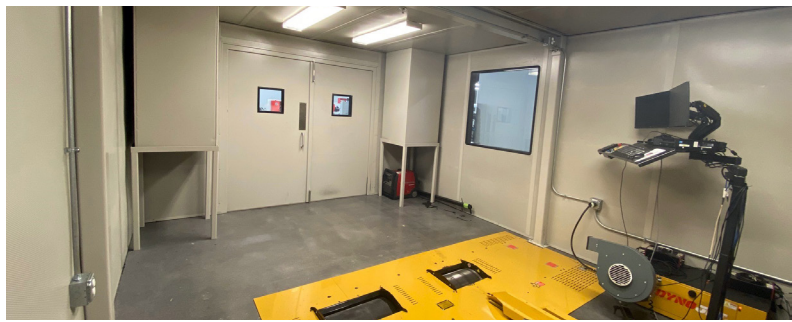
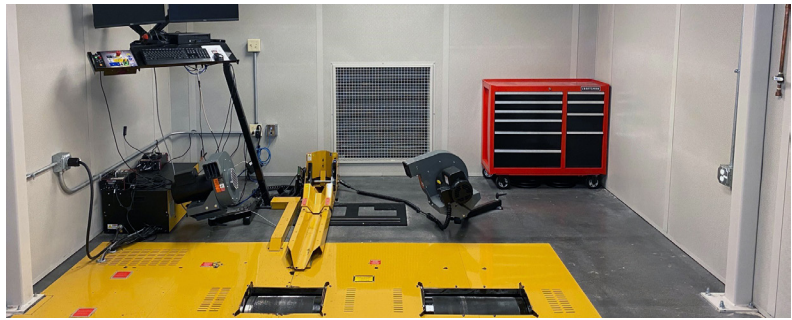


Case Study:

IAC Acoustics Motorcycle Dyno Test Cells

Black Gold Harley-Davidson
Dallas, Texas



IAC Acoustics Provides Motorcycle Dyno Test Cell to Black Gold Harley-Davidson

Black Gold Harley-Davidson is a leading motorcycle dealer in Dallas, TX. In 2020, Black Gold was ready for a state-of-the-art Dyno test cell room to support the purchase of their Dynojet dynamometer system.

Black Gold's challenge with a new dynamometer system was that it is inherently loud, dirty and potentially hazardous to employees. With over 70 years of experience in the design and construction of dyno test cells, IAC Acoustics proposed an optimal solution for both sound reduction and ventilation.

IAC delivered a high performing dyno test cell that allowed for testing of the power output of motorcycles and trikes across many different operating conditions (RPM, throttle, fuel mix, etc.), while mitigating the noise and hazardous conditions generated by the system.

IAC implemented Noishield® Regular panels consisting of a solid face and perforated interior that provide an STC-40 value and NRC - 1.1 value as a cost-effective solution. IAC also provided a double leaf STC-51 Noise-Lock® door for easy access with trikes. The test cell also included a double pane STC-47 Noise-Lock acoustical window, allowing for visibility from the control station.

The Noishield Regular panels provided an excellent balance of sound transmission loss and absorption throughout the system and provided the dealership with appropriate sound control, access and ventilation of exhaust gases.

IAC's required scope for ventilation included engineering and materials for an intake plenum and dual exhaust silencers. All were constructed of IAC's Noishield Regular STC-40 panels.

IAC Acoustics is the authorized dynamometer room vendor in the Harley-Davidson Tool & Equipment Program and a proud partner of Motorcycle Mechanics Institute.