



1. The Hutchens Device worked in the past and will continue to do so in the future.

There were **four deaths in eight months before the Hutchens Device was mandated** by NASCAR in its top three divisions in 2001. **Since that time, no deaths have occurred** in NASCAR's top three divisions.

At Safety Solutions, we are proud to have played a major role in this record.

2. It Works:

The Hutchens Device has provided superior head and neck protection to NASCAR drivers for the past four seasons, and **continues to provide** that same level of **protection**.

When mandated by NASCAR in the fall of 2001, the Hutchens Device demonstrated to NASCAR, its effectiveness in NASCAR's testing. The device continued to pass NASCAR's stringent Head and Neck restraint testing through the 2004 season.

Wearing the Hutchens Device is **still a viable solution** to reduce the risk of injury in most crashes. Even the experts agree, if the option is not to wear a head and neck restraint, it wouldn't be the option we would stand behind.

3. What is the SFI 38.1 Standard and how does it relate?

The new standard is set very high by NASCAR's SFI 38.1 Head and Neck restraint specification. In order to pass the specification, the restraint now has to pass a 70 G, 30-degree angular frontal impact, as before, and three straight frontal 70G impacts below **4000 N** neck Tension. (The Federal Motor Vehicle Safety Standards for passenger cars allows **4170 N**) The Hutchens Device passed the 30 degree angular frontal portion of the test with a best ever score of **3800 N**. This is compared to 4375 N in the 2002 NASCAR tests. The Hutchens Device missed passing the NEW straight frontal impact specification by only **7%**.

The **majority of crashes** a driver will potentially experience are **well below** the stringent SFI 38.1 impact spec of **70Gs**. As a reference, Dale Earnhardt's fatal impact was estimated at 42 G's. NASCAR has reported that since the soft walls were added last year, that data recorders highest impact to date, was not over 50 G's.

The SFI 38.1 Specification uses none of the normal cockpit surroundings that help guide and control occupant motion during an impact. It also uses a pulse from a side impact with a NASCAR Bush series car that is very stiff.

In FACT: In the actual **on track impact** that the SFI test pulse was taken from, the driver suffered a **broken collar bone** as a result of the crash. *The driver was wearing our competitor's head and neck restraint.*

As a comparison:

The **SFI 16.1 Seat Belt specification** is based on a **55-60 G** impact according to SFI. SFI 16.1 certified Seat Belts **routinely break in the SFI 38.1 Head and Neck Restraint test**. A special seat system, firewall and **highly modified seat belt** system are used in the SFI 38.1 test.

Seats, a vital part of the safety system, are currently not tested by NASCAR. A new SFI spec. introduced by NASCAR for seats is based on a **40 G impact. (30 G's below the Head & Neck Restraint spec. of 70 G)**

4. Crash Safety System:

It is important that the racer understands the importance of a good safety system. It has been shown in many labs and on **the track** that much higher impacts can be survived with the use of a **complete safety system**. The Hutchens Device has been used in many crashes in the field that have been recorded at over **70 G's** without fatalities or injuries.

The comparison data that is shown on **HutchensDevice.com** was done at an ISO accredited laboratory in complete safety systems. This indicates how the Hutchens Device acts in a real world **environment** like your race car. In laboratory testing, full environments, properly mounted seat belts, rib seats, headrest, shoulders and / or driver nets and a steering wheel in the system, have been shown to lower the major injury criteria values of the occupant.