The Probe

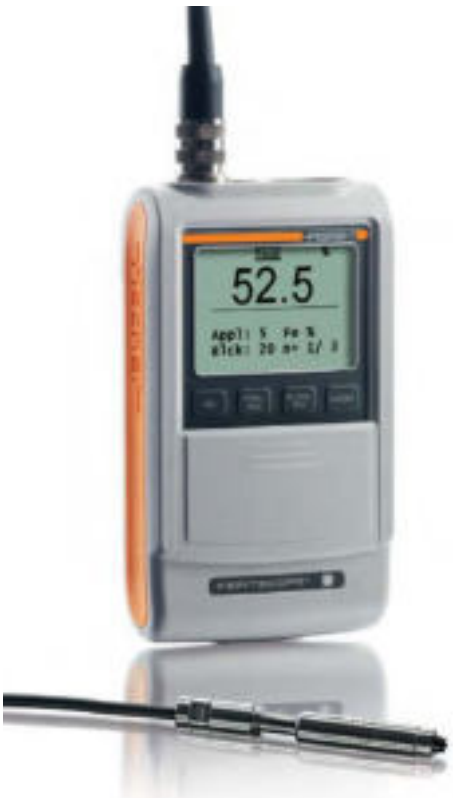
KK&S INSTRUMENTS - July / September 2011 Issue

In this issue:

Feritscope

The FERITSCOPE FMP30 from Helmut Fischer measures the ferrite content in austenitic and duplex steel according to the magnetic induction method. All magnetisable structure sections are measured i. e., in addition to delta-ferrite also strain-induced martensite, for example, or other ferritic phases.

The FERITSCOPE is suited for measurements according to the Basler-Standard and according to DIN EN ISO 17655. Areas of application are onsite measurements, e. g. of austenitic plating as well as weld seams in stainless steel pipes, containers, boilers or other products made of austenitic or duplex steel.



FERITSCOPE FMP30 - features:

- Accurate Non-destructive measurement of the ferrite content in a range from **0.1 to 80 % Fe or 0.1 to 110 FN**
- Units of measurement switchable between **% Fe and WRC-FN**
- Automatic recognition of the **3 probes**
- Large, easy to read display
- Protection of settings though lockable keypad
- Battery or 240v line operation
- Automatic shut-down or continuous operation
- User-friendly operation menu
- Multiple language selections
- Sliding cover for keypad; however, On/Off and evaluation keys remain accessible at all times
- Robust housing
- FREE DataCentre software

FERITSCOPE FMP30 - Measurement capture:

- Fast measurement and data storage
- Automatic measurement acquisition upon probe placement or through “external trigger”
- Enabled or disabled acoustic signal
- Overwriting of erroneous measurements or previously stored readings
- Selectable tolerance limits
- Measurement data presentation as an analogue bar with display of specification limits
- Continuous display: Continuous display of the reading when probe is placed on the specimen; storing with externally triggered measurement acquisition
- Outlier rejection function for the automatic elimination of erroneous measurements
- Matrix measurement mode: Measurement data storage in blocks that are set up in the application in the form of a matrix. Block change manually or automatically in the specified sequence
- Measurement data averaging: Only the mean value of a specified number of single readings is stored
- Automatic block creation: Number of single readings per block
- Area measurement: Continuous measurement acquisition until the probe is lifted off; only the resultant mean value is stored
- Continuous measurement acquisition and storage with the probe placed on the specimen

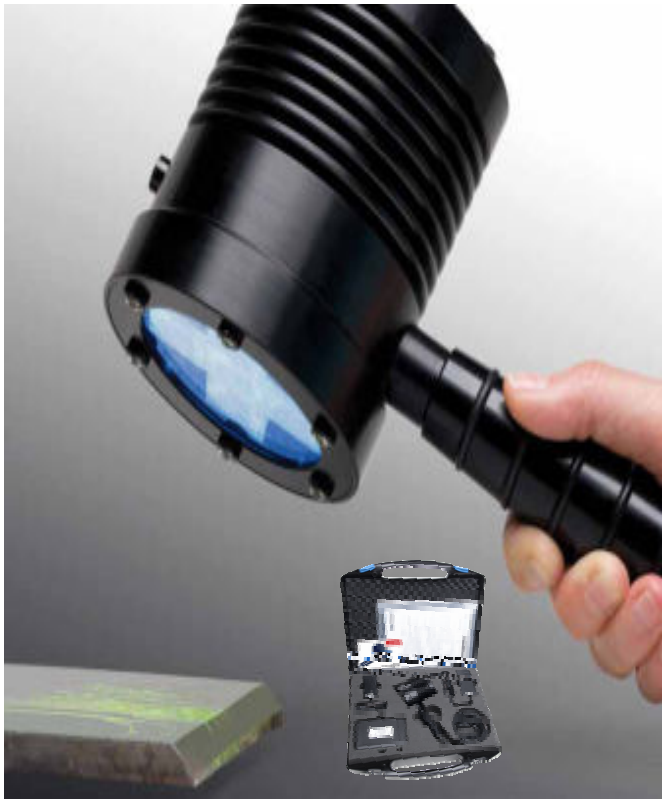
For further Feritscope features or a price, reply to this email or contact us on 02 88503755 or www.kks.com.au

KK&S INSTRUMENTS
QUALITY IS A NECESITY

Product Profile - LED UV Lamp

UV LED Lamp - 3815

UV LED lamp for fluorescent penetrant & magnetic particle inspection - from Germany



Features and benefits:

- Runs with 5 high-end LEDs
- Immediately ready to use
- High UV intensity
- Intensity of approx. 45 W/m² at a distance of 400 mm
- 120 mm Ø illuminated area (at a distance of 400 mm)
- Very uniform intensity distribution
- Low risk category according to German standard EM 6
- Fulfils the safety standards concerning UV radiation
- Fulfils all standards of the German Society for NDT (DGZfP) regarding wavelength and Intensity.
- UV-A radiation at 365 nm wavelength
- No white light
- No filter glasses are required
- No risk by UV-B and UV-C even if the protective perspex cover is damaged.
- Solid aluminium housing, black anodized, small and portable
- Shockproof and Water resistant
- Runs by mains, 12v vehicle or the rechargeable battery.
- Lamp and rechargeable battery can be used for the inspection in closed containers and boilers
- 2.5 hours cont. operation with rechargeable battery

Karl Deutsch's new Portable LED lamp for mains and battery operation.

A quantum leap for the generation of mobile UV light used for the fluorescent penetrant and magnetic particle inspection: Instead of conventional glow-discharge bulbs, five light-weight, intense, high-power UV LED's with more than 10,000 hours operating time are used. The lamp is ready to operate immediately after power-on, provides a high UV intensity and a uniform distribution of intensity. The grading into risk class 2 (according to the German standard EM 6) meets the requirements of working safety for a low UV radiation exposure.

For pricing and availability reply to this email or contact us on

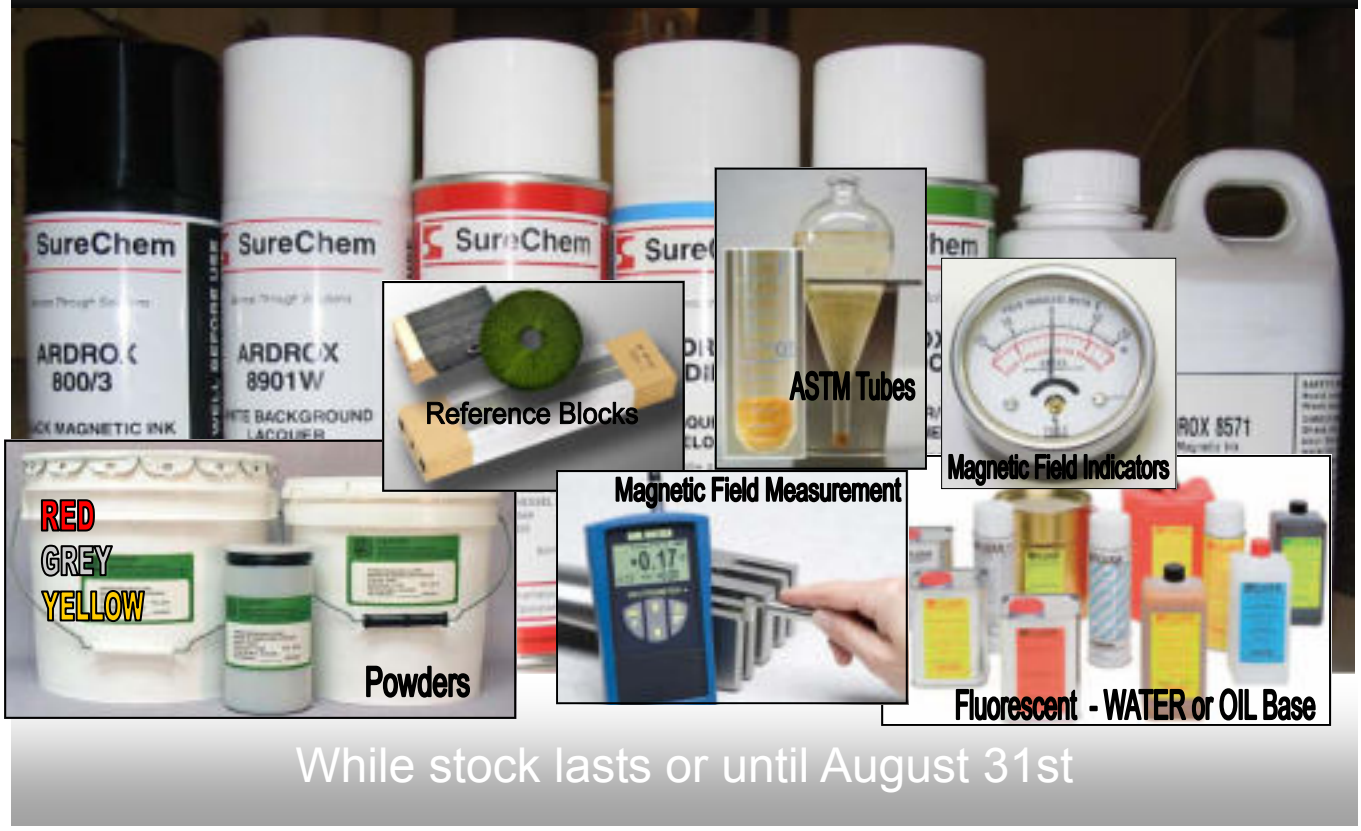
02 88503755 or www.kks.com.au

KK&S INSTRUMENTS
QUALITY IS A NECESITY

Special . MPI Consumables

20% OFF !

Inks, Dye's, Powders & Accessories



While stock lasts or until August 31st

For orders and prices reply to this email or contact us on

02 88503755 or www.kks.com.au

KK&S INSTRUMENTS
QUALITY IS A NECESITY

News

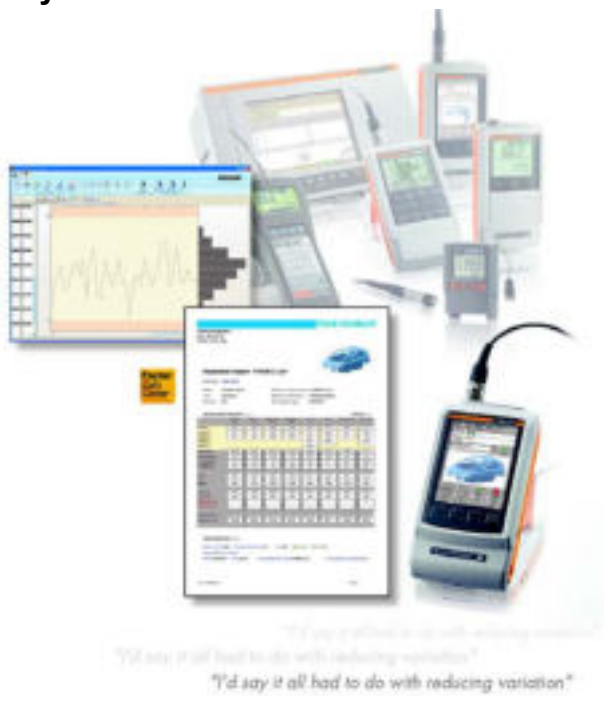
Helmut Fischer launch the new Software Platform for their classic instrument range -

FISCHER "DataCentre"

and it's FREE !

FISCHER DataCenter - (Included with a new instrument purchase)
Software for Evaluating and Archiving Measurement Data

FISCHER DataCenter IP - (Additional Cost for FMP 100 / 150 Only)
Inspection plan Software for Quality Assurance



FISCHER DataCenter Software significantly expands the functionality of the FISCHER measuring instruments.

Quickly and easily, measurement data can be transferred to a PC and inspection reports can be generated and printed.

In addition to the various evaluation options, the Factory Diagnosis Diagram (FDD) provides a user-friendly tool for process monitoring.

FISCHER DataCenter

The basic version **FISCHER DataCenter** is included with the delivery of all Fischer instruments with USB or RS232 ports. The basic version comprises all functions for convenient transfer, evaluation and printing of measurement data.

For further Software information please reply to this email or contact us on

02 88503755 or www.kks.com.au

KK&S INSTRUMENTS
QUALITY IS A NECESITY

Application

ECHOMETER: Rectangular or Round Probe Crystals?

For wall thickness measurement, even the correct probe crystal shape is important.

There are many reasons to choose **KARL DEUTSCH** ultrasonic thickness gauges. The reliability, precision, and efficiency of our **ECHOMETER 1075/1076** and the corresponding probes are well-known world-wide.

Less well-known is the fact that also the shape of the probe crystal may be an essential quality feature for selection of a wall thickness gauge. Mainly due to easier manufacturing, it is common for other manufacturers to use a pair of half-round piezo crystals. KARL DEUTSCH uses rectangular crystals for their **ECHOMETER** probes. The longer side is approximately twice as long as the shorter side. This is done for two important reasons:

Whilst the sensitivity to indicate smaller reflections is comparable to half-round crystal pairs, the special sound field characteristic of a rectangular crystal has the effect that the sensitivity of the probe suffers less reduction with greater wall thicknesses. The advantage is, larger wall thicknesses can be measured without compromise compared with half-round crystal pairs.

Secondly, the more uniform sound pressure distribution in longitudinal direction of the crystal allows an easier coupling onto tubes or generally onto all cylindrically curved work pieces. It is important, that the acoustic barrier of the TR probe is arranged perpendicularly to the axis of the work piece. In the case of half-round crystals and with moving the probe back and forth, it is often difficult to reach the point of maximum sensitivity which must be achieved before the gauge produces a reliable wall thickness reading. A rectangular crystal is practically uncompromised against lateral movement during the coupling process.