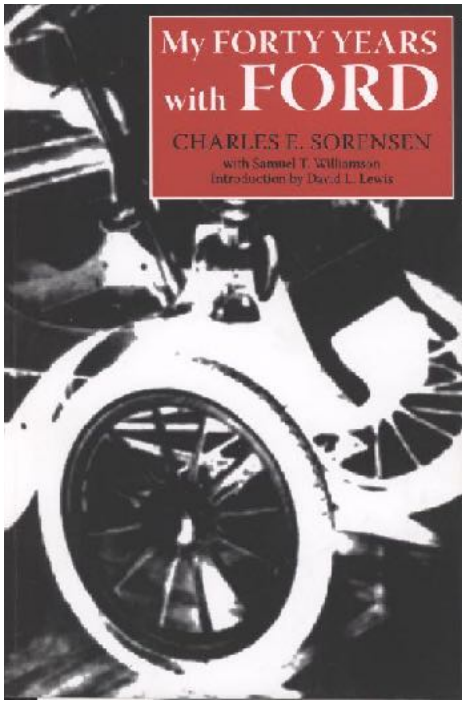
My Forty Years with Ford

Charles E. Sorensen with Samuel T. Williamson
2006 (reissue), Wayne State University Press

Paul Duncan Book Review

I recently read Charles Sorensen's book "***My Forty Years with Ford*.**" The book was originally published in 1956. The book is a first hand account written by a Charles Sorensen who was intimately involved in the development and production of the Model T as well as other Ford Motor Company (FMC) products including World War II bombers until his retirement in 1944.

Charles Sorensen started at FMC in 1905 when he was 24 years old. He was adept at making wooden patterns in which "he translated Henry Ford's mechanical ideas into tangible visual form." He observed that Henry Ford had an uncanny ability to see what steps were needed to create a process far in advance of anyone else. For instance, "Ford understood that to successfully build an inexpensive automobile, one needed revolutionary cost cutting production." Ford did not know exactly what steps would be needed but he and his assembled team understood that they needed to design, build and sell automobiles at a profit in order to remain a viable business entity. At the same time, they needed to be able to increase production and decrease costs. Sorensen emphasizes that Henry Ford was not driven by money. His ultimate goal was to produce an auto that was affordable to the average working person. Sorensen emphasizes that Henry was an innovative and creative team player. Ford values and needs the opinions and ideas of his close associates but he made the decisions. As it turns out, the 8 "pre-Model T" automobiles that FMC built were a dress rehearsal for the Model T. Nearly 10,000 "pre-Model T" models were sold and provided income for FMC along with consumer and dealer input. Henry decided early on that the planetary transmission was the right design along with a 4-cylinder engine with a removable head and stamped metal oil pan. Sorensen credits stockholder and treasurer James Couzens for his fiscal and marketing responsibility and for creating an expanding dealer network.



Henry and his associate C.H.Wills incorporated the new vanadium steel alloy from Europe into new lighter designs of the Models N, R, and S. By incorporating precision-built interchangeable parts into the assembly process, automobiles could be built at a rate of 100/day by 1909. Sorensen understood that the key to producing the car Ford envisioned in the numbers he envisioned was to improve the manufacturing process of the individual parts and the assembly process leading to the finished automobile. The assembly line followed.

Once the Model T design was settled, production started in the fall of 1908. As orders poured in, it became clear that the FMC Piquette plant could not handle the production that was needed. The Highland Park plant was planned and operations moved there in January, 1910. By 1912, 68,700 Model T's were produced with the majority being Touring cars that sold for $690-a $250 drop in 2 years. The most sophisticated machine shop anywhere was part of the Highland Park plant design as well as large integrated factory spaces where efficient mechanized assembly could take place. Sorensen states: "Mass production and automation both evolve from the same principle: Precision machine produced interchangeable parts and orderly flow of parts to subassembly and final assembly."

In 1913 FMC produced 170,000 T's that sold for $600 each (another $90 drop in price) and the company realized a 28-million dollar surplus. Henry Ford wanted to pass on profits to the worker. At Henry's direction Sorensen and Couzens transferred a portion of the profits to the labor costs and calculated that the daily wage would need to be $5/day. Henry Ford said that the $5/day wage was not charity but profit sharing.

After spending 39 years with FMC Sorensen said: "He was aware of Henry's character deficiencies but he believed when weighed against his good qualities, his sense of responsibility, his exemplary personal life, and far reaching accomplishments these defects become microscopic. Sorensen made it clear that he was proud to have the label-"Henry Ford's man." This book has crystalized my understanding of the design and production of the Model T and why the Model T was such a successful industrial break through. This book tells a truly extraordinary story of innovation and "possibility" thinking!