The Sensor everybody’s been waiting for: Low-Cost, Plug-and-Play Torque Sensors

Torque And More GmbH (TAM) is a sensor design and sensor manufacturing company, located in the south of Munich in Germany. TAM is developing and producing non-contact “Plug-and-Play” mechanical force sensors for the automotive, industrial, and consumer market.

**TAM is introducing the Active-3 Torque Sensor, at the exhibition “2015 Sensor & Test”**.

Working on magnetic principles, the “plug-and-play” Active-3 (A3) Torque Sensor can be used to measure mechanical stresses applied on any Ferro-magnetic objects (industrial grade steels). Within seconds, after having placed the Sensing Module as close as possible to the Test-Object, reliable Torque measurements can be taken.

**This translates into a rich benefit portfolio for the user:**
- **Over-torque can not damage the Sensor module (cannot age).**
- **Sensing principle is insensitive to humidity, oil, dust, coating paint (i.e. Paint) or vibration.**
- **Sensing Module can be used over a 200 deg C temperature range.**
- **Insensitive to external magnetic interferences (like the Earth magnetic field, or magnetised tools).**
- **High signal resolution (of >14 Bits) allows a very large Torque measurement range.**

These features make the A3 Sensor very cost attractive sensor solution.

The company Torque And More (www.tam-sensors.com) offers Standard Sensors, Sensor Kits with USB interface and PC software, and also produces custom specific sensor solutions. The affordability and easy-to-use feature makes this an attractive solution to volume applications.

The A3 Torque Sensor is the third generation of a sugar cube sized Torque Sensing Module that has been invented by Lutz May and his engineering team. Its simplicity makes the low cost sensor solution the preferred choice in demanding and cost sensitive applications, like e-bikes, automotive gear-boxes, motor-sport applications, wind turbines, and power tools.

One of the most stunning features of this sensing technology: **it is a true Plug-and-Play Sensor.** Reliable mechanical stress (Torque and Bending) measurements will be taken from any industrial grade steel (Ferro-magnetic materials) immediately after having placed the small sized Sensing Module on the Test-Object (drive shaft, or tube).

The Test-Object (shaft from which Torque measurements will be taken) can be used as is (no processing of any kind required). This feature alone makes the A3 Torque Sensor a very cost attractive sensor solution.

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The Active-3 Torque Sensor and A3 Sensor Kits will be introduced and demonstrated by TAM at the 2015 Sensor & Test exhibition in Nuernberg (Booth: 554, Hall: 12).