



# **Q4 TASMAN**

Advanced CCD-Based Optical Emission Spectrometer

### **Analytical Performance that Exceeds Your Requirements**

Bruker Analysis Report					
Sample: Tube 13 Analysis Time: 27.04.2015 13:28:59					
	C [%]	Si [%]	Mn [%]	P [%]	
Ħ	0,030	1,000	2,000	0,045	
Ø	0,016	0,440	1,537	0,017	
#	0,000	0,000	0,000	0,000	
	Cr [%]	Mo [%]	Ni [%]	AI [%]	
Ħ	18,50	2,500	13,000		
Ø	17,29	2,055	9,941	<0,0050	
#	16,50	2,000	10,000		
	B [%]	Co [%]	Cu [%]	Nb [%]	
Ħ					
ø	0,0011	0,160	0,381	0,020	
#					
	Ti [%]	V [%]	W [%]	Fe [%]	
Ħ	0,0300			71,00	
ø	<0,0050	0,050	<0,030	68,04	
Ή	0,0000			62,40	

Elemental.Suite OES spectrometer software: By adding your logo and other design elements you can create customized reports with the integrated report manager.

## Your Analytical Requirement is our Inspiration

At Bruker Elemental, we design and develop advanced OES systems to meet or exceed your analytical needs. The new Q4 TASMAN provides the answers you need fast, using the very latest, state-of-the-art technologies.

Our engineers have designed innovative solutions that make the Q4 TASMAN OES system fully suitable not only for your dedicated applications, but also for many general purpose applications.

The result is a completely new CCD-based instrument, which lets you achieve your goals faster, more reliably, and more cost-effectively than ever before.



Elemental.Suite OES provides full touchscreen capabilities.

#### **Starting with Innovation**

Bruker Elemental has designed the new Q4 TASMAN spectrometer to achieve unrivaled performance:

- Proven co-axial argon flow combines analytically optimized flows with reduced consumption. More accuracy can be achieved analyzing small samples.
- CCD-based spectrometer features Clear-Spectrum technology.
- Analytical Solution Packages (ASP) provide turn-key solutions for your applications.
- Less down-time with automatic control and diagnosis functions lead to higher availability.

New Elemental.Suite OES operating software, designed for maximum usability, with handy features and supportive functions:

- Routine operation with Automatic Method Finding (AMF).
- Professional reporting system for customized analysis reports and pre-configured grade library.
- Comprehensive user and access management
- Designed for both desktop and touchscreen operation.
- Elemental Suite Results Publishing (ESRP) system for exporting analysis results.

### Simply Analyze

### **Enjoy Shorter Measurement** Times

Q4 TASMAN features shorter measurement cycles compared to any conventional system. The newly developed readout scans all CCDs up to 30 times faster than before. The results are higher dynamic ranges with shorter measurement times. Faster time-to-result improves your efficiency and increases your profitability.

#### **Competitive Athlete at Heart**

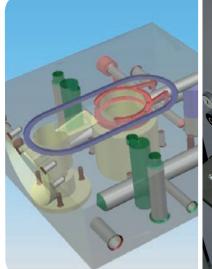
The optical system is the heart of the spectrometer: the well-proven Paschen-Runge mounting is equipped with ClearSpectrum technology. The combination of high-resolution CCDs and the latest firmware provides excellent performance from a very compact design.

Spectra deconvolution and evaluation are covered by a duo of firmware and software. Just place the sample in position and press the start button! Performance is at the tip of your fingers. After just a short while, accurate analysis results appear with color indicators.

#### **Everything is Goal-Oriented**

Co-axial argon flow puts the gas where it is needed: at the burn spot eliminating the need for a standby flow. In addition, the analysis of small samples and wires, by using adapters, is simpler than ever before.

Q4 TASMAN Models				
Model	Wavelength range			
Q4 TASMAN 200	200 - 620 nm			
Q4 TASMAN 170	170 - 620 nm			
Q4 TASMAN 130	130 - 620 nm			





Co-axial argon flow: reduced consumption and minimized maintenance.

#### **Three Models for your Applications**

The right solution for your application: TASMAN 200 is ideally suited for all non-ferrous applications where UV elements are not required; TASMAN 170 for ferrous applications with important elements in the UV spectrum (C, P, S, As, Sn, B, etc.) and finally the powerful TASMAN 130 capable of analyzing even ultra-UV elements like nitrogen, oxygen, and others.

#### **Analytical Solution Packages**

Q4 TASMAN offers dedicated solutions for your analytical tasks. The Analytical Solution Packages (ASP) are available per matrix: elements, calibrations, alloys and more.

In no time at all, you receive reliable, complete analytical results.

#### **Superior Technology**

Q4 TASMAN unites an outstanding solution for metal analysis: optimal analytical performance, user-friendly and cost-effective operation.

Q4 TASMAN's superior analytical performance and economical operation is a great asset for your metal business.

# **Technical Specifications**

#### **Optical System**

- CCD sensors with high resolution
- Multi-Detector Optics
- Paschen-Runge Mounting
- ClearSpectrum Technology
- Highest spectral sensitivity

#### **Source Generator**

- Maintenance-free, two phase PWM Generator
- Frequency 50 to 1000 Hz
- Spark & arc-like discharges from 10 µs to 2 ms

#### **Software**

**Q4 TASMAN** 

- Intuitive Windows® based software for simple routine operation
- Various user levels for secure and task-specific operation
- Functions for qualitative and quantitative analysis
- Elemental.Suite OES software including analysis database and interfaces to Microsoft Office® software
- Quality libraries with version control

#### **Analytical Solution Packages (ASP)**

- Available for all common matrices
- All relevant alloying elements
- Calibrations for all grade/alloy groups

#### **Electrical Data**

- 100 to 240 V (50/60 Hz)
- 600 W during measurement, 50 W standby
- 16 A (240 V) slow blow fuse or 25 A (100 V) slow blow fuse

#### **Weights & Dimensions**

- Width 540 mm / 21.26 inches
- Height 685 mm / 26.96 inches
- Depth 820 mm / 32.28 inches
- Weight ~75 kg / ~165 lb.

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