PRECIOUS METALS AND JEWELERY
Safe Analysis, value determination and authenticity testing
Is it real gold?
Authenticating jewelry and precious metals

Fine jewelry is not only for decoration and embellishment. Rather, it represents a lasting investment. When buying and selling, trust is good, but it can cost you dearly. Therefore: Comprehensive control is the best! With the X-ray fluorescence analyzers of the GOLDSCOPE SD® series in combination with the SIGMASCOPE® GOLD B and C handheld devices, you can be on the safe side when checking the authenticity of jewelry and precious metals, gold bars and gold coins. The measuring instruments are tailor-made for examinations in the laboratory as well as directly in the store. The precious metal composition for Au, Ag, Pt, Pd and other metals can be determined in seconds - and you can find out whether what glitters is really gold.
Non-destructive analysis of gold and precious metals

The GOLDSCOPE SD® series is tailor-made for the rapid analysis of gold and precious metals. Thanks to German type approval, the X-ray fluorescence analysis (XRF) instruments are easy to operate, even by untrained personnel. Since calibration is performed in advance by Fischer experts, you can use your instrument directly, without further preparation.

The GOLDSCOPE SD® 520 and SD® 550 as the most powerful spectrometers of this instrument series are equipped with the in-house developed digital pulse processor DPP+. This means for you: the same precision with shorter measuring time or even more precise results with the same measuring time.

With the XRF instruments of the FISCHERSCOPE® X-RAY XAN® series you even go one step further. You have the additional option of trace analysis as well as the analysis of stainless steel, electrolytes and powdered samples.

GOLDSCOPE SD® SERIES at a glance

Your advantages
- Fast and reliable analysis and authentication of jewelry and precious metals
- Hardware and software specially adapted to the requirements of the gold and jewelry industry
- Everything in view thanks to sharp, high-contrast, clear video image
- Conforms to EN 61010, DIN ISO 3497 and ASTM B 568

Applications
- Purchase and sale of gold
- Precious metal / dental alloy analysis
- Jewelry manufacturing
- Refineries, Assay Offices and Hall Marking benefit from our certification
- Coating thickness measurement of gold and rhodium coatings

Specific features

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<td>Opening to the front, Si-PIN detector, for smaller stores</td>
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<td>SDD for even higher resolution and shorter measuring times, DPP+, analysis of bullions</td>
<td>SDD for even higher resolution and shorter measuring times, DPP+, analysis of bars (measuring spot from 0.2mm)</td>
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Easy operation: Start/stop buttons allow measurement to be started directly on the instrument. Focus button for optimum sharpness and image results even with difficult samples.

Easy measurement preparation: Simple sample positioning thanks to measurement direction from bottom to top, spacious measuring chamber and integrated video microscope.

Robust construction: No external training required due to type-approved full protection device.

For specific requirements: Available with front-opening or top-opening measurement chamber door, with Si-PIN detector or SDD.

Measuring instrument and more: In addition to the XRF instrument, the scope of delivery includes a PC incl. WinFTM® software as well as keyboard and mouse.
SIGMASCOPE® GOLD at a glance

Non-destructive authentication of gold

With the SIGMASCOPE® GOLD B and C, you can test the authenticity of gold coins and gold bars quickly, easily and non-destructively. The handheld instruments use the physical effect that different alloys and fine gold differ in their conductivity. In this way, base inclusions with the same density, such as tungsten, are detected - and counterfeits are identified directly.

SIGMASCOPE® GOLD at a glance

Your advantages

- Fast and reliable analysis and authentication of gold coins and bars
- Easy operation via large, color touch screen and intuitive software - even for untrained personnel
- Variable penetration depths to match the thickness of the measured object
- Measurement through non-conductive cover layers such as foil packaging possible
- Conductivity measurement according to DIN 50994
- Use of eddy current measurement method according to ASTM E 1004

Applications

- Coin trade and coin authenticity testing
- Testing of gold bars (fine gold)

This is achieved by using the phase-sensitive eddy current method. The actual measurement signal is generated directly in the coating. The probe therefore does not have to be placed directly on the metallic layer. This means that conductivity can also be determined under non-conductive cover layers such as plastic packaging. The penetration depth of the eddy currents can be selected to match the thickness of the measured object.

Complete measurement expertise from a single source

At Fischer, we place as much emphasis on comprehensive and professional service as we do on the quality of the products themselves. Benefit from our years of experience. The Fischer 360° service shows you what you need in terms of professional quality management. We offer you exactly the services that are the prerequisite for permanently correct and safe measurements.
Our measuring instruments, software and accessories are developed, produced and constantly optimized in-house. The goal is to make the world of our customers measurably easier - made in Germany!

Our experienced staff will be happy to advise you locally and in your national language. Please find your personal contact partner at:

www.helmut-fischer.com

Global Sales, Application and Service