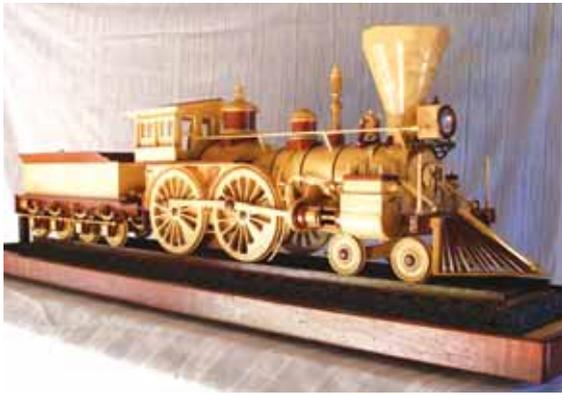


Harold Manwaring built a 560-piece model steam locomotive almost entirely from wood, creating every part by hand.



He Built A Working Steam Train From Wood

Harold Manwaring spent more than 7 years working as a fitter and turner for the railroad, but his love of trains stayed with him long after he left his job. As he drove trucks and heavy equipment in a new career, he thought about how to build a wooden locomotive. At age 60 in 1997, he began wood crafting by learning to use a woodworker's lathe, then built several jigs for holding and drilling wheels and journals. Manwaring says the skills he gained on numerous bowls led him to tackle a working locomotive.

Friends told him he couldn't build one that ran on compressed air, but he proved them wrong. The result is a 560-piece wooden masterpiece depicting a 4-4-0 steam locomotive. Made with nine different kinds of wood, the project took him about 3 years to make. The completed locomotive and tender rests on a 3-ft. long platform.

Manwaring says he gave the functional working parts just enough lubrication they'd operate without sticking. The loco produces steam and its wheels turn freely because they're raised slightly above the wooden track.

Compressed air is fed into a small stainless receiver in the firebox at 15 psi. The lines, cylinders, and pistons are all made of wood. The cylinders have a 1 1/8 in. bore and 1 1/2 in. stroke. Pistons have wooden rings just 1/16 in. thick, made like conventional automobile models. Manwaring says the engine runs effortlessly with the steam exhaust emitted through the stack with a calm "chuffing" sound.

Manwaring modeled his masterpiece from a 4 1/2-in. picture of a Philadelphia, Germantown, and Morristown Railroad locomotive built in 1837. He used a



Tiny pistons, rings, sleeves, and other engine parts are all made of wood.

magnifying glass to judge and document the part sizes he needed. The cream-colored wood is from street-cut trees in the town of Wagga Wagga. Desert ash was used for the cabin, boiler, and many working components. Other woods include red river gum, olive wood, jarrah wood, Australian red cedar, Queensland maple, and Osage orange. Some parts are held together with tiny metal pieces, although most are held with two-part epoxy and PVA woodworker's glue.

Manwaring made the steel tube inside the engine body from scraps of car muffler tube. Valves were made from old water tap spindles. Ball bearings and springs came from a tiny electric motor. Even the whistle works, emitting a shrill tune using 2 to 3 lbs. of air.

Manwaring says the whole project was quite tedious and also very satisfying. "The engine worked the first time I turned on the air, and with that, I stopped and celebrated with a beer."

Contact: FARM SHOW Followup, Harold Manwaring, New South Wales, Australia.

Sculptor Turns Scrap Metal Into Realistic Art



Mock says, "Dogs are the most popular of his designs by far."

When Brian Mock started sculpting in the 90's, he used scrap materials to practice because it was cheap or free.

"But I quickly learned that it was actually an interesting and striking medium," says the Oregon artist, who's known internationally and has 18 mos. of backordered commissioned pieces. "I've been collecting scrap metal for decades from local machine and auto shops that give me free access to their dumpsters, folks clearing out their garages, and occasionally, scrap yards. Almost all of what I have comes from donations, which I'm extremely grateful for."

Folks with scrap collections of their own recognize the parts used in Mock's artwork. Bolts and screws make perfect hair for a mother gorilla with her baby on her back. Mashers, knives, forks, and other kitchen tools bring a rooster to life.



Scrap metal such as mashers, knives, forks, and other kitchen tools are used in Mocks rooster sculpture.

Mock gathers and studies images from different angles before he begins. He uses grinders and power tools with cutting discs to prepare his media before MIG welding them together. Occasionally, he builds internal framing, but most are just pieced together.

"My sculptures range from 6 in. high to 10 ft. high, but the most requested size usually falls within 24 to 30 in.," Mock says. "Dogs are the most popular request by far."

He's also created other pets such as horses

Club Car Rebuilt Using Old Signs

Minnesota handyman Wayne Pelland says, "Just about everyone I knew told me I couldn't rebuild the old Club Car I got from the local paper mill into a usable vehicle, but after a couple of years of cutting, bending, and configuring old road signs into metal panels, I came up with something pretty impressive."

Pelland says his friends' comments were well justified because when he got the old car, it didn't have a motor, wheels, or tires and was ready for the scrap yard. Since Pelland worked for the county, he sorted through piles of old road signs to find those that weren't too damaged and could be used for car parts. He made a metal bender, then used flat salvaged metal from several signs.

"It took me a couple of years, with several starts and stops before I got everything right, but all-in-all, it looks fairly authentic," Pelland says. The front has vertical grill openings and a squared-off hood with embedded headlights and reflectors, vaguely resembling a Jeep. The side and rear panels and the operator platform are smooth and sturdy. Pelland configured a new steering column, bought two new padded seats, and built a metal roof supported by tube steel.

New wheels and tires and a sparkling blue



Pelland spent several years rebuilding his Club Car using metal from salvaged road signs.

paint job rounded out his project. He bought a 7-hp. Briggs motor to provide power, just enough to give his grandson a comfortable and safe vehicle to polish his driving skills.

Contact: FARM SHOW Followup, Wayne Pelland, 1803 6th Ave. E., International Falls, Minn. 56649.

and cats, and birds such as owls, crows, and hummingbirds. Cowboy boots and guitars are also popular.

Clients find Mock online, and they range from individuals to corporate companies requesting sculptures for hotel and office spaces. The indoor sculptures are protected with a clear coat, while outdoor sculptures are left to weather naturally.

"One of the biggest lessons I've learned in my 20+ years of sculpting is to welcome challenges and to trust my process. I've found that the more confidence I have in myself, the more it shows in my work. So, when I'm presented with a commission that might push me out of my comfort zone or with an installation that seems arduous, I always tell myself (and the client) that I can do it and do it well. This keeps me from doubting and overthinking and lets my creative process take over and do the work. My best sculptures have been the result of some of my biggest challenges," Mock says.

Check out his work on social media and his website, and email Mock for prices on commissioned work.

Contact: FARM SHOW Followup, Brian Mock (brian@brianmock.com; www.brianmock.com; Facebook: Brian Mock; Instagram: brianmockart).