

2014 TEEA Winner Technical/Technology Category: Raytheon Company, McKinney Site, McKinney

Narrator

At this plant just north of Dallas, Raytheon produces some of the most sophisticated night vision equipment in the world.

Allen Couture, General Manger, Texas Operations

Our products are critical for both fighting terrorism and also, for defending our country.

Narrator

Because final use ranges from satellites to submarines, each piece is tested in a chamber that recreates stressful environments.

Don Tolbert, Environmental Test Lab Lead Mechanical Engineer

We cycle between hot and cold temperatures, simulate altitude, humidity, and then do a functional test afterwards. If they pass then they are built properly.

Narrator

In 2008, rising utility bills prompted executives to issue a company-wide mandate.

Mark Taylor, Environmental Test Lab Manager

Each of us was sent off to see what we could do to reduce energy usage in our area.

Narrator

Environmental Test Lab Manager Mark Taylor put together a team, which together, developed a smaller compressor that maintains test conditions once they're established by two larger compressors.

Don Tolbert

It's a unique set up and it utilizes one-fifth the power. It's been really successful.

Narrator

So successful, in fact, that engineers initially couldn't believe the projected savings.

David Rodgers, Facilities Maintenance Manager

When we first did the schematics on the savings per unit it was getting anywhere between 65 to 75%. That was a little bit unbelievable so we told management “Well, I think it’s going to be somewhere around 35 or 40%

Narrator

The high savings projections held and the 1.5 million dollar price tag to retrofit paid off in less than two years.