

# PROTOTYPE THAT

When Kevin Binkert moved into the old Standard Metal Products (SMP) building in San Francisco's South-of-Market neighborhood 15 years ago, all that remained of the 1920s metal foundry was a metal plaque. In homage, Binkert revived the name and built out an atelier that melds the most modern Computer Numeric Control machines with traditional hand tools.

As a maker-for-hire, Binkert has prototyped a handheld blaster for brain tumors, engineered hydrant valves for San Francisco's fire department, produced custom parts for the city's Italian streetcars, and restored two historic clock towers.

In between commercial jobs, he worked on the Spirit of America, a 45,000-horsepower jet vehicle that tore through the desert at an unofficial record speed of 675 mph; built The Spinner, a Ford V8-driven machine that whips braided cables to deafening supersonic speeds; and unleashed the Flame Tornado, a gas-powered sculpture that spews a 40-foot-tall vortex of fire.

These days, he's taking his talent to the small screen for *Prototype This!*, a forthcoming Discovery Channel TV show produced by *MythBusters* creators Beyond Productions. Binkert and MAKE contributor Joe Grand are among the five hosts.

Binkert's DIY career began in post-college jobs at movie special-effect houses. His defining maker moment came when he joined machine performance provocateurs Survival Research Laboratories (see *MAKE*, Volume 07) in 1989.

"I think that around retirement a lot of machinists start realizing they can make art with their tools," Binkert says. "I got into this the opposite way."  
—David Pescovitz

1. Okuma three-axis milling machine, known for its reliability and accuracy.
2. Mori Seiki CNC lathe used by its previous owner to machine parts for high-speed centrifuges.
3. Marvel cut-off band saw.
4. Monarch Model EE lathe, arguably the best manual lathe ever.
5. Cat-40 tools for the Okuma.
6. Wheel balancer machined for an SF streetcar.
7. Chip conveyor catches the scraps from the CNC and drops them in the steel drum.
8. Dentures left by dentists who commissioned a custom denture-cutting tool.
9. Arbor press for installing bearings and pins.

Photograph by Robyn Twomey

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