

the following two decades, that share slipped to 35 percent. Dana needed to go abroad, or lose out.

The automotive industry that was emerging around the world owed much to the trade restriction of World War II, which had starved people in regions like South America of the replacement parts they needed for their cars. Local entrepreneurs, like Esteban Daneri in Argentina, and Ricardo Albarus in Brazil, began manufacturing the parts themselves, but technology was limited, and quality needed to be improved.

In the 1950s, piston ring manufacturer E. Daneri and U-joint kit maker Albarus wanted to expand into the original equipment market, but it did not prove easy. Their technology was limited and their quality was not sufficient for people like Ford, General Motors and Kaiser who were shipping in parts from the United States and assembling them locally.

Then new trade laws were passed, encouraging the use of local parts. Albarus and E. Daneri recognized that to take advantage of the opportunity they needed access to new equipment and well-known brand name. While E. Daneri forged an alliance with Perfect Circle, Albarus was introduced to Dana by Ford. In 1954, Dana granted Albarus a Technical Assistance License, and in 1957 Dana traded manufacturing equipment for a 30 percent stake in the Brazilian company.

Instead of trying to run the business from Toledo, Dana trusted their new partner to know about their way around Brazilian business. Autonomous decision making was encouraged, local financing was used for expansion, and costs were kept to a minimum.

This hands-off policy worked well, and both Albarus and E. Daneri expanded rapidly and profitably. Dana started other ventures like Danargen, then moved to Venezuela and Columbia. Soon Dana produced almost their entire range of products in South America. Meanwhile, Dana looked to establish a presence in the world's other major markets. In 1972, Dana established up Spicer drive-shaft plant in Korea, and later in the 1970s Dana took an interest in two English companies, Turner Transmission and Brown Brothers.

Turner was a manufacturing company that contributed to Dana's traditional markets, but Brown Brothers was something new. Brown Brothers was in distribution, and the aftermarket.

The VW Beetle, and Reinz

In 1939, due to recession and war, the number of foreign cars imported into the United States was just 298. By 1959, that number had swelled to 614,131. Led by the Volkswagen Beetle, European manufacturers were building dealer networks and customer goodwill across America. They were also earning a reputation for engineering quality and dedicated service.

Reinz, a supplier to Volkswagen and the other leading European car companies, symbolized the European attitude. Demonstrating a tremendous willingness to work with customers, Reinz established an application engineering department to ensure that their products exactly fitted each customer's needs. Aware of the global nature of the automotive industry, Reinz established facilities in India, Japan, and the United States. Yet costs were kept low, and Reinz's product quality and dedication to service remained high.

Dana Industrial

In 1969, a subtle shift in Dana's stated goal acknowledged the opportunities being created by Dana's engineering and manufacturing know-how. Instead of being a purely automotive company, Dana would expand its horizons to include: "The worldwide design and manufacture of systems for the transmission and control of power."

At first most industrial sales were of equipment evolved through Dana's traditional operations, but soon Dana Industrial was designing equipment specially for aviation, marine, mining, exploration and agriculture customers.