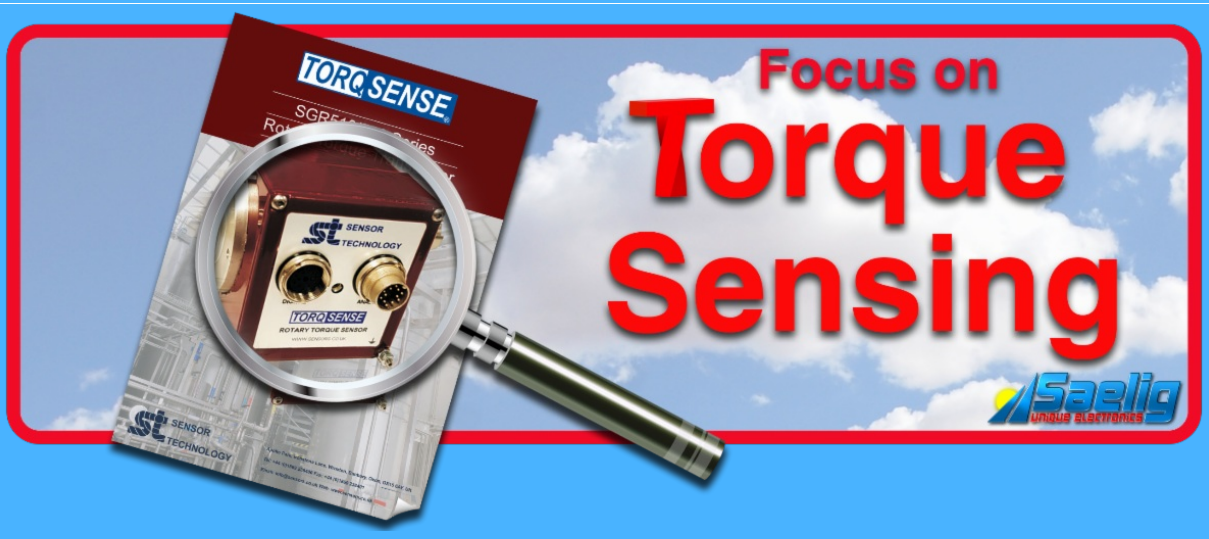


November 2020

Dear Colleague,

For over 40 years, Sensor Technology has developed solutions for customers' torque and load measurement problems, developing its own unique technologies for markets all over the world. The measurement technology for their 'TorqSense" Torque Transducers and torque meters is based on their proprietary patented non-contact technology.

But what problems can a torque sensor address? A principal application is 'how can we be more efficient?' Monitoring the rotating systems used in manufacturing and power generation can save money and prevent equipment failure. By examining torque on these systems, downtime can be reduced, product quality improved, and energy efficiency maximized.

What is Torque? It's a measure of rotational force. Think of a screwdriver applying torque to a rusty screw. With rotational torque, the object being examined rotates freely. Examples include industrial motor drives and gear reducers.

Torque measurements are also useful for process control. For example, a lumber mill uses a predetermined maximum torque to initiate blade changes. This saves wear and tear on the drive system and increases product quality. Monitoring torque is critical in assessing the performance of axles, drive trains, gear drives, and electric or hydraulic motors.

Torque sensors can help with experiments in power-steering applications, equipment power consumption, mixer viscometry for chemical or food manufacturing, improving drive train designs, investigating regenerative energy capture systems, pharmaceutical manufacturing and packaging, helicopter load measurements for fire safety and forestry, aerial entertainment safety, and many others.

See below for some interesting applications. And please call us to discuss your particular application needs.

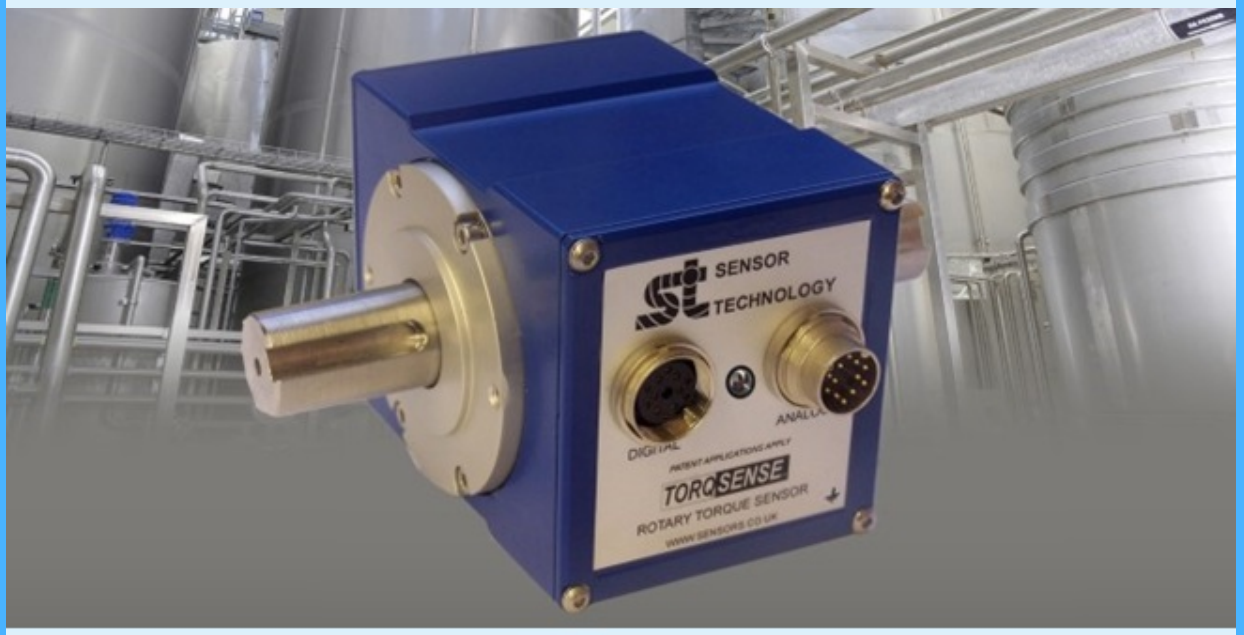
Alan Lowne, CEO

SENSOR TECHNOLOGY


TORQSENSE


LOADSENSE


WSG SERIES



TORQUING ABOUT ADVANCED PUMP CONTROLLER

Factory automation continues to develop year on year and pumps are increasingly required to supply real time operating data to control networks so that their performance can be monitored and adjusted to meet constantly changing production requirements. Hard wiring a sensor into a pump's rotating drive shaft usually requires the use of a delicate slip ring, but an alternative solution is to use a non-contact radio frequency detector, as Mark Ingham of Sensor Technology Ltd in the UK explains.

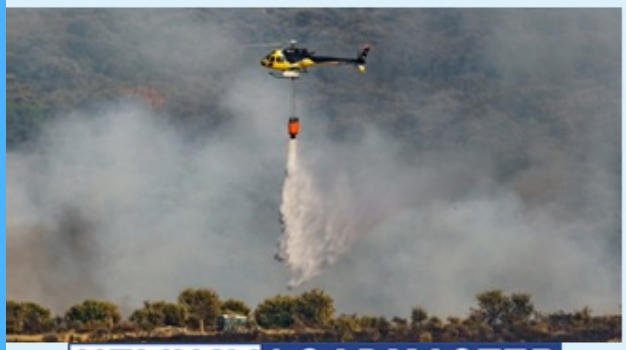
View Product Details

SMALL TORQUE: AN ESSENTIAL INGREDIENT FOR DEVELOPING THE NEXT GENERATION OF ENGINEERING SYSTEMS

The growing demand for high speed miniature and micro machines has prompted Sensor Technology Ltd to develop a torque monitor that can accurately measure down to 10mNm (ten milliNewton-metres).

View Product Details

TORQSENSE



HELINAV LOADMASTER

HELICOPTERS COULD BRING NEW TECHNOLOGIES TO FIGHTING BRUSHFIRES

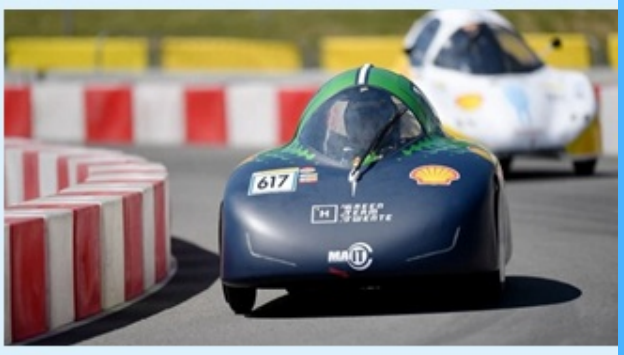
Recently, the UK has seen brushfires rage across large areas of moorland, a problem that may become increasingly common as climate change drives global warming. New techniques & increased levels of expertise will be needed to combat these. We look at the potential of emerging technologies.

View Product Details

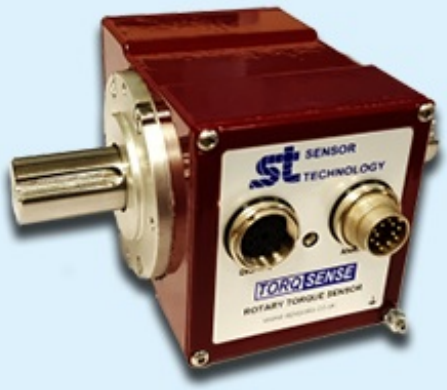
HYDROGEN CAR DRIVES FOR EFFICIENCY WORLD RECORD

A team of Dutch engineers competing to develop the world's most efficient hydrogen fuelled car has used a British torque sensor to determine that their next generation vehicle needs a custom designed and built hub motor. To measure the efficiency of the car's drivetrain, Green Team Twente built a test rig based on a torque sensor made by Sensor Technology.

View Product Details



TORQSENSE



TORQSENSE SGR 510/520

The new TorqSense SGR 510/520 strain gauge- transducers offer significant improvements in accuracy, over-range reading, and mechanical overload capability compared with their predecessors. SGR Transducers use non-contact technology which eliminates the need for electrically-noisy slip rings. These sensors are ideal for torque measuring, testing, feedback control of drive mechanisms, and process oontrol applications. The SGR series transducers use sophisticated strain gauge signal conditioning techniques to provide an excellent torque sensing solution.

View Product Details

Test Equipment | Automotive | EMC/EMI

Cables | Components | Converters

Data Loggers | Displays | Embedded

RF Shielding | RF/Wireless | Video