

SmartBolts are tension indicating fasteners that ensure proper clamp force is achieved at installation and maintained over time. Each SmartBolt features a visual indicator that changes color to measure and display tension in real time. Tension creates the clamp force that keeps a bolted joint secure.

INFRASTRUCTURE RADIO TOWER STRUCTURAL JOINT

The Willis Tower is located in Chicago and is the third tallest building in the United States. Many broadcast station transmitters are located above the roof - the tip of the tallest antenna reaches a height of 527 meters. At this extreme height the radio towers experience dynamic forces, primarily wind, that put increased strain on critical structural joints. The Willis Tower uses more than two hundred SmartBolt DTI to secure its radio towers and provide visual feedback that the critical structural connections remain properly tensioned.

