## Sōichirō Honda and the Utility of Failure

In 1949 the Honda Motor Company, founded the year before by Sōichirō Honda (1906-1991), was joined by Takeo Fujisawa (1910-1988). The two men had been introduced by a mutual friend who worked in MITI, the Japanese Ministry for International Trade and Industry. Fujisawa was an experienced and gifted salesman; he made the perfect partner for the more technically inclined Honda. But getting to that point had already taken an amazing amount of perseverance on the part of both men, Honda in particular.

Honda was the son of a village blacksmith and bicycle shop owner in the prefecture of Shizuoka, Japan. At the age of fifteen, Sōichirō left the village and apprenticed as an automobile mechanic in Tokyo. Around six years later he returned to Shizuoka and set up an automobile repair shop in Hamamatsu, near his home village.

Honda remembered something from his days in Tokyo. The fires after the Great Kanto Earthquake of 1923 had destroyed many car wheels by burning their wooden spokes. It occurred to Honda to replace the wooden spokes with cast-iron ones, for which he took out a patent. Soon his shop was netting 1,000 yen a month in profit—a respectable sum in those days.

Honda decided to reorganize his business completely as a manufacturer rather than as a repair shop. So in 1937 he founded Tokai Seiki Heavy Industry. And he decided his first product would be piston rings, also die-cast. But all his efforts to cast piston rings failed. The iron he cast was too stiff. Piston rings require some <u>elasticity</u>.

To overcome this problem, Honda and his managing director stayed at the factory around the clock, studying, experimenting—and failing. But they persevered. Honda's wife came to the factory to feed him, and eventually to cut his hair. As money grew tighter, he pawned some of her things. This went on for months. Honda realized he simply didn't know enough about metallurgy. But when he asked nearby foundries for advice, he was told to become an apprentice!

So he took one of his piston rings to Hamamatsu High School of Technology (now Shizuoka University). A professor there analyzed it and told him it lacked silicone. Honda had no idea what silicone was. So he enrolled in the school as a part-time student to find out. He was a terrible student in everything except matters related to making better piston rings. But within nine months of his first attempt, he produced a decent prototype.

Honda took his prototype to the Toyota Motor Company and finally got an order, for 50,000 piston rings. But when a random sample of 50 were checked by Toyota, only three passed inspection. Honda sold them elsewhere, and tried again. By