



TECHNICAL FEATURE



2015: A YEAR OF CHANGE

Wow...we saw so much in 2015, including things that offered insight into the future. The 2015 AASP/NJ NORTHEAST® Automotive Services Show, Automechanika, NACE and SEMA all were very informative shows chock full of industry announcements and information on important technical advancements. If you were unable to attend any of these events and did not research them, this article will explain some of the things they covered.

Certification

About eight years ago, we said in our classes that within five to seven years, the industry would have both regular DRP facilities and OEM-certified shops that have work driven to them *like* a DRP. We predicted that this would be the result of OEMs following the example of the European OEM Certified Collision Repair Facility (CCRF) programs. Well, this has become a reality. Some of the OEM programs are fairly easy to get on, while others require dealer sponsorship and extensive investments in equipment and training. In the coming years, more and more OEMs will adopt CCRF programs. Many will have steel, aluminum and composite programs, while others may only be steel or aluminum. Some will have parts restrictions, but all will entail equipment upgrades and some sort of training requirements. Repair facilities will need to invest in equipment and training to be prepared for the near future or be faced with closing their doors. However, we feel

the word "Certified" is being over-used and *improperly* used in many respects. Not all "Certified" programs are created equal.

Vehicle Advancements

BMW was one of the first OEMs to offer a steel-aluminum hybrid construction monocoque (unibody) back in 2004 through 2010 with the 5 and 6 Series (E60/E63). Since then, the Audi TT (8J/8S), Porsche Panamera (970) and Carrera (991) and Mercedes-Benz S-Class (222) (to name a few) have adopted that hybrid construction design. Well, the 2016 Audi Q7, 2016 Porsche Cayenne and 2016 Cadillac CT6 are all hybrid-construction vehicles. It is rumored that others will follow this design construction in the next two to three years.

BMW also announced the 2016 7 Series, which is constructed from steel, aluminum and carbon fiber. Lamborghini and Audi R8 will produce similar designs. We all need to think about how long it will be before



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we see this design in more popular vehicles.

We have all heard about the 2015 Ford F-150 with its aluminum body. Well, GM has announced that by 2017/2018, the 1500 Series will be an aluminum body as well, and two other OEMs have said they will also produce aluminum-body vehicles in the next two years. How long do you think it will be before vehicles like the Ford Taurus or Mustang, Chevy Impala or Camaro, Chrysler 200 or 300 or Dodge Challenger or Charger are constructed with aluminum? We are at a huge crossroads of advancement in vehicle design. Are you prepared?

Equipment

Equipment upgrades and new purchases will become more and more prevalent in the next few years. Structural repairs will require anchoring from areas other than pinch weld flanges and multiple anchoring points, so apparatus upgrades will be required. Rivet guns will be necessary for not only aluminum-intensive vehicles, but also for steel vehicles. Aluminum and silicon bronze (MIG Brazing) MIG welders will be obligatory for numerous repairs on new models, and carbon fiber-reinforced plastic (CFRP) repair equipment will be compulsory for many shops. Investment costs of \$75,000 to \$200,000 per shop are projected to just be able to perform repairs. Many shops need to sit down and make a three- to five-year plan.

Training

Training will become almost mandatory in the next few years. New materials such as advanced higher-strength steels, aluminum, carbon fiber and hybrid construction will require new techniques, equipment and materials. The new equipment, repair and replacement procedures will demand training on how to use the equipment to perform the repairs. Technicians will need to learn the new procedures and how to utilize the equipment to perform the mandated repair processes. Obviously, training will cost money and time.

Facility owners will need to allocate the time and funds for the technicians' education. Expect to see other training options than what is currently available.

Joining Methods

MAG/GMAW will not be going away, as there are many vehicles that have repair procedures for sectioning that require fillet welds, open butt joint welds and butt joint with backing welds. Conversely, we will see less and less plug welds and more STRSW requirements. And expect to see more rivet-bonding proce-

dures on steel vehicles, along with direct bonding to composite complements such as carbon fiber.

Electronics

Electronic components and computer-controlled systems will increase even more in the next few years. Repair facilities will need to learn how to diagnose damage to these systems and how to reinitiate, reset and/or aim them. Many vehicles will require dealership service due to the proprietary computer systems, but all shops should have some sort



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of a code reader or diagnostic computer to be able to determine what systems are not functioning. Remember, most systems will not set a Multifunction Indicator Light (MIL) for a Diagnostic Trouble Code (DTC).

“Commercially Acceptable” and “Industry Standard”

Nobody is really sure who started these asinine phrases in the collision repair industry. Let's look at their definitions:

■ **Commercially Acceptable:** Standard of work that is not perfect (as it has a reasonable amount of imperfections) but is acceptable in accordance with generally accepted commercial practices.

■ **Industry Standard:** Generally accepted requirements followed by the members of an industry.

In the coming years, OEMs will be setting a higher standard for repairs not only to their vehicles, but also for the vehicles repaired at their Certified Repair Facilities. Vehicle owners will no longer accept a reasonable amount of imperfections. As we have written before, there is no “industry standard” except what the OEM has set. We hear all the time that a vehicle cannot be repaired back to pre-loss condition and that even OEM repair procedures are not perfect. Well, that is just not true. Most of this negative attitude towards repairs and quality are generated from techs and facilities without the proper equipment, training and knowledge to know how to charge the right amount for the repairs. We have seen an explosion of Post-Repair Inspection failures, with every line in the book used to explain why the vehicle “had” to be repaired that way. These are just excuses because people are afraid of change.

Change is coming fast, and we all must be willing to adapt to it. **H&D**

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