About Xcite

Xcite Systems Corporation is dedicated to serving the needs of the structural dynamist for high force modal excitation applications. The company's products have origins at the Mechanical Engineering Department of the University of Cincinnati where the first generation of Xcite 1100 Systems was developed as part of a program to develop the means to predict and control machine tool chatter. This research project required an excitation source small enough to be mounted between the machine tool holder and work piece and develop preload to simulate static tool loading. In addition the exciter needed to generate controlled dynamic forces representing the cutting forces and frequencies seen during the high frequency chatter phenomenon.

This research was carried out under the auspices of the U.S. Air Force to improve the machining process of high strength alloys employed in the manufacturing of next generation aircraft and aerospace structures. The results of applying modal analysis technology using high force excitation to this chatter problem were so dramatic that it spawned an entire industry of modal analysis companies serving the hardware and software needs of structural dynamists in the global manufacturing community.

The viability of Xcite Systems's technology for producing high frequency controlled force by using hydraulics soon created a market demand for additional types of exciters. The company, then part of Zonic Corporation, soon developed a complete line of torsional exciters to meet the needs of the automotive drive train dynamists and rotating electrical machinery engineers. This family of torsionsal exciters, the Xcite1300T Systems, was added to the growing line Xcite 1100, Xcite 1200 and Xcite 1300 linear exciters.

Xcite Systems then introduced the first commercial linear inertial mass exciter, which allowed the dynamist to test structures such as missile silos, cooling towers, bridges and large electrical stators where no back up fixturing is available. The success of this product, the Xcite 1100-5 Inertial Mass System, led to the development and of the patented Continuous Rotating Torsional Exciter, which allows turbine rotor dynamists to apply a controlled dynamic torque to rotors while being spun at operating speeds up to 4000 rpm.

Xcite Systems Corporation was founded in 1997, by two former Zonic Corporation executives, to consolidate the Xcite Systems technology and products into a single entity focused on meeting the structural excitation needs of the global modal analysis community. With a growing global applications base in the automotive, aerospace, shipbuilding, power generation, turbo machinery and construction machinery industries, Xcite Systems strives to provide the finest structural excitation products and services to its clients.