

Offenhauser Stock Engine - Dirty Version

No engine has so dominated, or been respected in, racing circles as the famed “Offy.” The brainchild of engineer Fred Offenhauser (1888-1973), the engine that bears his name got its start from a combination of serendipity and disinterest. Offenhauser got his start working for another famed engine builder— Harry Arminius Miller (1875-1943). Joining Miller’s shop in 1913 and, with Miller as his guide, he acquired the skills and knowledge to build or repair any part of an engine on any foreign or domestic racecar. Assigned many projects, he rebuilt Bob Burma’s 1913 GP Peugeot for the 1914 racing season, and designed and built Barney Oldfield’s famous “Golden Submarine” in 1917. In 1919, Leo Goossen joined Miller’s staff and Offenhauser took on the responsibilities of plant manager. But, a fortuitous turn of events changed the course of his life.



Around 1930, a well-known racecar owner tried putting one of Miller’s four-cylinder, 151-cid, marine engines in one of his cars. The prototype succeeded beyond all his hopes, establishing a new international speed record of 144.895 mph. From this tried-and-true marine engine, Miller came up with a twin-cam, four-valve, 220-cid racing four. In spite of its potential for future success, Miller wasn’t interested in developing a throwback engine. But, Fred Offenhauser was. When Miller’s company went bankrupt in 1933, Offenhauser bought it and began to refine Miller’s original design. Thus began the “Offy” dynasty. From 1934 to 1960—a span of 27 years—Offenhauser’s four-cylinder racing engines dominated racing. They powered Indianapolis 500 racecars to an incredible 24 victories! In spite of this, the cigar-smoking Offenhauser chose to remain in the background and made only infrequent trips to the track. He was inducted into the International Motorsports Hall of Fame in 2001.

The success of Offenhauser’s engines lay in the fact that they produced staggering outputs of up to 3 horsepower per cubic inch. Thus a High Tower, twin-cam four-cylinder, racing Offy, with a 15:1 compression ratio, 4.28 x 4.38 bore and stroke, and 251.89 cubic inch displacement, can produce 420 horsepower at 6,600 rpm. That’s a 1.77 bhp/cid ratio. No wonder they’re so formidable.

GMP has produced two versions of the famed Offy 255 cid racing engine—a “clean” version and a “dirty” version. This isn’t an entirely new concept in model making (i.e. FM’s “Old Reliable” pickup, or Highway 61’s series of salt-encrusted lake racers), but it’s the first time I’ve seen it applied to an engine replica. With a little artistic “aging”—oil stains, encrusted track dirt, and heat-induced discoloration on the chrome exhausts—it looks as though this engine has just been removed from its car for an overhaul. As to the quality of this image, this is one solid chunk of die cast metal. The exhaust manifold is a separate die cast piece that mounts into two holes on the side of the image. I couldn’t find one plastic piece on this replica (other than the coating on the plug wires). GMP provides a heavy, cast-resin base to mount it on, and two aluminum brackets to hold it in position on that base. There’s also a Lucite dust cover. A screwdriver, wrench, and appropriate nuts and screws are provided for the small amount of assembly required.

There are no moving parts, but the amount of detail is exceptional, down to the last screw, nut, and bolt. There's even a small brass plaque on the right overhead cam cover that clearly says, "OFFENHAUSER ENGINE Eng. No. 244 Built by Meyer & Drake Engineering Corp. Los Angeles 47, Calif." Is this image worth the \$199.95 price tag? Well, you get well-crafted 1:6 scale racing engine that looks as if it could run. You also get a solid base, with dust cover, and no-nonsense, metal mounting brackets and hardware, along with tools to assemble it all. You be the judge.

T. H. Pine

Wordworker@earthlink.net