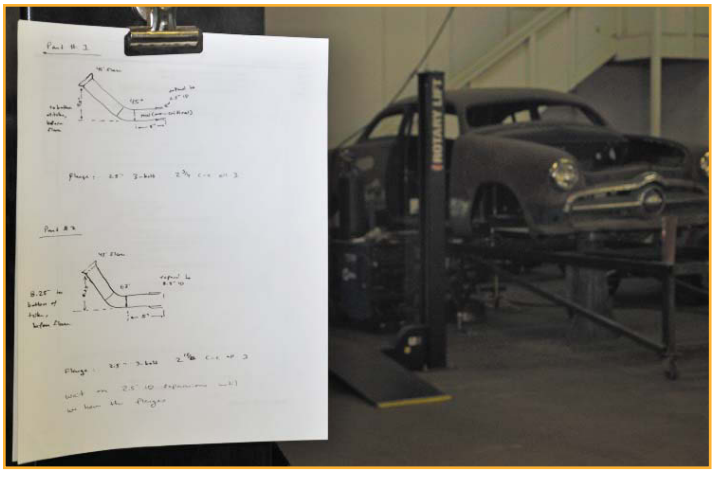
Hanksville Hot Rods' crew includes (from left) Chris Nixon, Jennifer Padilla, Hank Padilla and John Shetler.

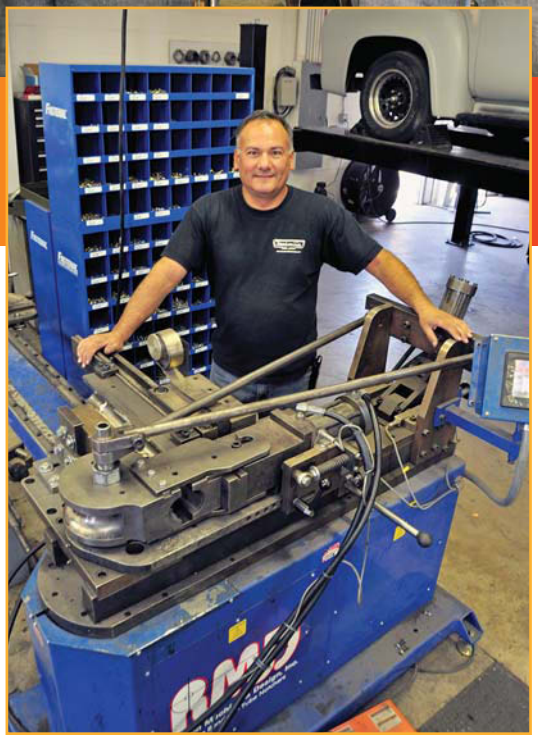
Hanksville Hot Rods

Geared for Perfection

By G.A. Johnson



A schematic hangs on the lift. In the background is an in-house project car. They plan to put a 7.3-liter Power Stroke diesel engine on a 1950 Ford chassis.



Henry "Hank" Padilla stands in front of his RMD MB-350 programmable, numerically controlled rotary-draw mandrel bender.

It's more like a research-and-development laboratory than the everyday exhaust shop; customers don't go to Hanksville Hot Rods for a quick-in-and-out job – they go to have their imagination brought to life. Some customers never set foot in the shop. They send a computer-aided-design (CAD) diagram of their creation to the shop and then have it shipped to them in the form of stainless steel.

It may be more convenient for those customers to deal with the shop over the phone, but not meeting the shop's owner is a definite loss. The diploma from Wyotech Institute says Henry Padilla, but he is known as Hank. And Hank is known for mandrel-bent, TIG-welded, stainless-steel perfection. His goal is to give the customer "the last exhaust that car is ever going to need."

Formerly a risk-management consultant, Hank spent his free time modifying cars. He studied collision, refinishing and specialty auto fabrication at Wyoming Technical Institute. After graduation Hank and his wife, Jennifer, opened the shop and turned a passion into a career. However, the purchase of a mandrel bender sent them down a path different from that of other exhaust shops.

Mandrel bending requires a different mindset. Watching a good exhaust technician use a press bender is like watching an artist sculpting a piece of pottery. That technician is in control of the material, and his hands are always in motion as he continually manipulates the pipe. Conversely, watching Hank operate a mandrel

One of Hanksville Hot Rods' custom headers. Mail-order headers and their prices are also on display on the shop's Web site, www.hanksvillehotrods.com.

Hank and John inspect the cut on a couple of freshly bent pipes.

Chris Nixon welds a down pipe for a 1985 Land Cruiser with a diesel engine. TIG welding gives the technician the ability to get close to the pipe and make precision welds.

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bender is like watching a rocket scientist prepare for launch. The stages of preparation are critical to the success of the project.

The first step before launch is the mockup stage. For more-complicated designs, Hank will go to his scrap table and make a prototype. "Our scrap mandrel-bend pile is almost worth a fortune," Hank says, pointing to a plethora of different-degree bends in a variety of shapes and sizes. The mandrel bender is in complete control of the pipe, and the technician cannot manipulate it on the fly. Therefore, every element of the pipe must be mapped out in advance, and the scrap pile helps choose the exact bends needed for the project. Hank compares it with learning to think in three dimensions.

Next, he creates a bending card and enters it into the bender's computer. Then he prepares the tooling and the pipe for action. The dies on a mandrel bender are designed to cater to both the type of material and the diameter of the pipe. Hank selects a bronze die for the stainless-steel pipe he is about to bend. The pipe must be well lubricated with special grease, because mandrel bending pulls the pipe around the die as opposed to pressing it against it.

"It all needs to be adjusted just right; otherwise, you compromise the quality of the bend," Hank explains as he reaches the final step, pushing the button – blast-off! The bend has now been created.

The precision of his mandrel bends is complemented by tungsten inert gas (TIG) welding. TIG welding is a slower method, but one that gives the technician greater control over the weld, and a cleaner weld in the long run. TIG also allows a greater diversity of metals to be joined. Obsession with flawless seams is only the beginning. Flanges are carefully sanded down to make for perfectly flush mounting, and many of his components are water-jet cut for better fit. Hank also seeks quality in the products he doesn't build himself, such as MagnaFlow tips and mufflers and Flowmaster mufflers.

"The idea is to get it really, really good, not just good enough," Hank said. However, the trade-off for quality is time. It's not unusual for an exhaust job to take days to complete.

One might ask, "Why not just buy a mandrel-bent kit from a manufacturer, take it to a shop and have it installed in a couple hours?" Hank loves that question. A typical customer at Hanksville Hot Rods might be considered a problem customer at other shops. They are the customer who has a show car with a lot of time, pride and money invested in it, the type of customer whose car may have better living conditions than their spouse or children. Such a breed of customer will bring back their prized possession to a shop because the tips in the manufacturer's mandrel-bent kit are a quarter-inch from being perfectly aligned.

This is the type of customer Hanksville caters to. Others come to Hanksville because no mandrel-bent kit has been made for their vehicle, a common occurrence for cars that have had many modifications or are completely custom built. The shop also specializes in offering more-exotic materials such as polished T-304 stainless steel and cold-rolled steel. Hanksville's also services commercial customers in addition to the public.

The mandrel bender has opened up a niche market for mass-producing elbows and other bends that are too uncommon for other manufacturers to bother with. Hank is especially proud of his extra-tight-radius U-bends (such as a 3-inch U-bend with a 3-inch radius). He also has a tube notcher and industrial bead roller that allow him to build complex pipes. The idea is not to try to compete with manufacturers but to supplement them. Hank believes the same way about other exhaust shops. His goal isn't to run other shops out of business, because he can profit from helping them instead, and so it's common for Hanksville to build pipes for other shops to install. However, exhaust products are just the beginning of what Hanksville has to offer – competition-quality roll cages are another one of its specialties.

Hanksville's roll cages are manufactured with a rotary-draw bender that operates similar to a mandrel bender. Each roll cage is made with a commitment to quality and durabili-

Hank puts finishing touches on a custom roll cage for a SAAB 900.

The mandrel bender is being prepared for stainless-steel pipe. Bronze dies are used for stainless steel, and chrome dies are used for aluminized steel.

ty. Many of the shop's roll cages feature an extended-style bar to offer better protection from side impacts. A collection of dented door panels is on display in the shop; customers who have seen the cages tested in action have sent them back as a memento. One panel has a note written on it, "You're my boy, Hank."

It's not just the production quality of the roll cages that makes them competition worthy, but the fact they're designed by an SFI-certified technician inspector with the NHRA. SFI is a non-profit organization established to issue and administer standards for specialty/performance automotive and racing equipment. SFI originally stood for SEMA Foundation Inc., but SFI is now an independent association.

Hank's concern with the performance of his cages is personal – he is present while some of his customers are on the track.

Additional products include custom-built headers, sheet-metal fabrication, installation of Lexan windows, lifts for junior dragsters and stands for glass tables. The diversity of product he offers comes from a large investment in production-quality equipment, but Hank will be the first to tell you it's a low-return investment.

What's the best investment he has made? The time he takes to educate the customer before they buy. He is proud of his shop's work and wants the customer to be just as proud of their decision to do business with him. Their word of mouth is what keeps Hanksville Hot Rod's staff passionate about their products and geared for perfection. UD

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