photo:

**Condenser:** The condenser functions like a miniature radiator — cooling (by removing the heat) then liquefying the compressed, hot gaseous refrigerant as it passes through. The condenser is typically located near the vehicle radiator, sometimes directly in front of it. Like the radiator, the condenser sometimes is fitted with a fan.



**Thermal Expansion Valve:** This valve controls the flow of the liquefied refrigerant, allowing the motorist to determine how cool the air will be when it enters the vehicle cabin.

**Evaporator:** The evaporator is another kind of radiator, much like the condenser. The evaporator, however, reverses the work performed by the condenser. It "evaporates" the liquid refrigerant, turning it back into a gas that chills the evaporator fins. Air blown past the fins becomes icy-cold and is transferred into the vehicle where it cools the interior. The refrigerant remains in the evaporator until it begins to warm and lose its cooling effect.

Accumulator or Drier (or Receiver Drier): The warm refrigerant makes its way back to the compressor but must pass through one more component — the drier.

Refrigerant can only be returned to the compressor in the form of a gas. Sometimes, however, liquid gets passed along (usually because the gas refrigerant warms and returns to a liquid). Liquids pose a serious risk to the compressor, where they can cause severe damage. The drier catches and absorbs liquids using a chemical known as a desiccant. Because refrigerant carries dispersed oil to keep the compressor lubricated, the drier also includes a filter to trap any accumulations of oil or other "gunk" that may get passed through the A/C system.

#### Step 3: Obtain the proper tools

The majority of damaged A/C systems experience some type of leak, which means your techs will use a UV dye set to identify where refrigerant is seeping through. Some OEMs do not allow dying of their systems, so your techs should be making use of three other tools to spot system damage:

• Electronic refrigerant leak detector — Sometimes a UV dye set won't reveal a leak. An electronic leak detector can check the entire system in a matter of minutes, including the evaporator.

• A/C manifold gauge set — Determining the pressure readings on the low and high sides of an A/C system are es-



erant in a component called an evaporator. Air passing through the evaporator fins cools the vehicle interior.



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sential to troubleshooting problems, making an A/C manifold gauge set an absolute necessity. Newer sets include anti-blowback features, but techs should still wear safety glasses.

• Flexible inspection mirror — Because A/C components are packed tightly in the engine compartment, locating damaged parts — especially bent lines and damaged evaporators — can be difficult. A flexible inspection mirror can fit into these tight areas and help turn up hidden damage.

#### Step 4: Difficult diagnoses

Tom Griffin, owner of 2014 *ABRN* Top Shops winner Mayfield Collision Centers in Bedford Heights, Ohio, says in many cases an A/C system damaged in a collision event is easy to spot. A front-end collision should indicate the

#### A NOTE ON REFRIGERANTS

Restrictions from the Environmental Protection Agency (EPA) phased out A/C refrigerant R-22 in favor of more environmentally-friendly R-134a. Now it appears that R-134a will steadily disappear as automakers turn to an even safer environmental alternative, 1234yf.

Half of a million vehicles on the road worldwide already use 1234yf. Industry experts expect that number to increase rapidly in 2017 when Europe begins mandating 1234yf in all new passenger vehicles. In the U.S., automakers are switching now to 1234yf to earn EPA incentives.

U.S. vehicles using the new refrigerant include these models, beginning in these model years:

2013 Cadillac XTS 2014 Chevrolet Spark EV 2014 Chrysler 300 2014 Dodge Challenger 2014 Dodge Charger 2013 Honda Fit EV 2014 Jeep Cherokee 2014 Range Rover 2014 Range Rover possibility of A/C damage. An inspection of the engine bay is the first step in uncovering problems.

Even if the A/C system appears fine, the next step is running the air conditioning and evaluating its performance. From there, a certified A/C tech can perform the necessary diagnostic tests and repairs. Most A/C problems can be traced to broken components or system leaks. Fractured hard lines (aluminum) and flexible (rubber) A/C lines are frequent culprits, as are punctured condensers, since they frequently are located at the front of the vehicle, near the radiator where they are vulnerable to damage in frontal collisions.

Some A/C problems can be far more difficult to spot, especially passive refrigerant leaks. There are two types of leaks, active and passive. Active leaks constantly lose refrigerant and thus show up more easily during leak tests. These leaks are typically the result of collision damage to belts and lines that are bent or crimped when nearby engine parts are pushed into them. Engine and other mechanical components sit so close to one another in the engine bay that even a light hit can press them into one another.

Passive leaks are intermittent so they may not show up during a standard evaluation and only appear at times when the vehicle is running. These leaks are the products of damage elsewhere in the A/C system that interfere with system temperature and pressure and create vibrations. Possible damage includes shaft seal leaks in the compressor or a cracked braze on an



Electronic leak detectors can check the entire A/C system in a matter of minutes, including the evaporator.

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evaporator or condenser that is no longer properly supported.

In these cases, a UV dye test will be more effective at finding leaks than an electronic test.

Passive leaks can take time to diagnose. Sometimes, they may not be apparent until after a vehicle is returned to the customer. Your shop needs to keep these factors in mind when performing a final quality inspection on the vehicle and if a customer calls later with concerns over the A/C system. In many cases, the latter issue can be avoided by performing a UV dye test on every damaged (or potentially damaged) A/C system and by thoroughly examining the system during a road test.

### Step 5: Offering further recommendations

Even if the A/C system isn't damaged in a collision, that doesn't mean you should ignore it during a vehicle inspection. Most vehicles on the road today (and well over 90 percent of new vehicles) have air conditioning. Repairing faulty A/C systems and offering maintenance can provide significant revenue.

Consider evaluating the A/C system in every vehicle that visits your shop, especially those older than three years or with more than 100,000 miles. Over time, many of these systems need recharged to return them to proper functional levels. Air conditioning systems that aren't maintained pose significant, and potentially costly, problems for vehicle owners.

Inform your customers of the following:

• Contaminated or low refrigerant or faulty A/C electrical wiring can ruin a compressor. This by itself is a serious issue, but it also can lead to even larger problems. Damaged compressors can send electrical surges throughout the A/C system and to other parts of a vehicle causing severe damage to both. Even if a vehicle escapes these issues, a faulty compressor can produce other





An A/C manifold gauge set is necessary to determine the pressure readings on the low and high sides of an A/C system.

VIOT

hoto:

issues, including draining the battery (thereby shortening battery life), reducing fuel efficiency and creating poor idling.

• A number of A/C problems can be repaired fairly inexpensively. Replacing the refrigerant is affordable as are other necessary services. For example, fluctuating A/C temperatures can be the result of moisture building up in an assembly or hose where the moisture turns to ice and creates a clog. Removing the ice is quick and easy. A weak or aging car battery can cause a number of A/C performance issues that can be remedied with a replacement costing around \$100.

Foul odors emanating from the A/C are typically the result of bacteria that build up in the evaporator. A quick evaporator flush will eliminate the problem.

The beautiful new finish and fresh body work you've provided can restore a vehicle with a new look that shouldn't be paired with A/C problems. Collision repairs provide an ideal time to address other vehicle issues. One of the best ways to appreciate the sharp look of a repaired vehicle from the inside is with clean-smelling, fresh, icecold air. Motorists and repairers can both agree to that. **M** 



Tim Sramcik has written for *ABRN, Motor Age* and *Aftermarket Business World* for more than a decade. He has produced numerous news, technical and feature articles covering every aspect of the collision repair market. In 2004, he was recognized for his work by the American Society of Business Publication Editors.

**≢=**<sup>7</sup> E-mail Tim at TSramcik@yahoo.com

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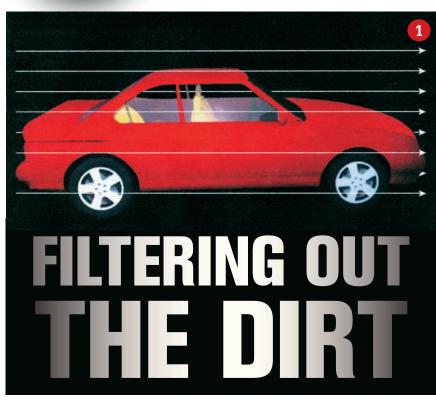
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### <sup>abrn</sup> TECHNICAL



### KEEP YOUR PAINT BOOTH AS CLEAN AS POSSIBLE For the best finished product

#### BY **ALFRED THOMAS** | CONTRIBUTING EDITOR

The pop saying "We've come a long way, baby," captures the progress of the automotive paint industry. The paint booth is now arguably one of the most important tools in the collision repair paint department. It has evolved into a tool that not only protects workers, but also cuts down on contamination of the environment, keeps the work clean and speeds up application and curing — thus increasing shop production. Though a significant investment, a paint booth that is properly maintained and operated efficiently can produce 10 or more paint jobs per day.

However, such progress has brought much controversy as well. Many laws mandate how we must operate these spray environments, what type of protective clothing operators should use and even the quality of air filters and how often they are changed. The most significant law or regulation is 40 CFR Part 40 Subpart HHHHHH (ABRN.com/EPAH6), commonly called the EPA H6 Rule.

#### Spray booths

Booth technology has changed as paint has changed. Some of the first booths used — when lacquer was the primary coating being applied — were the crossdraft type **(FIG 1)**, generally a simple non-insulated box that had filters at both ends and commonly worked by drawing air in from the rear and exhausting it at the front. Booths of this type worked principally to contain overspray and exhaust it outside. Lacquer

paint primarily dried through evaporation, and a crossdraft booth helped speed the curing time.

While these booths were an improvement over spraying vehicles in the shop and protected workers from overspray, crossdraft booths had some issues. They drew in massive amounts of air through the rear door, which in the winter could significantly lower a shop's temperature. They also drew massive amounts of air, contaminated with shop debris, across un-cured paint, often depositing dirt as the filters became filled. Filter technology at this time was crude at best. Most paint fumes were exhausted out the paint stack, and as incoming air quickly contaminated the rear booth filters. it allowed most of the dirt and debris to pass into the booth. Vehicles painted with lacquer were polished to create the desired shine, so small dirt particles were eliminated during polishing.

Booths were then equipped with fans that forced air into the booth, and another set of fans that drew air out. This provided a positive air flow in the booths. With more air coming in than going out, if there was a "leak" in the booth, it would blow air out rather than suck air (and dirt) in. Manometers, or air balance gauges (**FIG 2**), were installed on the booths that monitor air flow.

The next generation of paint booths was the downdraft group (**FIG 3**). These had incoming filters that covered the complete ceiling, and exhaust filters in the floor that directed the air straight down, passing over a much smaller part of the vehicle. The incoming air, on some, was pre-filtered before passing through the ceiling filter, eliminating nearly all



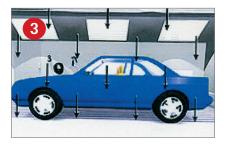
dirt and debris before it entered the booth. Filters in the floor also improved efficiency and filtered out most dirt and paint particles before they passed into the exhaust filters.

With the increase of air filtration, it is now more critical that painters control their booths more precisely. The introduction of basecoat/clearcoat paint decreased the need for polishing. Painters who wanted cleaner application of paints could no longer just wet down the floor before painting. Booth maintenance was now much more critical.

There is now a third type of spray booth available— the semi-downdraft (FIG 4)— which is a hybrid of the cross draft and downdraft booths.

#### Filters

Filters come in many different types, configurations and price ranges. Though denser filters cost more, they are also more efficient and trap more particles, allowing other more expensive filters to last longer. Pre-filters and exhaust filters are generally made



from the denser filter media and in a "pillow" configuration (**FIG 5**)). This allows for a larger surface area, making this configuration markedly more efficient. Ceiling filters are the most dense and costly; for this reason, many booths now use pre-filters to clean air before it is passed through the ceiling filter, extending its life significantly.

Work with the spray booth manufacturer or filter supplier to select the right filter for the shop's filtration needs.

#### **Changing frequency**

Painters may ask when they should change their filters. The answer lies with the booth air balance meter (ma-



nometer, FIG 2). As filters become clogged, the flow of air through them becomes more difficult. Eventually the booth can no longer be balanced. On the booth control panel, along with controls for the temperature and time, is a balance control knob, which is used to balance the booth in both positive and negative directions. When the booth can no longer be balanced, filters should be checked. Start first with the floor filters; then the exhaust and prefilters should be checked. Ceiling filters are changed less frequently, but should still be periodically checked. A filter change-out list should be kept.

The booth's airflow should be nearly

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#### Spray booth operations

As spray booths have become more sophisticated, their operation has become more critical. If operating properly, booths deliver safe and clean applications, as well as fast purging and curing of paint systems. So what should a painter do to reap the benefits of a modern booth?

First of all, the booth must be kept as clean as possible. To do this, never open booth doors unless the fans are running and balanced. When a booth is balanced with positive airflow, it is less likely to draw dirt and debris in when doors are opened. If the booth is balanced with a negative airflow or the booth is off, when the doors open, dust (which is statically charged) will enter the booth; and when a vehicle, which is positively charged, is placed inside, the dust will be drawn to the vehicle.

Shops can apply a sprayable masking on the booth's walls that can be cleaned off and reapplied as needed, as well as covering the floor with paper, which is changed as it gets dirty. All the prep work should be done in a prep station or using a vacuum, as far away from the paint booth as possible. As much masking as possible should be done before the vehicle is loaded in the booth, and the booth should be cleaned before each paint job. Experts recommend a balanced, generally clean booth be blown before a vehicle is loaded. The air stream of the blow gun is directed toward the floor filters.

The masked vehicle should be blown off with high-pressure air before loaded into the booth. The complete vehicle should be blown off, including the masking paper and all cracks where dust can hide. Then a chemical cleaner is used just before the booth doors are opened and the vehicle loaded. Many painters push a vehicle in, rather than drive it, so as not to contaminate the booth with exhaust. This is wise, especially with diesel-powered vehicles.



After the vehicle is in the booth, the doors closed, the balance checked, and the finish masking completed, the vehicle should then be blown off again with low pressure. The surface area to be painted should be cleaned with a final cleaner, most of which now contain an anti-static component such as alcohol, to help eliminate any static that may have built during preparation. Finally, just before spraying, the vehicle is tacked.

Also limit access to the booth. That is, no one without a paint suit should be allowed in, and the least number of trips into the booth as possible should be made by the painter. It is best to mix all the coatings that will be needed, take them into the booth, and paint the vehicle. The fewer times the door is opened, the less likely dirt is allowed to enter. If the booth is equipped with a mixing room, no one should enter the booth except through the mixing room access door. Booths equipped with a vestibule (a small room that painters go into to clean up and suit up before going into the mixing room) significantly reduce dirt in the paint. Painted floors, which are easier to clean, also cut down on dirt in paint.

Operating a productive and profitable paint shop can be complex, but not time consuming. An efficient shop will develop SOPs that can be completed regularly. The results will be well worth the time spent. ■



Alfred Thomas is associate professor and department head of Collision Repair at Pennsylvania College of Technology. He spent 15 years in the collision industry as a technician and shop manager.

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# BLOWTHERM SPRAY BOOTHS: NEW PARTS PROGRAM AND TRAINING

#### **NEW Spray Booth Parts Program**

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#### **Blowtherm OEM Parts**

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- Temperature Probes
- Gas Train Components

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\* Technology Equals Productivity: "The Air Speed System increased our production, both solvent and waterborne. Our paint comes out cleaner and faster...and our production is up 50%."  $\sim$  Dave Clark, Owner, Downtown Autobody, Maryville, TN

\* Energy Efficiency Saves Money: "We were really sold on the Heat Recuperation and Air Speed/Waterborne, Hi-Solid Flash-Off systems. No extra fans or blowers needed." ~ Dave Olender, Owner, Olender's Body Shop, Vernon, CT

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\* Longevity: "Twenty-five years later and still performing like the day I bought it. It's the best piece of equipment I ever bought."  $\sim$  John Roper, Owner, Cutters Auto Body, Tewksbury, MA

\* **Performance Means Profitability:** "Before I had a good painter, now I have a GREAT painter! Our painter is getting more production and up to 50% more efficiency out of the Blowtherm booths." ~ Scott McDaniel, Owner, Scott's Custom Colors Inc., Terre Haute, IN

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# PRICE, QUALITY COMPETITION IN THE CRASH PARTS INDUSTRY

he Certified Automotive Parts Association (CAPA) is a non-profit organization, which oversees an American National Standards Institute (ANSI) approved testing and inspection program that certifies the quality of parts used for auto body repairs. CAPA's goal is to promote price and quality competition in the crash parts industry and thereby reduce the cost of crash repairs to consumers without sacrificing quality. CAPA is not a manufacturing, marketing or sales organization. CAPA simply established standards for competitive (non-car company) cosmetic replacement parts in order to ensure their functional equivalency to car company parts. The program provides consumers, collision repairers, part distributors, and insurance adjusters with an objective method of evaluating the functional equivalency of certified parts to similar parts made by the car companies.

CAPA was set up in 1988 as a coalition of consumer advocates, insurance companies, repairers and distributors who wanted to encourage competition in the crash-parts industry in order to assure quality and control consumers' costs. Until the 1970s, only the car companies made crash parts and costs were higher because of their monopoly. CAPA certifies the metal and plastic cosmetic parts that are most commonly damaged in crashes, such as fenders, hoods, door panels, quarter panels, deck lids, pickup beds and sides, bumper covers, side moldings and grilles.

CAPA's policies are set by a 14-member Board of Directors representing auto body shops, consumer groups, insurance companies and part distributors. CAPA has an independent validator who conducts the testing, inspection and compliance aspects of the program. Only competitive auto body parts that meet or exceed CAPA Quality Standards for fit, materials and corrosion resistance are allowed to display the CAPA Quality Seal and are listed in a directory, which is widely available in the crash parts industry. CAPA has a Technical Committee made up of experts in the collision repair and auto body part industries whose role is to review and approve new and existing CAPA standards.

The concept of certification is well accepted. The fact is that most industry professionals or the average consumer cannot look at a product and make an informed judgment as to its quality or performance. Thousands of products are certified to exacting standards that protect consumers. One of the most accepted uses of certification is for electrical products.



In the early 1900's the insurance industry set up Underwriters Laboratory (UL) for the purpose of certifying the safety of electrical products after several fires were attributed to poor quality. Although well intentioned in the beginning as a volunteer program, the success of UL did not really come about until UL certification was required by state and local codes and later federal law at no cost to the states. The CAPA certification program is modeled after UL, but there is one significant difference. Certification of aftermarket crash parts is not required. Compliance with part certification is strictly voluntary.

Encouraging the use of an independent, third-party, ANSI approved standards developer or developers would offer consumers the protection they need against poor quality replacement parts, free collision repairers from having to use ill-fitting parts, help insurers know that the parts being placed on their estimates are good quality, and provide the car companies with legitimate competition.

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# NEW VEHICLE CONSTRUCTION HIGHLIGHTED AT CHIEF UNIVERSITY

ver the last three decades, more than 50,000 collision repair professionals have attended courses offered by Chief University, the training arm of Chief Automotive Technologies and Elektron. That number will continue to grow this year, as more than 75 technician, estimator and appraiser classes have been scheduled at locations across the country.

Chief University's 2015 offerings include the new Aluminum Damage Analysis and Repair Technology course and the updated Design Based Repair course. These classes cover the advanced metals and construction methods used by OEMs today, in order to prepare trainees for the vehicles that will be arriving in their facilities this year and beyond.

Aluminum Damage Analysis and Repair Technology covers aluminum forming methods and metal characteristics, as well as damage analysis, repair decisions and techniques for working with aluminum. Changes to Chief University's popular Design Based Repair course include the introduction of new sections covering advanced high-strength steels and structural aluminum.

Most Chief University classes are approved for I-CAR credit hours through the I-CAR Industry Training Alliance® program. Chief training also has been certified by the National Institute for Automotive Service Excellence (ASE) for compliance with the Continuing Automotive Service Education (CASE) Standards.

Many of the Chief University classes scheduled for 2015 are listed below. For a complete schedule, visit www.chiefautomotive.com/ChiefUniversity.

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Design Based Repair		
May 12-13	Birmingham	AL
May 19-20	Irvine	CA
June 16-17	Wheeling	IL.
July 9-10	Kansas City	MO
July 30-31	Salt Lake City	UT
Aug. 6-7	Rosemount	MN
Aug. 18-19	Mountlake Terrace	WA
Sept. 15-16	Morrisville	NY
Oct. 13-14	Nashville	TN
Oct. 20-21	Chamblee	GA
Nov. 10-11	Charlottesville	VA

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April 14-15	Greenville	SC	Ap
May 5-6	Morrisville	NY	M
May 12-13	Des Moines	IA	Se
June 2-3	Wheeling	IL	00
June 4-5	Clearwater	FL.	00
July 7-8	Kansas City	MO	
July 28-29	Salt Lake City	UT	Ur
Aug. 4-5	Rosemount	MN	Ju
Oct. 13-14	Houston	TX	Ju
Oct. 27-28	Birmingham	AL	00
Nov. 17-18	Mountlake Terrace	WA	No

Technician

Full Frame Analysis & Repair Plann		
April 2-3	Mountlake Terrace	WA
May 14-15	Des Moines	IA
Sept. 15-16	Altoona	PA
Oct. 13-14	Lewis Center	OH
Oct. 29-30	Birmingham	AL

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SPRING

Unibody A	nalysis & Repair F	lannin
June 4-5	Wheeling	L
June 16-17	Lewis Center	OH
Oct. 15-16	Houston	TX
Nov. 19-20	Mountlake Terrace	WA

#### Estimator/Appraiser

May 12-13	Worcester	MA
June 23-24	Charlottesville	VA
July 14-15	Arlington	TX
Sept. 15-16	Wheeling	IL.
Sept. 22-23	Irvine	CA
Oct. 6-7	Mather	CA
Oct. 22-23	Chamblee	GA
Nov. 10-11	Mesa	AZ
Dec. 15-16	Portland	OR

May 14-15	Worcester	MA
June 25-26	Charlottesville	VA
July 16-17	Arlington	TX
Sept. 17-18	Wheeling	IL
Sept. 24-25	Irvine	CA
Nov. 12-13	Mesa	AZ
Nov. 17-18	Chamblee	GA
Dec. 17-18	Portland	OR

April 16	Greenville	SC
April 17	Greenville	SC
April 24	Mesa	AZ
May 14	Birmingham	AL
May 15	Birmingham	AL
May 21	Irvine	CA
June 18	Wheeling	IL
June 19	Mountlake Terrace	WA
June 26	Chamblee	GA
Aug. 20	Mountiake Terrace	WA
Aug. 21	Mountlake Terrace	WA
Aug. 28	Portland	OR
Sept. 17	Morrisville	NY
Oct. 15	Nashville	TN
Oct. 16	Nashville	TN
Nov. 12	Charlottesville	VA
Nov. 13	Charlottesville	VA
Nov. 19	Chamblee	GA

April 7-9	Wheeling	IL.
April 14-16	Arlington	TX
April 21-23	Mesa	AZ
April 21-23	Irvine	CA
May 19-21	Derwer	CO
June 2-4	Mather	CA
June 9-11	Des Moines	IA
June 16-18	Mountlake Terrace	WA
June 23-25	Chamblee	GA
June 30- July 2	Inkster	MI
Aug. 25-27	Portland	OR

996 Industrial Drive Madison, Indiana 47250



# **REVO SPEED PROCESS TRAINING TO IMPROVE CYCLE TIME, REPAIRS**

lobal Finishing Solutions is offering a free 3-day training course with the purchase of a REVO Speed Infrared Drying System. We will go to your shop and provide a one-on-one training course with your equipment. This training course will cover the revolutionary REVO Repair Process and how to operate the REVO Speed, as well as show you how this process shortens cycle times and provides a better, longer-lasting repair.

#### **REVO Speed Infrared Drying System**

Global Finishing Solutions' REVO IR Systems were developed to meet the demand for faster repairs. By utilizing shortwave electric infrared technology, REVO Speed provides a repeatable standard operating procedure for all your paint shop repairs and significantly decreases the overall repair cycle time, allowing you to get more repairs through your shop in less time.

#### The REVO Repair Process

The REVO Repair Process is a departure from the standard repair process used in most collision centers and body shops in America. It was developed to shorten the overall repair cycle time, while still providing a quality repair. The REVO Repair Process has been proven to not only decrease cycle time, but also yield a sturdier, longer-lasting repair.

This hands-on training will be heavily focused on training your technicians on the 13-step REVO Repair Process. We will go through each step of the process — from prepping the panels to applying and curing clear coat.

#### **Operating the REVO Speed**

As part of the REVO Repair Process, we will show your technicians how to operate the REVO Speed. The PLC controls for the REVO Speed take the guesswork out of the curing process, so you can achieve the same results time after time.

In this in-depth controls training, we will walk you through each cure mode setting from start to finish, including:

- Body Filler
- Etch Primer
- Primer/Surfacer
- Wet-on-Wet Sealer
- Base Coat Waterborne & Solvent
- Clear Coat

#### **Proper Product Selection & Usage**

We will ensure your technicians are using the correct product(s) for each step in the REVO Repair Process. Using the correct products will allow you to achieve a faster, fully cured, more durable repair.



We will also train your technicians on the proper usage of these products, according to the paint manufacturers' recommended procedures and Global Finishing Solutions' guidelines, set by testing. These procedures and guidelines ensure a repeatable process every time.

#### **Global Finishing Solutions**

12731 Norway Road Osseo, WI 54758 (800) 848-8738 info@globalfinishing.com www.globalfinishing.com





# **PPG HELPS SHOPS CONVERT TO WATERBORNE WITH CONFIDENCE**

hether it's from a desire to use the same technology sprayed at the factory, regulatory compliance or simply wanting to use the most advanced technology available, more and more collisions centers are making the switch to waterborne paint systems. What holds many operations back from leaving solvent systems are concerns about getting up to speed figuratively and literally—with a new refinish platform.

To reduce guesswork and downtime, PPG created the CONVERT WITH CONFIDENCE<sup>®</sup> training program. Designed specifically for its AQUABASE<sup>®</sup> Plus and ENVIROBASE<sup>®</sup> High Performance systems, this comprehensive, proven program is based on PPG's vast experience helping individual shops and MSOs transition to waterborne technology. In fact, PPG has assisted over 10,000 shops in North America and 30,000 worldwide in making the move to waterborne.

#### A Proven Plan for Success

The Convert with Confidence program is a 30-day, step-by-step training initiative designed to simplify the transition from spraying solvent paint to waterborne technology. Through classes, proprietary assets and on-site analysis, shops are given all the tools and information needed for a trouble-free transition.

The conversion process begins with the *Convert with Confidence* seminar for owners and managers. Featuring PPG's Waterborne Conversion Planning Guide, this introductory class lays out the key milestones for their conversion. A custom schedule is made, establishing dates for compressor capacity review, equipment decisions and mixing bank delivery and installation, as well as other requirements.

Technician training is an essential component of the program's success.



PPG offers free off-site training for technicians, allowing them to mix, spray and clean waterborne basecoats under the tutelage of industry pros. Experience has shown participation in these classes goes a long way to ensuring a smooth transition with minimal interruption to workflow.

#### **Conversion Day**

On the day the shop makes the transition to waterborne, PPG provides comprehensive on-site support from PPG territory managers and distributor support staff. On-site instruction includes application training, computer training, waste stream training and color training. This on-site support continues until everyone is confident using the new waterborne system.

#### **Training for Tomorrow**

The *Convert with Confidence* program is just one of the wide array of training programs available from PPG. A broad curriculum of certification and business enhancement programs are offered to improve the efficiency, quality and profitability of a collision repair center. MVP Business Solutions courses target every part of refinish operations, including sales, estimating, production and facility management.

To help make participation in these programs easier for painters, technicians, managers and owners, PPG offers these courses at 16 Business Development Centers across North America. Additionally, the company also offers various improvement courses and education videos online for their customers.

PPG Automotive Refinish 19699 Progress Drive Strongsville, Ohio 44149 (800) 647-6050 www.ppgrefinish.com







# PRO SPOT OFFERS ONGOING TRAINING AND SERVICE

ro Spot provides on-going training to all of our distributors and their technicians, therefore, all owners of Pro Spot products receive complete training first hand. Pro Spot has two ASE certified training programs that are I-CAR alliance approved. Pro Spot also has a fully equipped training facility at their Headquarters & Manufacturing Facility in Carlsbad, CA for groups to come in and train on any and all products. To stay up-to-date, Pro Spot offers their unique My.prospot.com which includes interactive training courses for shops and technicians to access online.

Pro Spot's Weld Simulator is another tool in our commitment to training. The Weld Simulator is an augmented reality simulator that lets the user practice welding while being evaluated on crucial elements that create a quality weld. The user will learn to assess & control their travel angels, speed, stickout and more without the cost of consumables.

Pro Spot is constantly striving to improve our customer support methods and techniques. Whether that means implementing new and cutting edge technical support web technologies or further improving our already extensive training programs, Pro Spot is always looking for ways to better our customer's experiences.

#### Why MSOs choose Pro Spot

- Reliability
- Longevity
- Technology
- Service
- Training

Pro Spot (877) PRO-SPOT visit www.prospot.com.







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# MATRIX EXPANDS TRAINING OFFERINGS FOR JOBBERS, SHOPS

e believe that proper education is paramount to sustaining the future of all who work in and around the automotive collision industry. Quest Automotive Products is pleased to announce that we will be diversifying Matrix training offerings over the course of 2015. Some of the new courses will include custom painting featuring world-renowned pin striping and custom paint artists as well as business training in the context of the automotive collision industry.

Designed with attendees in mind, classes are conducted in our training facility located at Quest Automotive Products headquarters in Massillon, Ohio. This state-of-the-art facility is supplied with the latest tools and equipment for hands-on learning. Our well-appointed classroom is the ideal environment for effective, thorough coverage and discussion of the training material. Instruction is conducted by our training and technical staff; when schedules allow, leading industry manufacturers representatives will share valuable information and answer your questions.

Class sizes are small, providing a tailor-made educational experience which prepares a student at any experience level to be more productive and better prepared for their job role.

#### **Jobber Product**

This two-day training course is designed to educate Jobber personnel about the complete line of Matrix refinish products. The program will be divided between classroom time and shop demonstration time. Students will be provided with guidance for the proper placement and suggested use of each product. A focus on how to uncover customer needs will be discussed in order to help the Jobber make the correct product suggestions within their market. Information on refinishing aluminum is also included.

Content includes:

- Safety procedures and equipment
- Chemistry of paint
- Spray equipment
- Surface preparation and corrosion protection
- Undercoat systems, options and applications
- Topcoat systems, options and applications
- Product positioning
- Using the AccuShade Formula Retrieval System
- Product updates

#### **Painter Product Certification**

This two day course gives the student an overview of the entire Matrix product offering. The class focus is on products used in National Rule areas but will include Low VOC Product when necessary. Training qualifies painters for compliance to the national emissions rule EPA 40 CFR Part 63 Subpart HHHHHH (HAPS), as well as Matrix Warranty Certification. The program



APRIL SPRING TRAINING

will be divided between classroom time and shop demonstration time. Students will receive guidance on proper Matrix product selection and application to maximize shop productivity. Information on refinishing aluminum is included.

Content includes:

- Safety procedures and equipment
- Chemistry of paint
- Spray equipment
- Surface preparation and corrosion protection
- Undercoat systems, options and applications
- Topcoat systems, options and applications
- Product positioning
- Using the AccuShade Formula Retrieval System
- Product update

#### **Color Theory**

This one-day class explains how OEM color can drift from standard requiring the need to tint in order to achieve an acceptable color match. The course will teach the student fundamentals of visual color match and how to adjust color for a blendable match.

Content includes:

- OEM finishes and repair decisions
- Light sources and their effects on color
- Computer formula retrieval
- Variant color selection
- Color theory
- Formula analysis
- Application process and blending techniques

Matrix® Automotive Finishes | A Quest Automotive Brand 600 Nova Drive S.E. Massillon, OH 44646 (330) 830-6000 matrixsystem.com





# **PROSPRAY EXPANDS TRAINING IN 2015**

esigned with body shops in mind, our training classes equip you with the knowledge and hands-on experience to spray with confidence. Classes are conducted in Quest's stateof-the art training facility supplied with the latest tools and equipment for hands-on-learning.

Come for a couple days and leave a "Pro." The Prospray Technical and Training Center features:

• Classroom fully equipped with hidefinition audio-visual equipment and kitchen

• Custom 21' x 9' paint mixing room with teaching viewing panels

Drive-in wash bay for cleaning and prepping vehicles

Drive-in downdraft prep room for vacuum sanding and priming

Drive-in downdraft and heated spray booth with towers

Instruction is conducted by our training and technical staff. Class sizes are small, providing a tailor-made educational experience which prepares a student at any experience level to be more productive and better prepared for their job role.

#### PSPM-00001: National Rule Product

This class gives the student an overview of the entire Prospray product offering used in National Rule areas and H2O Waterborne Basecoat, Students will learn how each product is positioned in the collision repair facility and ways to maximize productivity and efficiencies on repairs they encounter on a daily basis. This program qualifies painters for compliance to the national emissions rule EPA 40 CFR Part 63 Subpart HHHHHH (HAPS), as well as Prospray Warranty Certification. Both classroom and hands-on training are utilized for an in-depth look at the proper use of spray equipment, paint booth operation and recommended product usage.

If you are enrolling for one of the dates underlined above, consider adding



the PSPM-00003 Color Theory session described below as a "third day" option.

#### PSPM-00002: Low VOC Product

This class provides emphasis on the Low VOC product group including H2O Waterborne Basecoat. Training also qualifies painters for compliance to the new national emissions standard for HAPS and EPA 40 CFR Part 63 Subpart HHHHHH as well as ProSpray Warranty Certification. Students will learn about waterborne technology as well as Low VOC undercoats and clears, and the different techniques for waterborne refinishing. Spray equipment, environmental conditions and proper handling of chemicals will be discussed. This class involves both hands-on and classroom instruction.

#### PSPM-00003: Color Theory

This one-day class is designed for the Prospray technician wanting a comprehensive education in color theory and adjustment for blending. Students will learn about pigments, color formulation, variant descriptions and the differences in OE production colors. Participants will leave with an understanding of how to achieve an acceptable match in the shortest amount of time. Both solvent and waterborne colors are covered.

#### New in 2015

We believe that proper education is paramount to sustaining the future of all who work in and around the automotive collision industry. Quest Automotive Products is pleased to announce that we will be diversifying our training offerings over the course of 2015. Some of the new courses will include custom painting featuring world-renowned pin striping and custom paint artists as well as business training in the context of the automotive collision industry.

Please visit our website for additional information and current course schedules www.prosprayh2o.com/training

Also, visit our YouTube channel for helpful Tech tips and how-to information www.youtube.com/user/ ProsprayAutoFinishes

#### **Prospray Automotive Finishes**

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# **RBL CREATES AN INDUSTRY GAME CHANGER WITH PPFS**

BL Products has recently launched the industry's most comprehensive paint finishing correction system named the Professional Paint Finishing System (PPFS). The system was born out of the OEM paint finesse lines.

All vehicles that are manufactured go through an inspection area, if there are defects in the paint surface, technicians remove the defects with the same equipment and materials used in the PPFS kit.

The kit consists of a nib sander that will remove the paint defect in seconds. The abrasive is an engineered abrasive which is digitally produced on film. This process allows for very quick and precise removal of the defect. After the defect is removed the 3" random orbital polisher used with the "one-step" polish will remove any sand scratches in seconds.

If you want to cut down or eliminate orange peel the kit includes both a 3" and 6" random orbital sander (all of the tools are engineered and produced for RBL exclusively). Foam and wool cutting and polishing pads absorb polish resulting in longer polish times. RBL has developed a 100% Polyester cutting and finishing pad that allows the polish to stay on the work surface and will not absorb into the pads.



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The 21mm 6" random orbital polisher prevents wheel marks (holograms) and burnt edges. Anyone can use this polisher, you can't damage the paint. The polisher has a 7.25" tapered interface pad that allows you to use 8" cutting and polishing pads.

See your jobber for more info. you can see a video of the system by going to **RBLProducts.com**.







# DAN-AM COMPANY OFFERS CLASSES ON BEHALF OF SATA

an-Am Company is the Exclusive Independent Importer & Distributor of SATA products in the USA & Puerto Rico. We offer several valuable classes for distributors and our shop customers across the USA.

#### I-CAR classes we offer

1. Gun Overview & Maintenance is a class showing proper gun setup, use and maintenance when using both solvent or waterborne materials. Describes the intricate details of a SATA gun, and how to properly care for them for a longlifetime of usage. Also describes how to properly use your SATA equipment to give you much better Transfer Efficiency as well as speed your cycle times through efficiency, faster flash times and achieve improved color match and clearcoat appearance.

- a. 2 hour course (\$47.00 paid to I-Car)
- b. I-Car class identifier DAEM-00001

2. Proper Airline & Filtration is a class that teaches the importance of clean, pure, dry air for use with today's low VOC HS materials, as well as waterborne materials. It helps to understand the need for air volume, and very fine particulate and oil vapor filtration, above and beyond low humid-

ity. Breathing air quality air, for painting too, helps offer clean paint jobs easier.

- a. 1 hour course (\$47.00 paid to I-Car)
- b. I-Car Class Identifier DAEM-00002

3. wProper Airlines & Safety is a class that not only discusses clean supplied air for painting, but also for breathing, using a positive pressure supplied air respirator. Also covers the use of a CO monitor, paint suits etc...

a. 1 hour course (\$7.00 paid to I-Car)

b. I-Car Class Identifier DAEM-00003

Please contact your local paint supplier to arrange for any of these I-Car classes to beheld by our representatives in your market.

We also offer EPA Rule 40 section 6H certification and recertification classes to all shop owners, managers paint and body technicians. This course is held in your market. It looks at how the equipment should be used to meet the Rule 40 6H requirements. It also talks about how proper setup and air filtration and air volume helps you achieve the EPA requirements in your shop.

- a. There is no charge for this class
- b. Bring a respirator, you will spray
- c. Contact your local paint supplier to ask for a class in your area.



#### 2-day class at Dan-Am Company

All distributors, shop owners or painters will benefit from this course. It is held at Dan-Am Company Headquarters in Spring Valley, MN. Complete training on the SATA products, and many of Dan-Am's other products. Teaches the value of clean air, and air volume. Discusses proper use of all of the spray equipment for best efficiency, and fastest cycle times. Also discusses proper airline installation to offer you clean dry air in your shop, and proper working of all of your air tools.

- a. Ask your paint supplier to contact Dan-Am Company to arrange for a class.
- b. Mention upon inquiring that you saw this in ABRN and tuition fees will be waived
- c. Only cost will be your travel and hotel. Hotel is roughly \$65.00 per night
- d. Lunch provided both days, and a dinner one night.

Dan-Am Co. One SATA Drive PO Box 46 Spring Valley, MN 5975-0046 (800) 533-8016 www.satausa.com www.danamair.com

#### ADVERTISEMENT



EM Products, Inc. is known to design quality products with the collision center technician in mind. While some automotive aftermarket products can only compete with low prices, SEM offers high value products that save time and materials to reduce cycle time and increase throughput. SEM backs the collision center with quality products and offers an array of training tools to help the technician operate efficiently.

#### SEM School, I-CAR Accredited Training

Thousands of collision center technicians benefit from SEM School, an I-CAR® accredited training program. This program meets I-CAR requirements for Adhesive Bonding, Plastic Repair, Foams, and Material Identification. Technicians learn the latest automotive refinishing techniques and get first-hand experience with new products and time-saving procedures in SEM's state-of-the-art facility.

Training includes: Adhesive Bonding, Plastic Repair, Foams, Material Identification, and Interior Refinishing. Contact your local SEM rep to schedule.

#### **Field Training**

SEM's national sales team offers hands-on training in collision centers and jobber stores. They host lunch-and-learns, I-CAR clinics, and product demos for qualifying shops. I-CAR clinics include Adhesive Bonding, Plastic Repair, Foams, Corrosion Protection and Material Identification. Contact your local SEM rep to schedule.

#### How-To Videos & Digital Downloads Training, SEMProducts.com

SEM recently updated their website, which now includes all training materials available for their vast product line. Standard operating procedures, training manuals, tech data sheets, how-to videos and more are easily available under each product page as well as the Training & Resources tab.

#### **Technical Support Call Line**

SEM's technical support team provides real-time answers to any questions users may have about any SEM products. When body shops or jobbers need help with product application, SEM's technical line connects them with a live technical specialist any day of the work week. Reach SEM's tech support at tech@semproducts.com or 1-800-831-1122.

### Time-Saving Procedures, Reduce labor up to 85%

SEM developed their OEM Refinishing System (ORS) to decrease cycle time on support parts, cut-ins and jambs. This comprehensive, NESHAP compliant system uses professional aerosols to reduce procedure steps and refinish jobs directly on the shop floor instead of the paint booth. SEM's



SPRING

TRAININ

1K HS Clear being applied on a radiator support during the final step of SEM's labor saving OEM Refinishing System.

ORS Training Manual includes an inner panel refinishing SOP, system overview, time comparison chart, product information, and Factory Pack<sup>™</sup> color swatches and crossover list. Go to semproducts.com/abrn-ors to get a free copy.

#### SEM Blog

New product announcements, industry trends, webinars, and how-to articles are featured on SEM's blog. These quick and easy to read articles keep technicians up-to-date on the latest news. Get the scoop at semproducts.com/blog.

#### SEM Products, Inc.

1685 Overview Drive Rock Hill, SC 29730 800-831-1122 www.semproducts.com







# SHERWIN-WILLIAMS SUPPORTS TOMORROW'S TALENT

ommitted to strengthening the future of the collision repair industry, The Sherwin-Williams **Company Automotive Finishes** Division is actively engaged in collaborative efforts with the Collision Repair Education Foundation (CREF) to support secondary and post-secondary students interested in the collision industry. Sherwin-Williams offers training to students and instructors; certification education; hands-on support at state, national and global competitions; and information sharing at career fairs and industry events. Additionally, Sherwin-Williams donates products, training manuals and funding to ensure that aspiring technicians' classrooms are equipped with every necessary tool.

"The industry always needs outstanding technicians," said Rod Habel, director of Training Operations. "We help students gain knowledge and develop skills they will need to succeed in collision repair careers."

Training takes place at the six Sherwin-Williams North American automotive finishes training centers – Chicago, Atlanta, Philadelphia, Dallas and Reno in the U.S., and Mississauga, Ontario, Canada. The company regularly invites students and instructors to visit the training center nearest them for hands-on instruction; about 150 students and instructors participate each year.

The training protocol for students includes an introduction to products and their features, an opportunity to apply paint inside a spray booth and a discussion of potential career opportunities. Local collision repair owners join the conversation to share insights into what they seek in employee candidates.

Instructors are encouraged to attend training classes annually to learn about emerging technologies and discuss the



merits of various teaching approaches.

Michael Pellett, manager of the Dallas Training Center, explains that Sherwin-Williams takes its training efforts on the road, too. "For example, we go to Texas State University twice a year to teach a certification course that helps students earn I-CAR credits, which help them secure jobs in the industry," says Pellett, who has been involved in these efforts for 29 years (he actually went through the training program himself as a student at Waukesha County Technical College in 1973).

The group looks for industry event tie-ins as well. For example, they invite instructors to a class immediately preceding the NACE | CARS Expo & Conference in Detroit each July and will host a session at the Chicago Training Center prior to Automechanika Chicago in April. Sherwin-Williams trainers also speak at the SEMA Show in Las Vegas each year.

To further support students, the team

participates in judging, set-up and breakdown at the SkillsUSA National Skills and Leadership Competition, to be held June 22-26, 2015 in Louisville, Ky. Students in the Automotive Refinishing Technology category compete in areas including paint mixing, matching and application, troubleshooting and more. The national winner will go on to the global competition in Brazil, where the Sherwin-Williams Brazilian team will join with members of the U.S. team to support competing students.

"These students are the future of our industry," concludes Habel. "We are committed to supporting them in any way we can, giving them the tools they need to keep us all moving forward."

For more information on Sherwin-Williams Automotive Finishes training, visit: http:// www.sherwin-automotive.com/ collision-repair/training-support/ or call 1-800-SWULTRA (1-800-798-5872).



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# CPG

### COLLISION PRODUCTS GUIDE

#### **RANGER PRODUCTS**

#### TIRE CHANGER

Ranger Products, a division of BendPak Inc., introduces tire changer R980ATF, a variablespeed model that performs on a variety of wheels, including all OEM and performance tire and wheel configurations. The R980ATF is equipped with a powerful variable-speed motor and gear box that allows operators to



match turntable rotational speed with varied tire and wheel combinations. Ergonomic controls are sensibly placed to minimize excessive reaching or bending resulting in more jobs per day.

www.rangerproducts.com (805) 933-9970



#### **DRYING SYSTEM**

Global Finishing Solutions' REVO Infrared Accelerated Drying Systems use short-wave electric infrared technology to effectively dry any kind of paint or material — from the

inside out — in minutes! This decreases overall repair cycle time, allowing more repairs through the shop in less time. In addition to rapidly drying filler, primer and clear coat, REVO Handheld can be used to soften glass seals and remove ornaments and adhesives.

www.globalfinishing.com (800) 848-8738

#### HYUNDAI

### ★ HYUNDAI Go Genuine<sup>™</sup>

COLLISION CONQUEST

#### **COLLISION PROGRAM**

Be a part of the Hyundai Go Genuine Collision Conquest Program for your collision repair facility and save on Hyundai Genuine Parts. This program allows Hyundai dealers to offer discounts on non-Hyundai parts. Using Hyundai parts during the collision repair process provides Hyundai owners with the proper fit, finish and quality.

www.opstrax.com (800) 633-5151

#### **ROTARY LIFT**

#### TWO-POST LIFT

Technicians can service even the tallest high-roof vans with the new Rotary Lift extended-height SPO12 two-post lift. The extended-height option, which increases the overall height by three feet, is available for both the standard



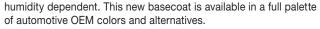
and Shockwave<sup>™</sup> SPO12 models. The SPO12 lift is equipped with three-stage arms and adjustable frame-contact adapters for reaching a wide range of manufacturer-recommended pick-up points.

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Three new clears have been introduced to support GenVerde, Lusid Technologies' fully VOC compliant solventborne paint system. GenVerde 3021 2K VOC Smooth Clearcoat, a 4:1 general application clear; GenVerde 4021 2K VOC Ultra Pro Clearcoat, a 2:1



Cromax Mosaic

SBLOO

European style ultra-high quality clear; and GenVerde 5021 2K VOC Performance Clearcoat, is a new technology 4:1 Low Energy Clear.

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Fusor® 208B Panel Bonding Adhesive is a versatile epoxy-based metal and plastic panel bonding adhesive with no odor during appli-



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was teaching a class in California recently, and a shop owner shared a story with me. He said a customer brought a car into the shop with obvious damage to two wheels and tires. The tires were damaged to the extent that the shop owner knew the tire cords – the metal or synthetic strands used on the inner lining of tires to

give them strength – could potentially be stressed or broken. When that happens, the air pressure in the tires can further deteriorate the cords and lead to a bubble on the outside of the tire – or worse yet, a blowout.

So the shop contacted the insurance company who agreed to pay only for the new wheels, not replacement tires. The shop explained the situation to the customer, saying it's impossible to know how badly the interior structure of the tires was damaged. But the customer couldn't afford two new tires, so had the shop leave the damaged tires on the car.

The shop wisely had the customer sign a hold-harmless agreement, noting that it recommended the replacement of the tires

but the customer declined. According to the shop, several days after picking up the vehicle, the customer had a blowout of one of those tires and was badly injured when the car rolled over.

When the accident investigation found the cause was the tire, the shop was named in a lawsuit brought by the customer. The shop's holdharmless agreement protected it, but the insurance company ended up settling for a large sum of money.

Now I should say that I haven't researched this story to validate whether it's true or not. But whether it is or not is inconsequential to 4 2 If neither an insurer nor that customer is willing to pay for something that you know should be done to the vehicle as part of a safe and proper repair, that alone in no way relieves you from liability for not doing it. 7

the point I'm using this story to illustrate. My point is this: When someone brings their vehicle to your shop and signs a repair authorization, that's a contract between you and that customer. Who is paying for the repairs doesn't impact that contract you have with that customer.

Too often I see shops try to use what an insurance company will or won't pay for as an excuse for doing incomplete or improper

## UNDERSTAND YOUR SHOP LIABILITY

What an insurer will or will not pay has no impact on your legal responsibility to the customer

repairs. They forget they have a contract with the customer that has nothing to do with what they negotiate with any insurer. The shop still has the liability related to fixing that vehicle properly – and I think some shops don't take that liability seriously enough.

Most of the automakers have documentation about the welder and the types and sizes of welds you should use to install a replacement quarter panel, for example. When I ask in a class how many people believe they should repair the vehicle based on that OEM documentation, every hand goes up.

But then I ask how many have installed a used quarter panel on a vehicle. Usually at least half the hands in the room go up. But if you drill out the spot welds on that used quarter panel, you are going to have to use larger spot welds to cover that hole when attaching it to the vehicle. Is that a safe and proper repair? Or could that not alter the strength of that portion of the vehicle – which in turn could affect airbag deployment timing? So is that really a safe and proper repair? I would argue that it absolutely is not.

I am not an attorney. I don't know how much a hold-harmless agreement signed by a customer will really protect you. It's something you should definitely discuss with your business attorney or insurance company.

But I do know your contract is always between you and your customer. If neither an insurer nor that customer is willing to pay for something that you know should be done to the vehicle as part of a safe and proper repair, that alone in no way relieves you from liability for not doing it.  $\blacksquare$ 





**Mike Anderson**, a former shop owner, currently operates CollisionAdvice.com, a training and consulting firm.

If you have a business issue or question you'd like Mike to address, email him. mike@CollisionAdvice.com





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