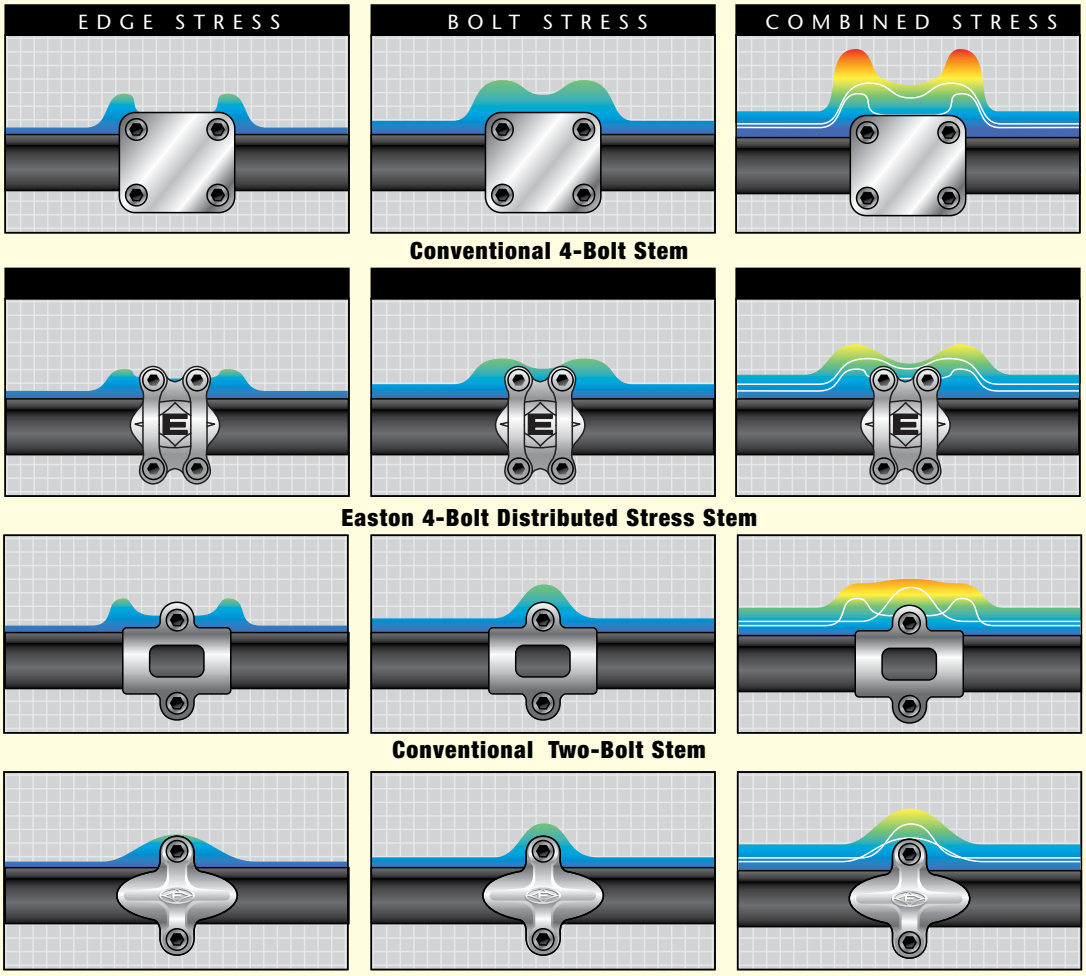
# Distributed Stress Technology (DST)

## There are two major stresses that the bicycle stem places on a handlebar




The first stress on the bar occurs along the edge of the stem clamp. The smoothness and shape of the edges determines how rider force is transmitted to the bar.

This stress is represented by the curves in the illustrations above — the higher the curve, the higher the stress.

The second stress on the bar is the clamping force generated by tightening the stem bolts.

The height of the curves on the chart represents the amount of clamping stress being applied to the bar.

Under actual riding conditions the bar is subjected to the combination of both edge and bolt stresses.

While this combining of forces may not be an issue with heavier bars, these forces can severely damage today's high-performance, ultra-lightweight handlebars.

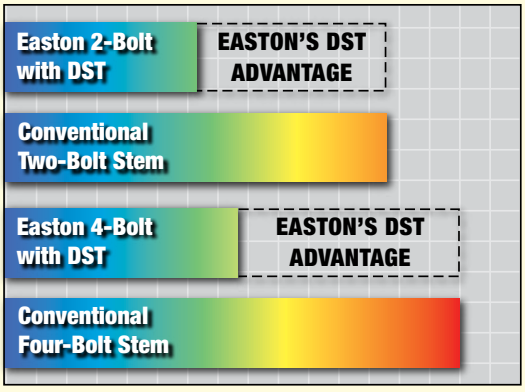
---

## What all this means to your lightweight handlebar

Because Easton manufactures both stems and handlebars, Easton engineers analyze the stem/bar interaction as a system. In reality the design of the stem directly affects the performance and longevity of the handlebar.

Easton DST stems were specifically designed with ultra-light, high-performance handlebars in mind. By better distributing the clamping stresses on the bar, Easton's design *greatly* reduces peak stress areas—reducing the chance of bar failure under load.

Easton does extensive testing of its own products as well as those of its competitors.




Through this testing, Easton's stems with Distributed Stress Technology design have been shown to be markedly superior at protecting lightweight, high-performance handlebars.

**COMBINED EDGE AND BOLT STRESSES WITH FIXED BOLT TORQUE (LESS IS MORE)**