

The NWS Radar Operations Center in Norman, OK is responsible for operating and maintaining the 159 NEXRAD weather radar installations throughout the United States and in select overseas locations. NEXRAD provides Doppler radar information to local TV weather services as well as US Government weather users, such as Air Traffic Control services.



The Problem:

The radome houses a 12-foot diameter RADAR antenna. The antenna rotates three times per minute on a pedestal which is secured to the radome floor with 12 critical bolts in a circular array. The NWS determined that a tension indicating bolt was required because of the variability of torque-tension relationship and the desire for an easier method of inspection than a torque wrench.

Our Solution:

The NWS selected iQbolt™ for the 12 bolt array for all 159 installations. Since 2008, they have been installing iQbolts at maintenance intervals. Now, operations staff are confident that the bolts have the required tension at installation. And the color indicator makes it easy to visually inspect bolt tension without shutting down the rotating antenna. There have been no problems reported since iQbolts were implemented.



Specifications:

Size: 34-16 x 3.5"

Design Tension: 27 Kilopounds-force

Material Grade: Grade 8

