Latest Generation of Torque Measuring Equipment







After starting out as a small UK based company, Crane has grown into a truly global company, with distributors based on every continent of the world.

Crane's head office, Crane Electronics Ltd. is based in the UK, with its sister company, Crane Electronics Inc. in the USA. Both locations have their own accredited service and calibration centre and provides technical advice, high quality support and a dedicated service to our customers and distributors.

Our knowledge and expertise satisfies the needs of manufacturing industry for improved quality, safety, complete traceability and increased productivity.

> With Crane's product range covering wrenches, transducers, data collectors, torque testers and system software, we meet the requirements before, during and after the assembly operation. This enables tool capability assessment, process capability assessment and control, and process verification.

> > Whatever your torque measurement and torque management requirements, you can count on Crane.

With over 40 years of experience offering solutions for torque management and control problems across 5 continents Crane can provide you with the right product.

The range of complete torque measuring systems from Crane Electronics Ltd.

For more detailed information on each individual product, please visit our website: www.crane-electronics.com



A history of Crane

Since the launch of Crane Electronics in 1971, we have come a long way and we are proud of our achievements since our foundation. Our milestones are shown below.

1971 Crane Electronics Ltd established by David Crane in Stoke Golding, Leicestershire, UK

1978 Crane introduces the world's 1st 'smart' transducers - Crane's UTA (Universal Torque Analysis) system features transducers that 'talk' to the readout, eliminating set-up errors. "Plug & Play" long before it became a household expression!

1984 Crane Electronics Inc established for sales and service support to customers in the Americas, including a calibration laboratory

1986 World's 1st in-line transducers capable of repeatable measurement of impulse tools

1986 1st practical torque processors incorporating SPC and organised data collection

1990 Crane moves to larger premises at Jacknell Road, Hinckley, UK

1992 Achievement of the international quality systems standard ISO 9000

1994 UKAS accredited calibration laboratory opens

1998 Crane introduces joint simulation system for use with impulse tools

2002 Authorised Service Centre concept introduced bringing repair and accredited recalibrations closer to our customers

2002 Crane becomes accredited to the international environmental standard ISO 14000

2003 Crane moves to larger premises at Watling Drive, Sketchley Meadows, Hinckley, UK; combining production, development, service, calibration laboratory and all administrative departments under one roof

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£7.45Nm

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Crane Electronics Ltd The force in torque management

- 2003 TorqueStar Opta and Opta Comms launched
- 2004 ReadStar II launched, giving low cost readouts
- ProWrench Opta released 2004
- JRS Opta introduced 2004
- 2005 TMAC Opta released
- 2007 IQWrench launched

2008 The launch of OMS (Opta Management Software – complete audit and fastening tool management solutions)

2009 In October, Crane acquired Industrial Measurements Limited (IML)

2009 In December, Crane acquired Task Engineering (Peckleton) Ltd

2010 The tJRS Opta (threaded Joint Rate Simulator) is introduced, allowing tools to be tested on a 'true' threaded joint where joint rate can be varied

2010 First five-way electronic switchbox created to allow software control for up to five UTA Plug and Play Crane transducers

- **2012** The launch of the IQWrench2 Opta
- Internal updates (software applications) 2013
- **2014** The Launch of the IQVu and the CheckStar Multi

2015 The launch of the RFm, the WrenchStar Multi, the TCI controller



Products:

Wrenches

The WrenchStar Multi is a light weight production wrench with auditing capabilities enabling digital recordings of the torque information. The WrenchStar Multi is compatible with the latest Crane products especially the IQVu (http://www.crane-electronics.com/product/iqvu-data-collector), the most advanced data collector on the market. Interesting features are the LED light ring enabling real-time and end-of-cycle time of tightening. This 360° light ring shows status of readings and jobs regardless of how you hold the wrench. It comes with an RF feature meaning you do not need a cable to connect it to the data collector. The replaceable battery pack can be charged when in or out of the wrench. It has a vibration alert. Interchangeable DIN heads and the means to record up to 200 readings offline before having to return to the data collector.

Use the WrenchStar Multi with the IQVu and you have the perfect torque and angle measurement system for your application.

The IQWrench2 is a high specification digital torque wrench with a data collection system. The wrench software can be updated at any time for greater flexibility. Basic to advanced options, barcode scanning and RF data transfer are available depending on your applications and requirements. Torque ranges from 0.5 to 1500Nm. It comes with 200 reading memory. The robust wireless protocol allows for up to 5 wrenches to communicate simultaneously with a single base station receiver.

The IQWrench2 has easy selection of quick release interchangeable heads. Barcode scanning is optional.

tJRS Opta

The tJRS Opta is the only fully automated joint simulator that is based on a threaded fastener. This means that joint conditions can be set up in the same way as in real fastener applications, and also the joint can be automatically "backed off". As a result, tools can be tested offline under the most realistic conditions of any automated joint simulator, in a quick and efficient manner.

The tJRS Opta combines many of Crane's proven class leading products along with innovative techniques based on simple mechanical principles, allowing the user complete confidence in the results of their tool testing.

The tJRS Opta from Crane is the latest generation Joint Rate Simulator featuring a multiple patented system. As with all products in the Opta range the tJRS integrates seamlessly into the OMS software package to provide a complete torque measurement solution.

Transducers

CheckStar Multi

Crane's CheckStar Multi raises the standard for dynamic torgue and angle measurement of all continuous drive and impulse tools, with proven reliable performance in thousands of applications worldwide.

RFm

The wireless communication device RFm allows wireless connectivity to the CheckStar Multi and the IQVu to remove the need for hazardous cables when transferring your torgue measurement readings. Simple, safe, accurate and effective.

CheckStar Rotary Transducer

CheckStar sets the standard for dynamic torque and angle measurement of all continuous drive and impulse tools, with proven reliable performance in thousands of applications worldwide.

Stationary Transducers

Crane's stationary transducers are the quality choice for the testing of al continuous drive, impulse and hand torque tools in the workshop and production line-side environment.

Data Collectors

IQVu Data Collector

Crane Electronics has taken the TorqueStar Opta – improved it - and combined it with a market leading, robust Tablet to offer the most revolutionary torgue data collector on the market.

The IQVu is a familiar and clear interface for this data. It allows the user to confidently and easily audit the torque of critical fasteners providing highly accurate rich data that can be traced to an operator, a tool, a location and a time.

The collection of data can be organised to maximise efficiency, using Jobs and Rounds. Once collected, data can be analysed, saved or downloaded to suit corporat requirements. The whole operation is carried out using a device, which is not only familiar, but robust, rugged and secure. The tablet has tempered "Gorilla" glass, survives a 1.8m (6') drop test and it has sophisticated software security as standard.

IQVu is compatible with all existing Crane products.

The IQVu is also designed to work with all new Crane products, including the increasing range of Crane wireless devices, allowing further flexibility when collecting data.





Crane Electronics Ltd The force in torque management







TorqueStar Opta

TorqueStar Opta is the equipment of choice for the measurement and collection of torque, angle, pulse and force data in the manufacturing and quality environment.

ReadStar II

The ReadStar II is a basic, easy to use readout which allows measurement and collection of torgue data, with storage of up to 200 readings.

Torque Testers

ReadStar TT

The ReadStar TT is a basic, easy to use readout which allows measurement and collection of torque data, with storage of up to 200 readings and built-in torque transducer.

CapStar II

CapStar II is a simple and easy to operate digital torque tester specifically designed for usage in the pharmaceutical, food and cosmetic industries

TCI Lineside controller

The TCI is a production lineside controller that interfaces the RF WrenchStar Multi to a company's manufacturing system using protocols such as Open Protocol. The TCI allows easy management, set up and diagnostics of itself via web browsers. The TCI connects either via the Ethernet or serial, and provides a comprehensive real time status via LEDs



Joint Kits

Joint kits are an essential acessory for accurate off-line testing of powered assembly tools.

Software



OMS, CraneElectronics' system software package, features a fully encompassing range of functions to provide a complete company wide solution to all torque related activities. This includes tool and joint management, tool repair/maintenance histories, quality torque auditing and production data collection, R&D data storage including torque/time/angle trace analysis, and transducer/readout calibrations.

Set up individual jobs and rounds to your specific applications and audit and monitor the whole process. All data is captured in real time.



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IQVu, the most revolutionary data collector available



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