



Elemental Suite OES

- Intelligent optical emission spectrometer software

ELEMENTAL SUITE MAKES LIFE EASY

Controlling your spectrometer - so simple

Elemental Suite OES sets new benchmark

Elemental Suite OES is the newest member in Bruker's successful family of software based on Bruker's powerful ALASKA framework for instrument control.

All Bruker optical emission spectrometers can be operated with Elemental Suite OES, covering the entire range of OE applications.

Designed for maximum usability, Elemental Suite OES's plug-in based architecture provides maximum flexibility for your analytical requirements now and in the future.

Analysis and PMI Screens

Elemental Suite OES assists you in your daily work. Automated average and limit checks ensure safe operation. Saving, printing and reporting your analyses can be done with one click.

Designed for both Touchscreen and Desktop operation, the Analysis Screen supports variable font sizes and various skins to maximize ease of use. The ability to assign access rights to users and user-groups helps avoid operating error.

Element	Min. Value	Average	Max. Value	rel. Deviation [%]
C		0,016	0,03	
Si		0,440	1	
Mn		1,537	2	
P		0,017	0,045	
S		0,0090	0,015	
Cr	16,5	17,29	18,5	
Mo	2	2,055	2,5	
Ni	10	9,941	13	0,59
Al		<0,0050		
As		0,016		
B		0,0011		
Co		0,160		
Cu		0,381		
Nb		0,020		
Sn		0,0064		
Ti		<0,0050	0,03	
V		0,050		
W		<0,030		
Fe	62,4	68,04	71	

PMI Screen

Element	Unit	Value
C [%]		0,015
Si [%]		0,443
Mn [%]		1,539
P [%]		0,017
S [%]		0,015
Cr [%]		17,35
Mo [%]		2,048
Al [%]		<0,0050
As [%]		0,016
B [%]		<0,0010
Co [%]		0,158
Cu [%]		0,383
Nb [%]		0,019
Sn [%]		0,0064
Ti [%]		<0,0050
V [%]		0,048
W [%]		<0,030
Fe [%]		67,98

Analysis on Desktop

Name	Unit	Low (Alarm)	Average	High (Alarm)	Abs. Std. Dev.	1	2	3	4
C	%	0	0,016	0,03	0,0014	0,015	0,017		
Si	%	0	0,440	1	0,0049	0,443	0,436		
Mn	%	0	1,537	2	0,0028	1,539	1,535		
P	%	0	0,017	0,045	0,00000	0,017	0,017		
S	%	0	0,0090	0,015	0,0013	0,0081	0,010		
Cr	%	16,5	17,29	18,5	0,092	17,35	17,22		
Mo	%	2	2,055	2,5	0,0099	2,048	2,062		
Ni	%	10	9,941	13	0,0071	9,946	9,936		
Al	%		<0,0050		0,0004	<0,0050	<0,0050		
As	%		0,016		0,0021	0,017	0,014		
B	%		0,0011		0,0001	<0,0010	0,0012		
Co	%		0,160		0,0028	0,158	0,162		
Cu	%		0,381		0,0028	0,383	0,379		
Nb	%		0,020		0,0021	0,019	0,022		
Sn	%		0,0064		0,0004	0,0061	0,0066		
Ti	%	0	<0,0050	0,03	0,0007	<0,0050	<0,0050		
V	%		0,050		0,0028	0,048	0,052		
W	%		<0,030		0,0099	<0,030	<0,030		
Fe	%	62,4	68,04	71	0,085	67,98	68,10		

Analysis on Touchscreen

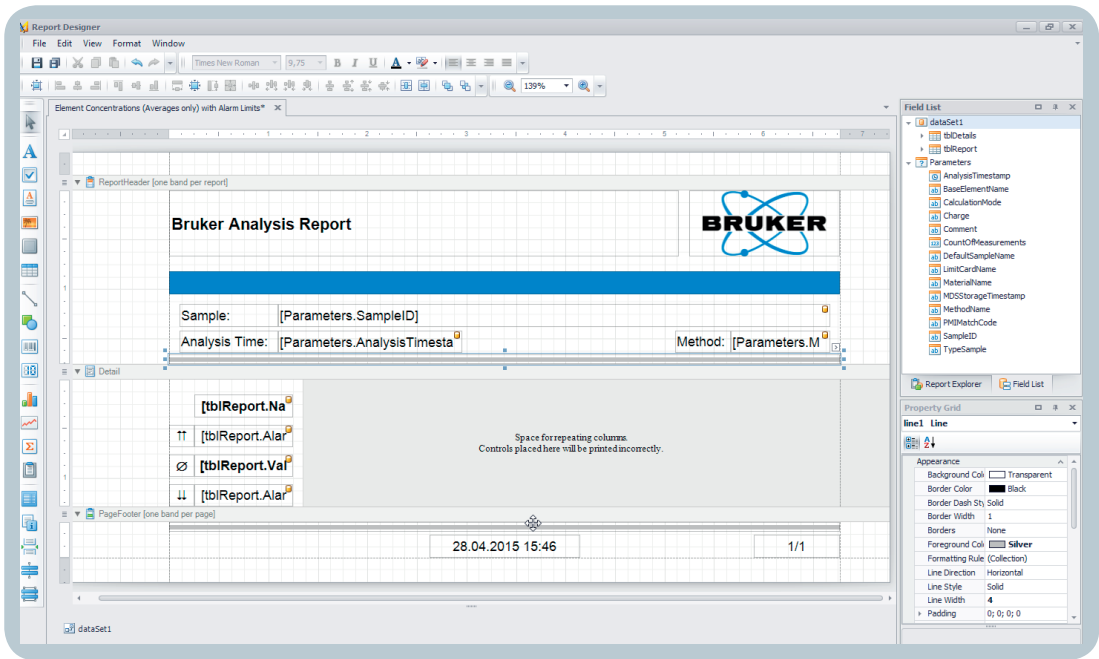
The dedicated PMI Screen focuses on important information when performing positive material identification. PMI uses an advanced, high performance algorithm when searching the integrated grade library. You can even import existing libraries using the built-in wizard. During PMI analyses, you can switch to the standard screen when needed.

Customize it!

Create your own reports!


Elemental Suite OES comes with a powerful report designer which finally makes your analysis truly complete. Design your own reports by adding your logo and other design elements. Send your reports to printer, PDF-, HTML- or CSV file formats. Additional text fields can be added to your sample identification. Just drag them into your report - it's that easy.

Limits that have been checked during analysis also can be included in your report. Different colors can be assigned if results are not within limits. Elemental Suite OES comes with several report templates, providing a good starting point to design your own cutting-edge analysis reports and certificates.




Report Designer

Report Example A

Bruker Analysis Report					
					
Sample: Tube 13					
Analysis Time: 27.04.2015 13:28:59					
Method: Fe131F S					
C [%]	Si [%]	Mn [%]	P [%]	S [%]	
0.030	1,000	2,000	0,045	0,0150	
0.016	0,440	1,537	0,017	0,0090	
0.000	0,000	0,000	0,000	0,0000	
Cr [%]	Mo [%]	Ni [%]	Al [%]	As [%]	
18,50	2,500	13,000			
17,29	2,055	9,941	<0,0050	0,016	
16,50	2,000	10,000			
B [%]	Co [%]	Cu [%]	Nb [%]	Sn [%]	
0,0011	0,160	0,381	0,020	0,0064	
Ti [%]	V [%]	W [%]	Fe [%]		
0,0300			71,00		
<0,0050	0,050	<0,030	68,04		
0,0000			62,40		

Analysis Report

is Report



Tube 13

Analysis Time: 27.04.2015 13:28:59

Method: Fe131F S

Element	Concentration [%]	RSD [%]
C	0,016	8,84
Si	0,440	1,13
Mn	1,537	0,18
P	0,017	0,00
S	0,0090	14,85
Cr	17,29	0,53
Mo	2,055	0,48
Ni	9,941	0,07
Al	0,0050	8,73
As	0,016	13,69
B	0,0011	12,86
Co	0,160	1,77
Cu	0,381	0,74
Nb	0,020	10,35
Sn	0,0064	5,57
Ti	0,0050	16,84
V	0,050	5,66
W	0,030	55,00
Fe	68,04	0,12

signature

Report Example B



Minimize your gas consumption

Save & Close

Low Flush (Ar)

☒ Use Auto-Close after Hours

Analytic Flush (Ar)

☒ Use Auto-Close after Minutes

☒ Use Pre-Flush Seconds

UV Optic Flush (Ar)

☒ Use Auto-Close after Minutes

Buttons: Set to Default, Cancel, Search

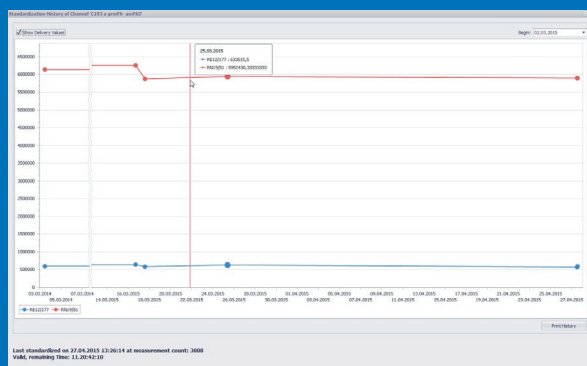
Monitor your instrument parameters

Vacuum level, HV-voltage and fan speed status can be displayed for aid in monitoring the functionality of your instrument.

All parameters can be recorded for trend monitoring, helping with instrument diagnostics.



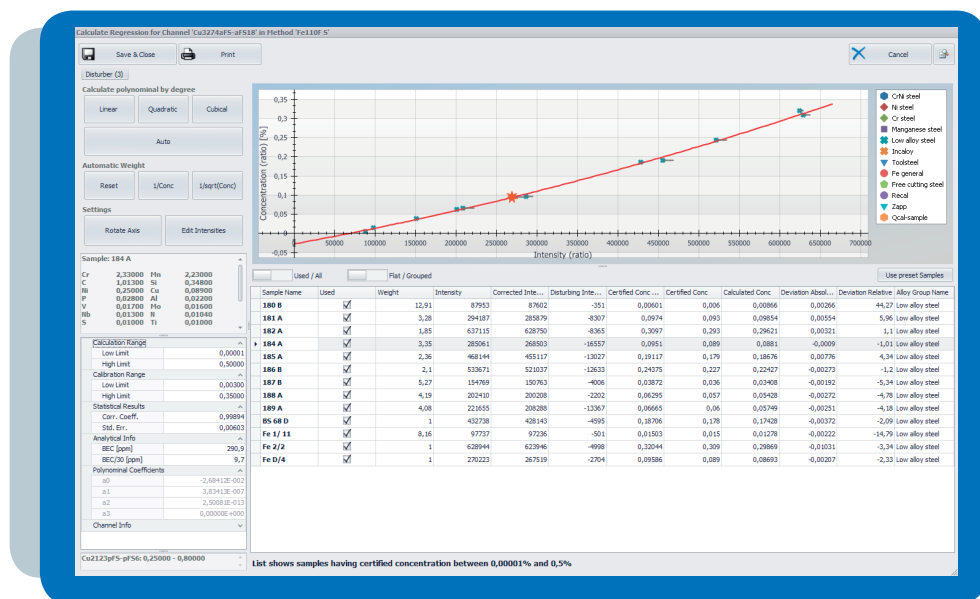
Standardization History



Don't worry about quality control. Elemental Suite OES lets you keep an eye on your instrument's performance over time, providing stable and failure-free operation. Print out standardization history and show it to your auditor. All significant service events and modifications are logged to an integrated audit trail list.

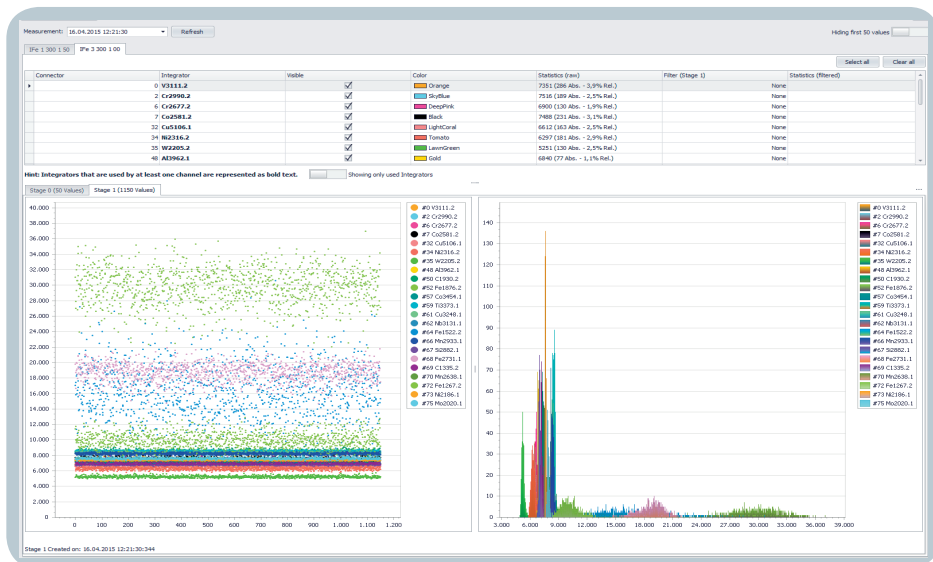
NEXT ERA OF ANALYSIS DESIGN

Professional tools for experts



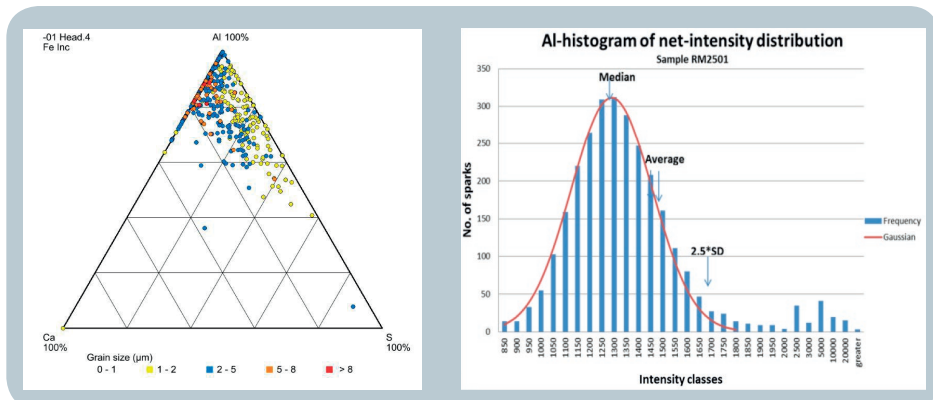
Elemental Suite OES Regression Plug-in

Elemental Suite OES's user-friendly regression software makes calibration easy for every user and provides all important features for experts. Structured menu and comprehensive functions make the calibration process easier than ever before. Calibration curve sectioning, calculation of additive and multiplicative corrections, selection and de-selection of alloy groups support tailoring your calibration to your needs. With the best fit comes the best results.



Elemental Suite Single-Spark Viewer

The single-spark viewer plug-in allows investigations of single spark distributions for every channel at any time during analysis for single spark capable instruments. Information on the raw signals and statistical interpretation give additional information on your sample. Inhomogeneous samples can be studied in detail. Zoom functionality, multiple channel selection, and various statistical evaluation modes enable for differentiated data assessment. Single spark data also provide valuable information on insoluble element fractions.



Elemental Suite & MCI

With the fully integrated MCI (Metal Cleanliness Inspection) option, Elemental Suite OES enables investigations on cleanliness, inclusions and oxygen leading to even more beneficial information about your samples. In combination with the standard bulk analysis, the MCI plug-in is a fast way of getting information within seconds. Immediate display of oxygen and other measurement data ensure fast process and quality control.

Features

Operation Mode

- Routine operation with Automatic Method Finding (AMF)
- Positive Material Identification (PMI) with AMF
- Sorting - pass and fail mode

Reporting

- Professional reporting system for customized analysis reports
- Flexible printing and preview capabilities

Grade Library

- Import grades using the convenient import wizard
- Setup your own grades with internal and external limits
- Cross-reference with local standards
- Bruker Elemental pre-configured grade library

Quality Control & Monitoring

- Check sample workflow
- Monitor validity of standardization-, check-, and type-standardization samples
- History of standardization with graphic illustration
- Integrated Audit Trail logs all significant changes and events
- Recording of instrument parameters such as temperatures and voltages
- Alarm system shows and logs important events
- Configurable precision monitoring

Customization

- Lookup lists and plausibility checks for sample identification
- Easy to use function for set up of check- and type-standardization samples
- Flexible formula editor for expressions like Carbon Equivalent (CEQ)

Security

- Comprehensive user management guarantees maximum safety
- Access rights can be assigned to users and user groups easily

Economy

- Configurable gas saver
- Enhanced power management for mobile instruments

Usability

- Easy to use and intuitive screens
- Designed for both desktop and touchscreen operation
- Supports variable font size and skin designs

Calibration

- Extend the delivered calibration with your own standards using the Methods Editor and its powerful regression software
- Manage your methods safely using an integrated version control system
- Various statistical data algorithms and solvable/insolvable calculation
- Comprehensive CRM sample library

Database

- Secure SQL database
- Integrated database client allows querying of current and past analysis
- Viewing, filtering, sorting and reporting of stored analysis results
- Easy to use Backup and Restore Tool for all data
- Integrated Web Data Service enables third party products like web clients or mobile apps to query analysis results using the standard OData protocol

Data Interfaces

- Elemental Suite Results Publishing (ESRP) system for exporting analysis results
- Connection to various laboratory information systems (LIMS) supported
- Elemental Suite Automation Interface (ESAI) for integration into automatic laboratory systems

Language Support

- English, German, French, Russian, Japanese, Chinese, Spanish, Czech, Polish, Turkish
- More languages available on request