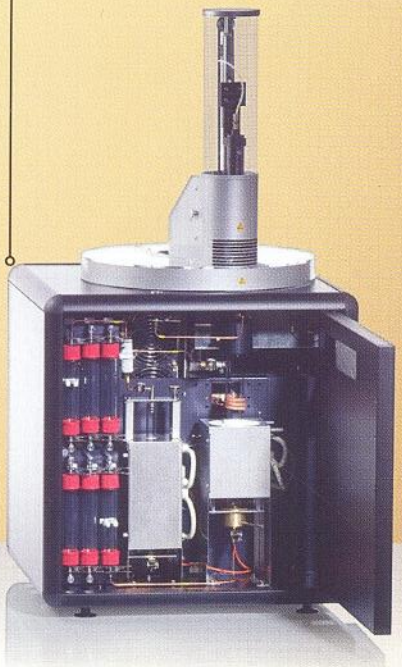
Metal analysis has never been that easy!

Clearly arranged and easy accessible components for fast and easy maintenance.



EASE OF USE

The inductar-series is optimized to significantly simplify the daily routine operation. Clearly arranged, easy accessible system components and the long-life combustion tubes minimize maintenance efforts. The tool-free clamp connection system ensures reliable leak-tightness of the instrument at any time. Thus, customers can enjoy smooth analyses and low instrument-handling time.

TRUSTFUL QUALITY

Our consumables and spare parts are designed to meet the highest quality standards and reliability. They are certified and validated in accordance with international norms and standards. Whether it is FDA 21 CFR part 11, CE or ISO 9001 – Elementar applies the tightest international regulations governing quality control and product safety.

IDEAL SOLUTION FOR

- Foundries
- Steel mills
- Automotive industry
- Semiconductor industry

SAMPLE TYPES ANALYZED

- Steel
- Cast iron
- Copper
- Refractory metals
- Other metals and inorganics

High sensitivity

Outstanding sensitivity thanks to high performance, state-of-the-art technology.

High data quality

Outstanding precision and accuracy through high performance combustion. Matrix-independent results. Longterm stability of calibration.

Extreme durability

Outstanding robustness and longevity thanks to state-of-the-art technology.

Great flexibility

Wide range of optional conversion kits available for special applications. Upgradeable at any time.

Elementargroup – your partner for elemental analysis

Elementargroup is the world leader in high performance analysis of organic elements. Continuous innovation, creative solutions and comprehensive support form the foundation of the Elementar and Isoprime brands ensuring our products continue to advance science across agronomy, chemical, environmental, energy, materials and forensics markets in more than 80 countries.

Elementar Analysensysteme GmbH | Donaustraße 7 · 63452 Hanau (Germany)
Phone: +49 (0) 6181 9100-0 | info@elementar.de | www.elementar.de

elementar
EXCELLENCE IN ELEMENTS

05 003 484, 06/2015 A

inductar cube

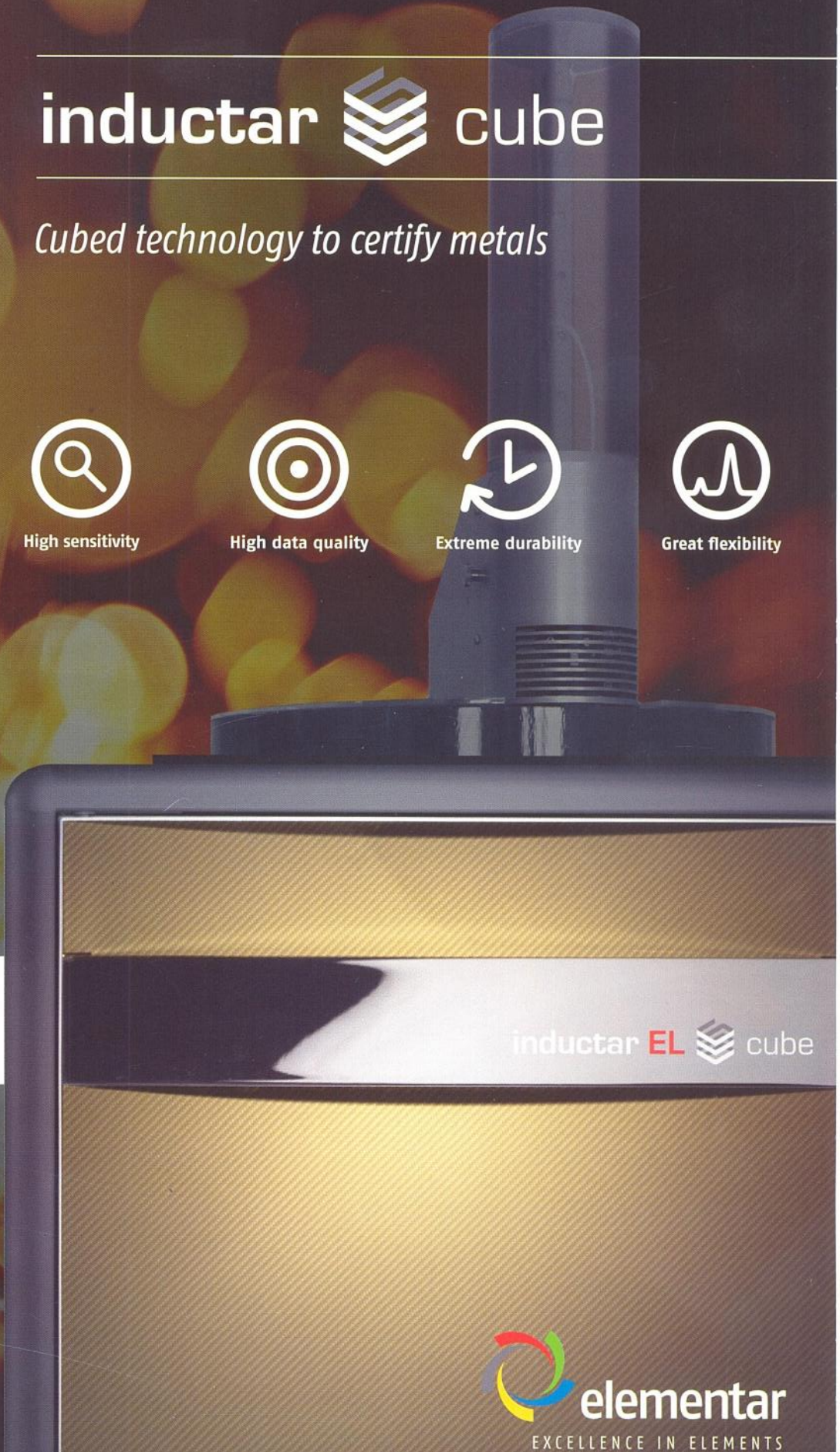
Cubed technology to certify metals

High sensitivity

High data quality

Extreme durability

Great flexibility



elementar

EXCELLENCE IN ELEMENTS

inductar cube

World's first 5 element analyzer for metals

KEY FEATURES

- Industry-leading performance and versatility
- Solid-state technology for high-frequency induction furnace
- No tedious cleaning operation required to handle dust and debris
- Unique detection technology for precise hydrogen determination
- Manual operation or fully automated with up to 90 position autosampler
- Optimized for secure and unattended 24 / 7 operation

Great news from the global leader in elemental analysis of organic materials: we at Elementar took advantage of our industry pole position and developed a new, revolutionary product for the elemental analysis of C, S, O, N, and H in metals and inorganic materials. Packed with innovative solutions and state-of-the-art technology, the inductar-series sets new standards.

A powerful team.

Confidence in results

Innovative ideas, combined with state-of-the-art technologies let the inductar-series clearly stand out of the crowd. The highly optimized and reliable combustion process - a well-known highlight of all Elementar instruments - always guarantees reliable, highly precise results and furthermore significantly reduced dust and debris formation. Combined with high-performance detectors, the inductar-series shows excellent accuracy and lowest possible limit of detection.

Software that meets customer demands

The inductar-series is controlled via a feature-rich, multi-language software. It is easy to use and user configurable to fulfill all requirements in R & D, routine, and high-throughput laboratories. For an easy lab integration, e.g. automatic weight transfer from balance, barcode reader support or LIMS integration are readily available.

CS ANALYSIS

In a pure oxygen atmosphere the sample is introduced to the induction furnace. Unlike conventional systems, the inductar-series feeds the sample from the top. The high temperature in the furnace converts the traces of sulfur and carbon from the sample into sulfur dioxide, carbon monoxide and carbon dioxide. After detection of the sulfur dioxide using an IR detector, the carbon monoxide is quantitatively oxidized to carbon dioxide. After removal of sulfur trioxide the carbon dioxide is detected via a second IR detector.

Unsurpassed system uptime

The inductar-series is developed for maximum user convenience and maximum robustness in 24 / 7 operation. The proprietary solid-state technology for the high-frequency induction furnace ensures high temperature precision and a virtually unlimited lifetime of components. This finally makes the frequent exchange of oscillator tubes obsolete. By design there is also no tedious cleaning operation required to handle dust and debris. Simply exchange in low intervals the inline filter, a tool-free task performed within seconds.

Industry-leading versatility

The high performance, wide-range IR detectors and the unique detector for precise hydrogen determination cover the full concentration range. Thus, configurations having two detectors with limited detection ranges per element are not required for the inductar-series. Both options, manual operation and fully automated with up to 90 position autosampler, are available. Furthermore, the modular concept even allows upgrading the inductar CS cube and inductar ONH cube at any time into the 5 element setup of the inductar EL cube, or any element combination for dedicated use.

ONH ANALYSIS

For the first time it is technologically possible to use induction heating also for ONH analysis. By using smart instrument design and modern induction technology, the needed temperatures can be reached at the sample. Up to 3,000 °C are necessary to melt the sample material and release the gases of interest. In combination with new detection techniques (patent pending), sample introduction procedures and gas flow schematics, a simple to use instrument enables the user to reach the best detection limits. Quick analysis with semi-automated or fully automated sample feeding for 24 / 7 instrument operation are possible.