

# Zetec Component Testing Solutions

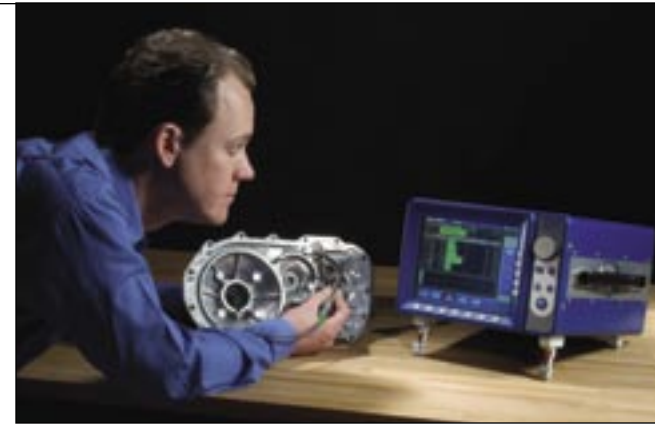
**Uson's Custom Approach to Applications.** Uson has an application-specific approach for your inspection needs. Starting with your material samples and requirements for flaw detection, Uson designs and builds innovative test solutions. The entire solution is engineered to meet your specifications, from the first feasibility study through design, prototyping and manufacturing. Thorough quality testing is completed before installation at your facility.

**Free Feasibility Study Guarantees Results.** With a free feasibility study, your real samples are carefully evaluated for detection and test reliability before you make any commitments. Our application specialists have extensive knowledge in eddy current testing and can determine if eddy current is the best solution for your test situation. A formal feasibility report and cost estimate is forwarded to you for your consideration. Budgetary quotations are also available.

**Custom Designs Fit Your Process.** Uson designs are customized to your application. Let us help you achieve 100% quality inspection. For more information about Uson or our products, visit: [www.uson.com](http://www.uson.com)

Uson's Zetec eddy current NDE solutions are the result of almost 40 years of market leading experience in safety critical industries.

The relationship between Uson and Zetec combines the non-destructive test experience of two companies who understand the challenges faced in the manufacturing environment.



Description	Function	Part Number
InSite HT2—2 Channel	Hardness Test	6020-00-02
InSite HT4—4 Channel	Hardness Test	6060-00-04
InSite HT8—8 Channel	Hardness Test	6060-00-08
InSite CT2—2 Channel	Crack Test	6030-00-02
InSite CT4—4 Channel	Crack Test	6030-00-04
InSite CT8—8 Channel	Crack Test	6030-00-04

## Specifications

Frequency Range	5 Hz—10 MHz
Number of frequencies per test	8 (InSite HT) 2 (InSite CT)
Sample rate	Up to 16000 (InSite HT) Up to 10000 (InSite CT)
Dimensions	8H x 11.5W x 13.5D in 20 x 29.2 x 34.3 cm
Weight	16 lb (7 Kg)
Display Type	Active matrix VGA color
Probe support	Up to 8
Industrial I/O	Yes
Universal AC power input	Yes
Filters	Yes
Adjustable gain	Yes
Adjustable alarms	Yes
Data recording	Yes
USB Ports	Two
Serial Port	One
10/100 Base T Ethernet port	One
External VGA port	One
Multi Language	Yes

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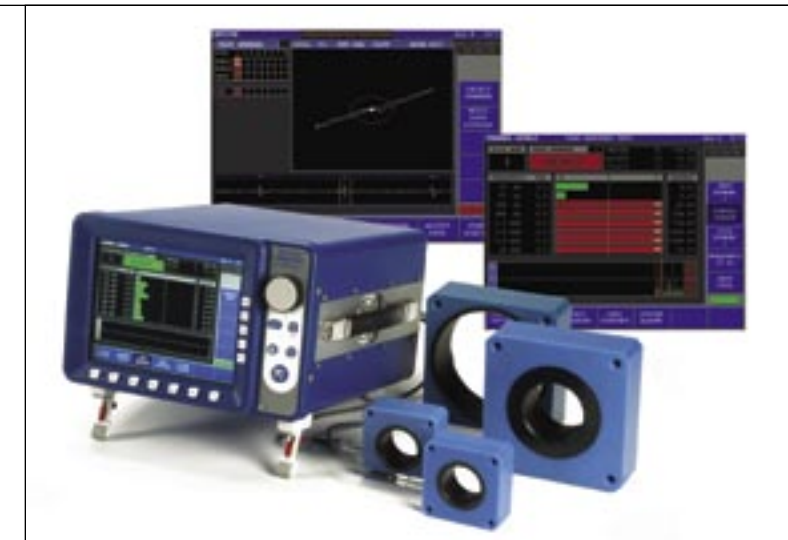
## InSite Hardness and Crack Tester

Critical Component Inspection Made Easy

Crack, flaw, hardness, case depth and material composition testing for finished components.

- Fast
- Reliable
- Easy to use
- Non-destructive
- Built in I/O
- Made in the USA
- Comprehensive local support.
- In house probe design and manufacturing.
- Turnkey system engineering available.

- Save time
- Reduce scrap
- Ship consistently good product.



**Critical parts need accurate inspection. Crack and flaw detection, hardness and case depth analysis as well as material characterization, are all possible with Uson's Zetec InSite series.**

Clean and non-destructive Eddy Current Technology reduces expensive, time consuming sample preparation and can replace subjective manual testing with a technically superior, objective test.

InSite testers are built around modern PCI architecture, making them exceptionally reliable and easy to maintain or service.

Right out of the box, InSite Hardness and Crack Testers are the simplest instruments

on the market to set up. Logical step by step menus, supported by on-line Help files, guide the user through the configuration process. Zetec has made it so easy, even inexperienced users will soon be testing.

At the heart of the InSite is a super fast CPU, sampling at up to 16,000 samples per second.

This facilitates integration of the InSite into test systems operating at typical production line speeds.

Complex part geometry need no longer slow down the test. InSite testers can support up to eight probes, each with its own discrete output, and feature multiple test enables. What this means is that simultaneous inspection in several test locations on a single component is possible.

United States | United Kingdom | Germany | China

# Eddy Current testing is a tried and proven technique for the comparison of one part to another or to a standard part.

**Greater Versatility.** The InSite series use a wide frequency band from 5Hz to 10MHz for greater testing versatility, with up to eight automatically selected or user selectable frequencies available in the Hardness Tester or two frequencies in the Crack Flaw Tester.

Users will appreciate the high resolution screen and easy menu navigation together with USB, 10/100 Ethernet and serial ports which facilitate transfer of data and screen shots, even across the internet.

**Find Unanticipated Conditions.** The InSite HT automatically selects eight frequencies per test. In order to pass the test the parts must pass at all eight frequencies. Experienced users can select their own base frequency and allow the InSite to calculate the step frequencies or they may define each frequency individually. An advantage of multi frequency testing is that it can identify fluke or unanticipated failures.

Test data can be displayed as a bar chart, showing the result at each of the eight frequencies, as discrete data points, or as a simple “green light / red light”, referred to as test lights.

**Easy Integration.** InSite’s built in Industrial I/O can convert the test result signal to instructions for sending to PLCs, material handling and part marking or other equipment.



## Test Complex Parts At Speed.

Multi channel capability with multiple test enables and configuration switching means that complex part geometry is easily managed, and fast repeatable tests can be performed consistently.

The InSite CT can support two, four or eight probes, testing at one or two frequencies per probe.

Multiple frequencies are not as important when looking for flaws or cracks as most defects will be situated at the surface. The second frequency if selected may be used to search for sub surface pockets voids and inclusions.

Component inspection using eddy current technology to search for cracks and flaws can save an incredible amount of time. Test times of three minutes per part using magnetic particle inspection can be cut to as little as six seconds or less per part. The test is easily automated and consequently there is a huge potential for cost saving or improving productivity. The InSite CT contributes to these improvements by using a super fast processor which can sample at 10,000 samples per second at a single frequency.

High resolution VGA screen is easy to read. Both versions of InSite have a variety of display options which allow the operator to view and interpret data and configurations with ease. Main picture shows Hardness Tester channel data, inset shows typical Crack Test screen.

The InSite is a multi-channel/multi-frequency instrument which provides the user with the best possible detection capabilities and cost per channel value. Multi-frequency testing is essential for a comprehensive test. With multi-frequency-testing even unanticipated faults will be identified.

Setting and adjusting configurations or switching between displays is fast and easy using dedicated function buttons and on-screen menus.

Scrolling strip-chart displays test results. Using the result buffer the operator can scroll through the data and select an individual test result and then review it.



Switching from one menu to another is easy using the menu key. All the tester settings are recalled from one menu which is navigated using the rotary mouse and function keys.

On-line help is featured and will support five languages. The help menu automatically recalled as applicable to machine status when invoked. No need to keep manuals nearby.