# **Delivering Excellence**



Maximise Power safely Enhance Fuel utilisation Reduce maintenance intervals Applied "enginuity"

# The world's leading Torque Sensors Systems

## Power of Pedigree

Auxitrol Weston has led the world's Torque Sensors market for more than forty years where it has significantly contributed to our accumulated **sensors pedigree**, fast approaching 40 million flight hours.

And, with more of our products on more of the world's leading gas turbines and gearboxes than any of our competitors together with a growing reputation for redesigning many of their failed systems, we bring a wealth of well tested experience which has the potential to make us **invaluable** to those who crave engineering excellence.

## Trust the Experts

When you do business with Auxitrol Weston, you are not merely accessing guaranteed quality and performance, you are tapping into an unrivalled resource of more than one hundred **Sensor Experts** who are **passionate about technological and engineering advancement**. People who really understand how sensor technologies interact with engine environments, with heat, vibration and the value of positioning. And, more importantly, care about working with people like you, to find inspirational solutions to your engineering challenges!

## Applied "Enginuity"

Filling the gap between Engineering challenges and creative, reliable sensor solutions is a skill we refer to at Auxitrol Weston as "enginuity", the application of **ingenious Engineering** minds.

# We **revel in thrilling our Customers** with surprising, often ground breaking solutions, which not only meet their specifications but more often nowadays, asks them to reframe their original expectations, sometimes radically, in order to provide them with

products beyond purpose.

Such "enginuity" is perhaps best evidenced where we are able to assist Customers with real-time data and experience which challenges their specifications, often resulting in radical system changes and significant error reduction, with consequential improvements in accuracy, reliability and engine performance.

So, we're getting involved earlier. Our opinions and expertise are trusted implicitly. Our technologies and their reliability are irrefutable. Our intervention appreciated and acknowledged as progressive. And, our accuracy accepted as a legacy of a massive **MTTF record** of over 40 million hours, based on our impressive fleet hours.

# **Torque Sensors**

Our Torque technology isn't new but it's unique to Auxitrol Weston and it's **tried**, **tested and patented**. Based on a Phase Displacement system, our Torque Sensors are designed to measure static or dynamic torque on any transmitting shaft. Using intermeshed phonic wheels, our torque products are ideally suited to handling **higher speeds** and temperatures with **greater accuracy**.

## **Typical Performance**

- Turbine / Rotor speeds to 60,000rpm
- Operating temperatures from -60° C to +500°C at the tip; and +820°C body temperature
- Repeatability to +/- 0.025%

# Applications

Aerospace including LRU - Engines embracing all Turbo prop engines

## **Future Proofed**

Our research and testing rigor underpins our **authority** in all matters relating to sensors. It's what keeps us ahead, so that we can be emphatic about the quality of our work, its progressiveness and the contribution it will make towards upholding our Customers' reputations, as well as our own, now and in the future! To achieve this we have **two custom built test cells**, each weighing nearly 6 tons, where we can simulate the dynamic working conditions of our sensors "on engine", rotating phonic wheels to **speeds of up to 55,000 RPM** in a safe working environment.

This exceptional Speed and Torque Test Facility is also routinely used by leading OEM's to qualify their own calculations or to establish unknown performance characteristics, particularly in the development of new products

# Approvals / Accreditations

AS9100:2009 BS EN ISO 9001:2000 EASA Part 21 Subpart G EASA Part 145 FAR-145 ISO 9001 & AS/EN 9100 ISO 9001:2000 ISO 9001:2008 Nadcap TCAC



