



Customer: Harley-Davidson
Motor Company

Location: Milwaukee, WI

Project: Product Development Center

Project Information

In early 1998, Harley-Davidson engineers, designers, technicians and other specialists moved into a spectacular new Product Development Center (PDC). The new PDC is more than just a building. It is an environment that supports the myriad activities that combine synergistically to result in new and improved products from the company whose name defines “motorcycle” around the world. The dramatic roofline evokes the curving image of a motorcycle fuel tank. Inside, product planners dream, designers conceptualize, mechanics build prototype products, and engineers test the new designs in a new state-of-the-art laboratory. There is even a “jury room” where Harley riders judge the “rumble” of each new motorcycle.

The PDC houses fifteen major test cells, including ten dynamometer cells for engine performance or endurance testing, three chassis dynamometer cells for emissions testing, and hemi-anechoic and fully anechoic chambers for noise, vibration and harshness testing. Other areas of the laboratory test electronics, motorcycle structures, and components such as valve trains, starters, and transmissions.

Every test cell has special requirements for space, equipment layout, climate control, fuel, water, electrical power, fire protection, test control, data acquisition and computer communication. Harley commissioned Emprise to coordinate specifications for newly purchased equipment as well as requirements for relocated equipment. Emprise followed up on this work by furnishing mechanical designs for various safety systems and a sophisticated fuel distribution control system. Emprise also designed and configured a test cell communication network that allows information to be shared between all of the test cells.

