

Carmelo Joseph Scuderi
1925-2002

Carmelo J. Scuderi (BS, ME), was an American inventor, a mechanical designer, and a thermodynamics and fluid mechanics engineer who worked for nearly 50 years inventing, developing, testing and commercializing new technologies. Throughout his lifetime, Scuderi was an invaluable process partner for major corporations and defense contractors. He worked and served as a consultant for Hamilton Standard, Raytheon, Avco Lycoming, Hughes Aircraft Company, as well as the US Navy and Air Force. Scuderi assisted in the development of the Mark 48 (Mk-48) Advanced Capability (ADCAP) torpedo, critical test equipment for NASA space suits, fire suppression equipment for aircraft carriers, and countless applications utilizing refrigerant and compressor technologies.

In 1992, Scuderi developed a compressor technology to prevent the release of chlorofluorocarbons (CFCs) into the atmosphere in response to a key United States Environmental Protection Agency (EPA) mandate. His oil-less compressor was conceived and introduced within a period of six months and captured 70 percent of the refrigerant recovery market within one year. In 2005, *Discovery Magazine* credited this development as one of the reasons for the ongoing repair of the ozone layer. Nearly 20 years later, Scuderi's technology remains the industry standard.

In 1994, after spending most of his life contemplating the inefficiencies of the conventional engine Otto cycle, Scuderi set out to improve the internal combustion engine and in 1998 began designing the Scuderi Split-Cycle Engine full-time. Scuderi's design was finalized in 2001 and with the help of his children, he began obtaining patents, contacting laboratories and licensing experts, and raising funds for what would be a completely new internal combustion process: The Scuderi Cycle.

Carmelo Scuderi died suddenly in 2002, but the Scuderi family's next generation of engineers and support partners continue to further his legacy of innovation by transforming their father's engine concept into the revolutionary Scuderi Engine and beyond.