Big ideas made compact

SPECTRUMA
ANALYTIK GMBH

GDA Alpha

GD-OES has great reputation for its capabilities for depth profiling, but more than 40 years ago this technique was invented for the bulk analysis of precious metals. Coming back to the roots and combining it with all the new technologies developed over the last decades, SPECTRUMA will continue to promote the best analytical source available for spectrochemical analysis for bulk analysis, as well as for depth profile analysis. The desktop instrument GDA-Alpha is an innovative glow discharge analyser, which convinces by new technical developments and its appealing size.

The space-saving instrument GDA-Alpha combines SPECTRUMAs state-of-the-art CCD optics with very high resolution and by this means can cover a wide range of applications. Through constant innovation users find a cost-optimized instrument with all quality features of German workmanship. Application fields of the GDA-Alpha are the bulk analysis of complex alloys as well as depth profiling of coated materials. Elements of interest such as H, O, Na, Li, K can be analyzed easily and with highest resolution. Thus, the GDA-Alpha is outstandingly suitable for use in the industry during production control, quality assurance, and incoming inspection. Convincing by its efficient, user-friendly handling, the GDA-Alpha can be completely integrated without necessary extensions into working processes of its users.

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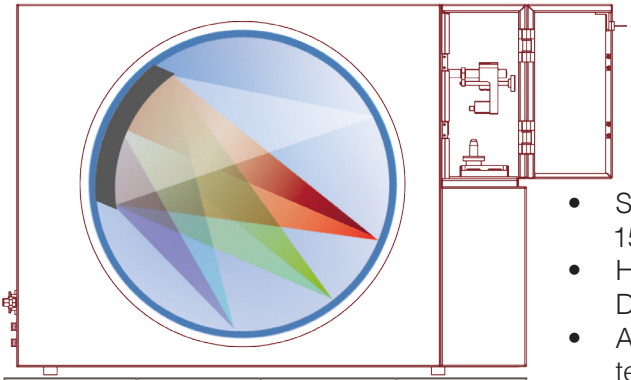
No compromises in technical performance



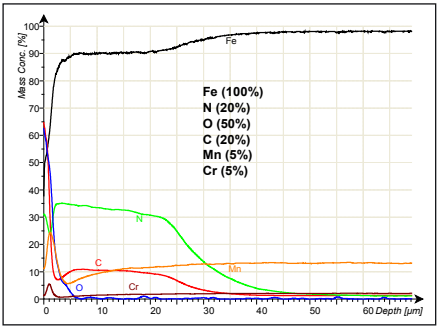
Height	Width	Length	Weight
675 mm	390 mm	950 mm	95 kg

- Std. wavelength range: 150 nm – 520 nm
- High stability by SPECTRUMAs DC-source
- Almost all elements can be determined.
  → Optional: H, O, Na, Li, K
- One pump system

Measurement results of the GDA-Alpha

Sample	Steel						
Elements:	Fe [%]	C [%]	Mn [%]	Si [%]	P [%]	Cr [%]	Ni [%]
	81,69	0,899	0,248	0,168	0,0359	3,643	0,107
	81,71	0,897	0,247	0,169	0,0363	3,635	0,107
	81,92	0,886	0,242	0,168	0,0361	3,586	0,107
	81,91	0,900	0,241	0,170	0,0362	3,594	0,107
	81,96	0,893	0,241	0,169	0,0362	3,574	0,107
	81,83	0,893	0,243	0,170	0,0366	3,607	0,107
	81,89	0,895	0,242	0,170	0,0366	3,584	0,107
Mean	**81,9**	**0,893**	**0,242**	**0,17**	**0,0363**	**3,589**	**0,107**
SD	**0,0455**	**0,00463**	**0,0006**	**0,00118**	**0,000234**	**0,0111**	**0,00035**
RSD [%]	**0,06**	**0,52**	**0,25**	**0,45**	**0,64**	**0,31**	**0,33**

Exemplary measurement results of steel sample (Bulk)



Exemplary evaluation of a nitrated steel sample (QDP)