

Snyder's Model A and Model T Pistons

Unlike other aftermarket pistons available in today's market, Snyder's Premium Pistons are made by an OEM (original equipment manufacturer) who supplies Automotive, Marine, Motorcycle, and Industrial manufacturers. Their factory is ISO-9001, TS-16949, and QS-9000 certified, which means they have passed all the quality standards required to sell directly to GM, Ford, and Chrysler, as well as all other vehicle and engine manufacturers throughout the world.

Like the Ford Motor Co. today, this OEM piston factory follows the TQM or Total Quality Management System which monitors, checks and documents the product specifications during the manufacturing process. This ensures a consistent high quality level of the pistons.

With several decades of engineering and manufacturing expertise, this factory utilizes the most up to date C.A.D. equipment and systems to assist their engineers in piston development along with the most modern "state of the art" CNC machinery. In addition, a precision master cam machine makes a special tooling to OEM specifications which is used to machine the profile and the taper of the piston precisely as originally engineered.

Like a fingerprint, each piston requires its own master cam to match its profile (ovalness) and degree of taper from crown to skirt. These precise specifications are the key to the piston's performance, life and quietness of operation. However at price of 2.5 million dollars each, the master cam machine is cost prohibitive to almost all but the O.E.M. manufacturers. Most piston manufacturers have just a few generic cams and they pick the closest one, which is the equivalent to a "one size fits all" pair of shoes!

Original equipment Ford Model A and T pistons were used by this factory to reverse-engineer and upgrade the pistons for Snyder's, following the important dimensions while strengthening and improving the original piston's design. The factory then created new casting molds and tooling for Snyder's pistons, including a special set of new master cams for each piston -- one to machine the piston and the second to check the piston's profile and taper during the final Quality Control Process.

The piston castings are made with a High Quality JIS Eutectic Aluminum Alloy utilizing special patented molds designed to minimize porosity. Due to the wide range of sizes being produced for Snyder's (standard to + .120"), the factory created two different size casting molds in order to maintain the correct specification for piston wall thickness on all oversizes.

Before casting a production run, each corresponding batch of the casting alloy is tested by an Independent Lab to 100% ensure the quality. After casting, the pistons are QC checked for porosity, then hardened to modern automotive specifications in computer controlled heat treating chambers delivering consistent quality control. There are many different processes involved during the machining, with strict TQM quality control checks following each designated process. After machining, all pistons are sorted by size to within .0005" and color coded so you are assured of a perfectly matched set. The end result of this is a fully upgraded version of the original piston. Even a casual look on the inside and out of Snyder's pistons will reveal the extreme quality of the casting and tooling and modern manufacturing used.

Although Snyder's Premium pistons are much higher in quality, they have been specially priced to be competitive with the aftermarket pistons available. All Snyder's Premium Piston sets for Model A's include pins & clips and are available in STD. to .120 Oversize. Snyder's Premium Model T Piston sets include pins and are available in STD. to .060 oversize in both standard and high compression versions.

