

Beyond Grade Libraries:
Total Materia & ELEMENTAL.SUITE
Joint Webinar Bruker AXS & Key To Metals AG



OES

The "OES" text is rendered in large, blue, 3D block letters. In the background, there is a perspective view of a grid of squares, with some squares highlighted in blue, suggesting a data matrix or a material surface.

Total Materia

The logo for Total Materia features a blue square icon containing a white stylized 'M' shape, followed by the text "Total Materia" in a black sans-serif font.

ELEMENTAL.SUITE

Total Materia & ELEMENTAL.SUITE Agenda & Meet your Speakers



- Introduction
- ELEMENTAL.SUITE
 - Analysis Viewer & searching grades
 - Internal quality library, limit cards
 - Total Materia integration
 - Search against Total Materia
 - Exporting grades from TM ⇒ ES
- Total Materia (more advanced topics)
 - Finding equivalents to foreign materials and compare them side by side
 - Searching for materials worldwide by chemical composition or mech. properties
 - Deciphering material specifications
- One last thing...
- Q&A Session



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spark-Optical Emission Spectrometry for Metal Analysis



The workhorse for all metal analysis tasks

- Analytical tool with high flexibility
- Full alloy analysis with excellent data quality (compared to XRF: superior for light elements, better suited for traces and lower concentrations)
- Speed: Time-to-result 25-35 s
- Easy sample preparation
- Reliability: high uptime and robustness of hardware and method, even in the 3rd shift
- Cost-effective: moderate acquisition costs, low operational costs, able to adopt to changing requirements



Total Materia & ELEMENTAL.SUITE Chemical Analysis – Interpretation?



We have also a mess of terms ...

Specification Quality Limit Card
Grade Material Designation
Alloy

All relating to the name/designation of material, based on chemical composition (and allowed deviations/ranges)

Often used as synonym (careful, that we mean the same thing)

Total Materia & ELEMENTAL.SUITE Need Help and Expert Knowledge?

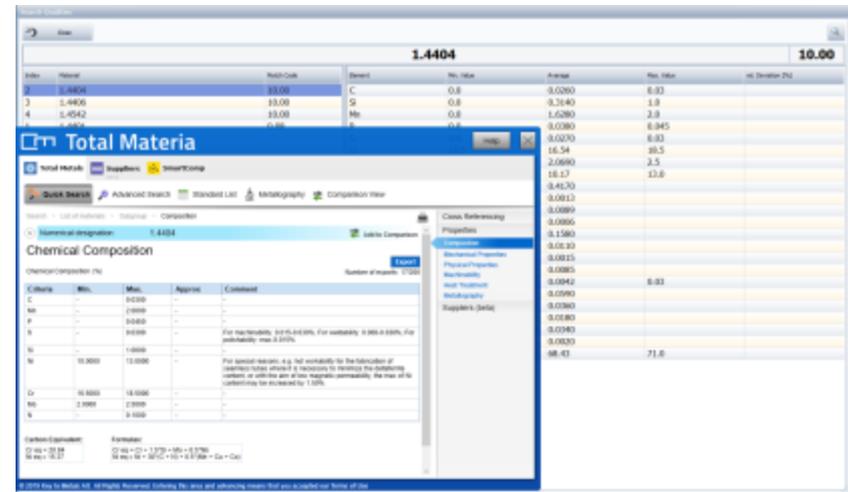


Fortunately, there is a solution helping you to maintain an overview over complex worldwide regulations and providing expert knowledge: Total Materia

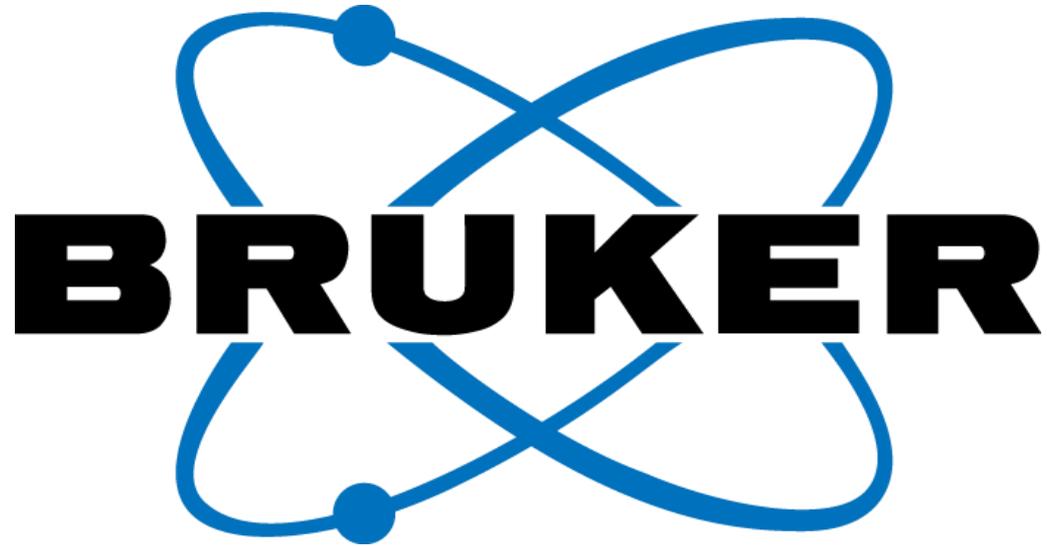
- > 350,000 alloys from >75 countries
- Queried by patented search algorithm: SmartComp
- Desktop version does not require internet connection, up to 200 exports to the internal library

Total Materia not only contains chemical compositions, but also

- > 15 million properties (physical, chemical, mechanical, and metallurgical data), including suppliers and proprietary data sheets



Integration of TM into the spectrometer software allows seamless **(P)ositive M)aterial I)dentification**



Innovation with Integrity

Transfer to application lab

Total Materia & ELEMENTAL.SUITE Time-Limited Q4 TASMAN Series 2



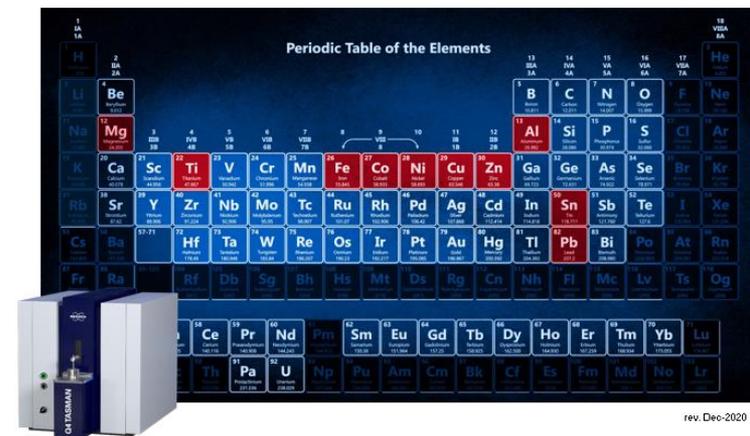
Announcement

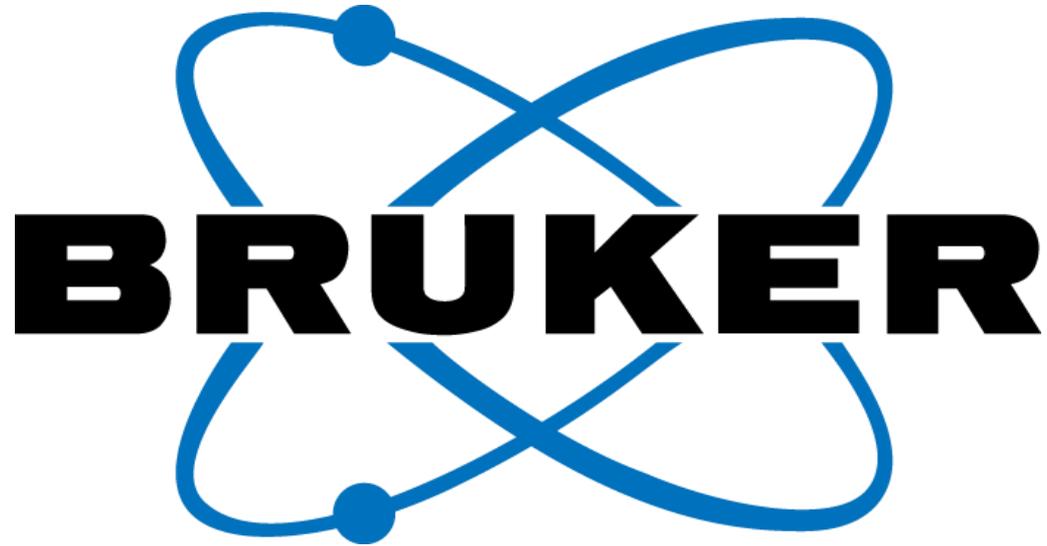
Dec. 2020 we launched the new generation of Bruker's OES-blockbuster: Q4 TASMAN Series 2

- Starting from Mar. 1st, 2021 we will bundle **a free license of Total Materia** with every order received
- Promotion ends June 30th, 2021 (end of Q2/2021)



Al Base	Al Base	Al Base
Co Base	Co Base	Co Base
Cu Base	Cu Base	Cu Base
Fe Base	Fe Base	Fe Base
Mg Base	Mg Base	Mg Base
Ni Base	Ni Base	Ni Base
Pb Base	Pb Base	Pb Base
Sn Base	Sn Base	Sn Base
Ti Base	Ti Base	Ti Base
Zn Base	Zn Base	Zn Base
Information		
Type Comparison		





Innovation with Integrity

Questions & Answers