

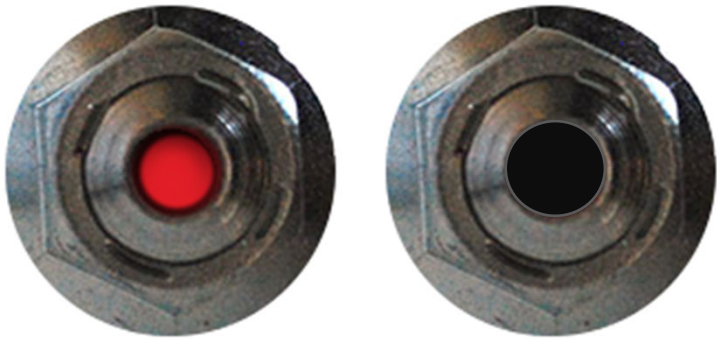
SmartBolts



Incredibly advanced. Surprisingly simple.

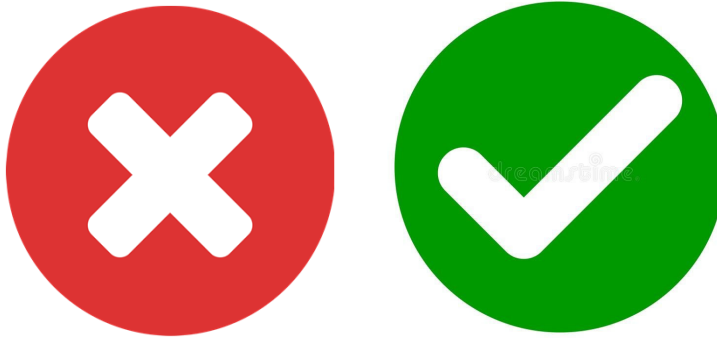


How are they Smart?



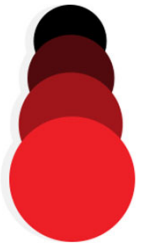
Airfield Lighting Systems (ALS) has launched a Visual Indication System that turns the top head of a bolt from red to black as you tighten it.

SmartBolts give you peace of mind because you know your bolts are at the correct tension which is vital for Airfield safety.



They can be easily retrofitted to existing runway lighting and do not need to be replaced with every inspection, saving you money and time.

Key Features



The Visual Indication System is a method of measuring bolt tension that is embedded in every **SmartBolt**. This technology uses colour to indicate tension. Changes in colour are proportional to bolt stretch, ensuring accurate and reliable measurements.



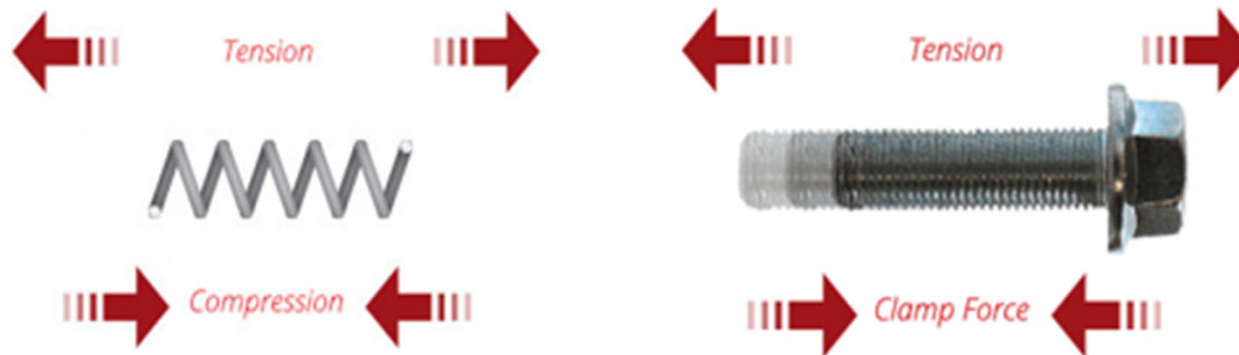
SmartBolts improve the safety and reliability of your equipment. A real-time visual alert of tension allows hands-free inspection. Service life is extended with full repeatability, reusability, and no wearable parts. Install and inspect on-the-go with no training required.



Remove the doubt associated with traditional nuts and reduce the maintenance frequency. Simple installations and faster inspections reduce operational costs. Furthermore, **SmartBolts** provide an early warning of reductions in bolt tension, leading to increased productivity and safer Airfields



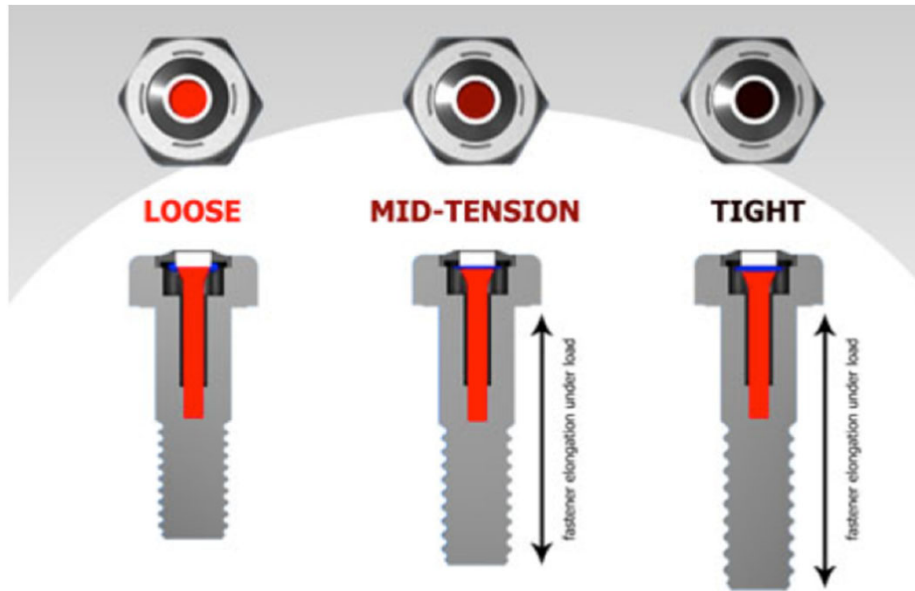
How it Works



The bolts work very similar to springs. When you stretch a spring, it pulls back – trying to return to its original size.

This stretching force on a bolt creates the necessary tension and a clamp force, which holds things together.

The coloured indicators represent a certain torque



SmartBolts directly correlate tension with colour. Accuracy and reliability is ensured because the colour change of the Visual Indication System is proportional to bolt stretch — the only true measure of how tight your joint is (torque readings alone can be misleading since torque only measures how difficult it is to turn the bolt head).

The SmartBolts built-in visual tension indicator turns from red to black when proper tension has been reached — and is completely reversible for the life of the bolt.

Recommended for all ALS Airfield lights



Taking Airfield Safety to the next level.

- Reduces risk of FOD.
- Save time on runway inspections, no need to get out of the van to torque the fittings a visual inspection is all that is required.
- No need to throw away bolts and norlock washers each time, **SmartBolts** can be re-used over and over.
- Tough and strong.
- Long lifetime guarantee.



Call on +44 1702 547866 for more information or visit our website www.alsukltd.co.uk





Now that's a **SmartBolt!**
with a **Heico** Combi-Lock
Washer