

# Seat Insert Kits

Energy Impact Systems (EIS) is available from BSCI in do-it-yourself seat kits. This material is a revolution in the two-part foam seat insert design, providing a ready-to-use seat in approximately one hour.

## Advantages over conventional 2-part foam systems:

- EIS is tested to rigorous impact and flammability standards to conform to SFI 45.2 standards
- The slow foaming rate gives the occupant more time to position their selves in the seat
- A drill and an electric knife are the only tools needed to complete the process
- EIS is a resilient material that does not require replacement after impact

## Advantages over beaded seats:

- EIS is tested to rigorous impact and flammability standards to conform to SFI 45.2 standards
- No costly and unreadily available tools needed such as vacuum pumps
- Time is of the essence in racing and other occupations and with a cure time of 5 minutes, EIS completion time surpasses that of beaded seats
- EIS begins as a liquid, allowing the material to conform to every crevice of the body and ensuring accuracy of the mold to the body for exact comfort and support expected by the occupant. Beaded seats do not have this liquid characteristic.
- EIS is a resilient material that does not require replacement after impact

Kits are available in small, medium, large, and custom sizes.

Contact BSCI for additional information and details.

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All products are manufactured in our facility under rigid quality control standards.



**Machined and  
Pour-In-Place  
Seat Inserts**



## CNC Machined Seat Inserts



BSCI can replicate any seat insert or headrest with either of our two SFI 45.2 approved foam materials. Along with our state of the art CNC Machines, BSCI uses a process to manufacture products that are precise and uniform in density, increasing the comfort level and safety of the seating system. Using this process BSCI can duplicate and provide an exact replica of any existing insert, eliminating the need for driver and crew participation. Our technicians are also highly trained in molding new seat inserts to the occupant's body. Differing from other materials used to manufacture seats and headrests, BSCI's SFI 45.2 approved foam materials are inherently self-extinguishing in the event of a fire. CarbonX fabric covers the exterior of all BSCI seat inserts and headrests.



BSCI has a long and successful history of protecting the most famous drivers in the world with our interior protective products. Motorsports organizations have put their trust in BSCI for over 15 years by using our SFI 45.2 approved foam materials. Using the high safety standards for the motorsports industry, BSCI is continuously seeking ways to develop and advance other safety products used by the military, marine, automotive, and aerospace industries. Leading experts in crash safety recommend our interior protective materials and products. The use of BSCI materials and designs transfer to occupants, not only in motorsports, but across the board in motorized vehicles to provide the same safety, comfort, and enhanced performance levels.

## NEW EIS W18 SFI 45.2 Approved Foam

Our customers asked for a way to give them a competitive edge and BSCI delivered. Weighing only 1.8 lbs/ft<sup>3</sup>, EIS W18 is the lightest SFI 45.2 approved foam available today and surpasses any other foam on the market in safety/weight ratio. BSCI's EIS W18 revolutionary foam material provides endless possibilities and can be used in fabricating energy absorbing protective parts in vehicles from seats and headrests to interior door pads, leg brace protectors, steering column pads, and arm guards.

## SFI 45.2 Approved Foam

BSCI's highly engineered Energy Impact Systems (EIS) materials exceed the SFI 45.2 specification for impact padding material used in occupant protection. The materials are highly engineered to comply with standards established by sanctioning bodies for usage in their respective series.

Initially, all BSCI foams were manufactured for motorsports applications. We scrutinized every detail of our foam to produce products with the lowest rebound velocity available. At rebound velocities of less than 40 percent of the original impact speed, BSCI materials and products outperform our competitors whose products have a rebound velocity in the 80 percent range. This factor is another component of our material that transfers to other applications for vehicle occupants, i.e. military, automotive, aerospace, and marine.

EIS is available in simple and complex shapes to meet your needs.

BSCI offers CAD/CAM design for production purposes and has the ability to quote parts from customer-supplied data.

- BSCI uses state of the art technology to create a seat design that provides the best comfort and safety
- BSCI specializes in vehicular occupant safety and comfort by providing in-house engineering and production with a custom design consultation
- Our safety-tested foam products are available in varying densities and reduced sensitivities to hot and cold temperatures for diverse applications
- Foams are designed for impact energy absorption, fire protection, fatigue reduction, improved comfort, and stress reduction
- BSCI's designs and foams mitigate the energy forces absorbed by the head, neck, torso, hips, and legs over time resulting in improved performance, comfort, and safety