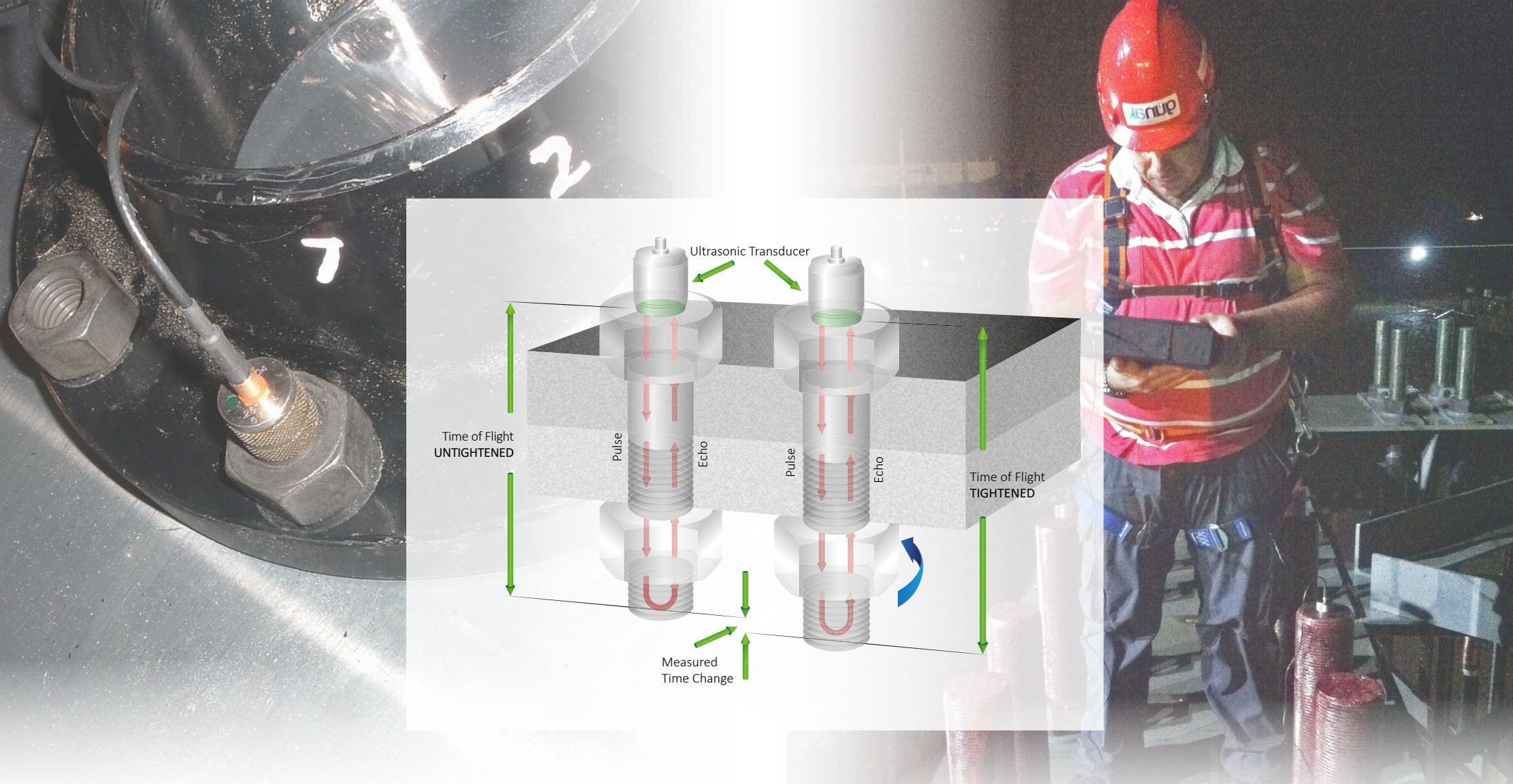




# Delta Sigma Ultrasonic Measurement Instrument





It is the tension in a fastener rather than the torque that is the critical factor. Torque is an indirect means of establishing tension and in a correctly engineered joint and with a controlled tightening process, it is a satisfactory method under the majority of circumstances.

However, in joints that are highly critical due to safety or the cost and implications of machine down-time, a more direct means of establishing tension is needed. Various methods exist including several types of load indicating bolts or washers. However, one of the most versatile methods is to measure the extension of the bolt due to the tightening process using ultrasound.

The Delta Sigma pulse-echo ultrasonic time-of-flight (TOF) measurement device; measures, displays, stores and transfers bolt load and elongation data in a new, single purpose unit. The Delta Sigma uses a rugged, sealed colour touch screen for all operator Input/Output. The screen uses proven medical touch panel hardware.

The measurement system is a hybrid technique, using the best of both analogue and digital signal processing techniques for fast signal acquisition and precise single shot TOF measurement.



Click below to find out more

- Weights & Dimensions
- Intuitive Operations
- Data Storage
- Transducers
- Connectors
- Display
- Temperature Transducer
- Microprocessor

Fast Digital Signal

A-D

Fast A-D and/or Dig Out Control

Additional Features

## DELTA SIGMA KIT & TRANSDUCER

44539.KIT Delta Sigma unit, canvas case, ultrasonic couplant, temperature probe, transducer cable, 1 x transducer of customer's choice all enclosed in a peli case

## DELTA SIGMA BASE KIT

44539 Delta Sigma unit, canvas case, ultrasonic couplant, temperature probe and transducer cable all enclosed in a peli case



## Technical Specification



All data is logically presented on a 4.3" colour, resistive touch screen, usable with gloves. Data and digital signal traces are stored for later display and transfer. The unit has automatic temperature compensation through an included magnetic temperature probe. The novel memory system has a secure sector for all bolt data and a "public" sector for transfer via USB to connector.

Intuitive software developed specifically for the bolting industry, the automatic echo detection algorithm has been developed with input from the most experienced users and electronic developers in the bolt tightening industry.



## CUSTOMER RELATIONS

### OFFICE OPENING HOURS

Monday - Thursday 07:30 - 17:30  
Friday 07:30 - 16:15

### CONTACT DETAILS

#### New Sales

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Torque Measurement Instruments



Torque Transducers



Ultrasonic Bolt Measurement



Calibration Services

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