

Case Study:

# IAC Acoustics Moduline NVH Test Enclosure



Toyota Boshoku

Lawrenceville, Illinois & Princeton, Indiana



## IAC Acoustics Provides Turn-key NVH Test Enclosure to Automotive Seats Supplier

Toyota Boshoku is a leading manufacturer of automotive products in the United States and across the globe. This respected brand has earned that position through consistent, high performing products. This level of quality can only be met through continuous monitoring of process and on the floor product testing. When Toyota manufacturing plants in Indiana and Illinois faced recent noise control concerns in their testing process, they looked to IAC Acoustics, whom they had successfully worked with in other factories across the country in the past, to provide a solution.

These two factories were faced with the challenge of conducting acoustical testing of their automotive seat frames on the factory floor with ambient sound levels of 84 dBA. In order to test accurately, they required a test environment of 35 dBA. To solve for this, IAC recommended 10 turnkey test enclosures that would reside on the factory floor at each site and would satisfy the acoustic requirement.

These “plug and play” enclosures were constructed to include Noise-Lock® III STC-58 panels for the walls and ceiling of each structure, an STC-61 triple seal double leaf access door at the front end for human access and an STC-61 sliding door at the back end for product access. In addition to the panel and door construction, the enclosure interior was lined with 4 inch thick Noise-Foil panels to optimize the desired repeatable test environment.

Consistent with the IAC Acoustics guarantee, every enclosure was pre-tested for performance prior to shipment. IAC Acoustics enclosures are ruggedly built from raw steel and are specifically designed to withstand the daily and relentless harshness typically found in industrial manufacturing environments. This includes the use of non-combustible and ASTM E 84 class A fire rated materials in the fabrication of our enclosures.