



Vibration Impact Test (Horizontal impact) (Vertical impact)

We conducted our own original severe vibration impact tests based on the US NAS3350/3354 standard screw looseness test, and verified that all types of HARDLOCK nuts exceed this evaluation standard by a clear margin. As self-locking nuts used in civil engineering applications such as railways, highways, bridges, pylons, etc., HARDLOCK nuts are exposed to a wide range of vibrations and impacts on a continuing basis. However, the data from these tests proves that HARDLOCK nuts maintain a stable tightened condition regardless of the type of impact to which they are exposed. A performance comparison with other general-purpose nuts demonstrates the clear superiority of HARDLOCK nuts for tasks where vibration resistance is paramount.