

# High Performance Metal Analyser – ARTUS 8



The ARTUS 8 provides fast, precise and accurate analyses for the perfect melt. It is our most powerful and reliable spectrometer and is well suited for the metal processing industry and perfectly suited for the metal production and inspection & contract lab industries. It is available in 3 models: the ARTUS 8 Standard, ARTUS 8 Ultimate and ARTUS 8 Visible. The ARTUS 8 Standard covers a wavelength range of 174-680 nm; ARTUS 8 Ultimate: 146-680 nm and ARTUS 8 Visible: 212-680 nm. All types of calibration elements are covered.

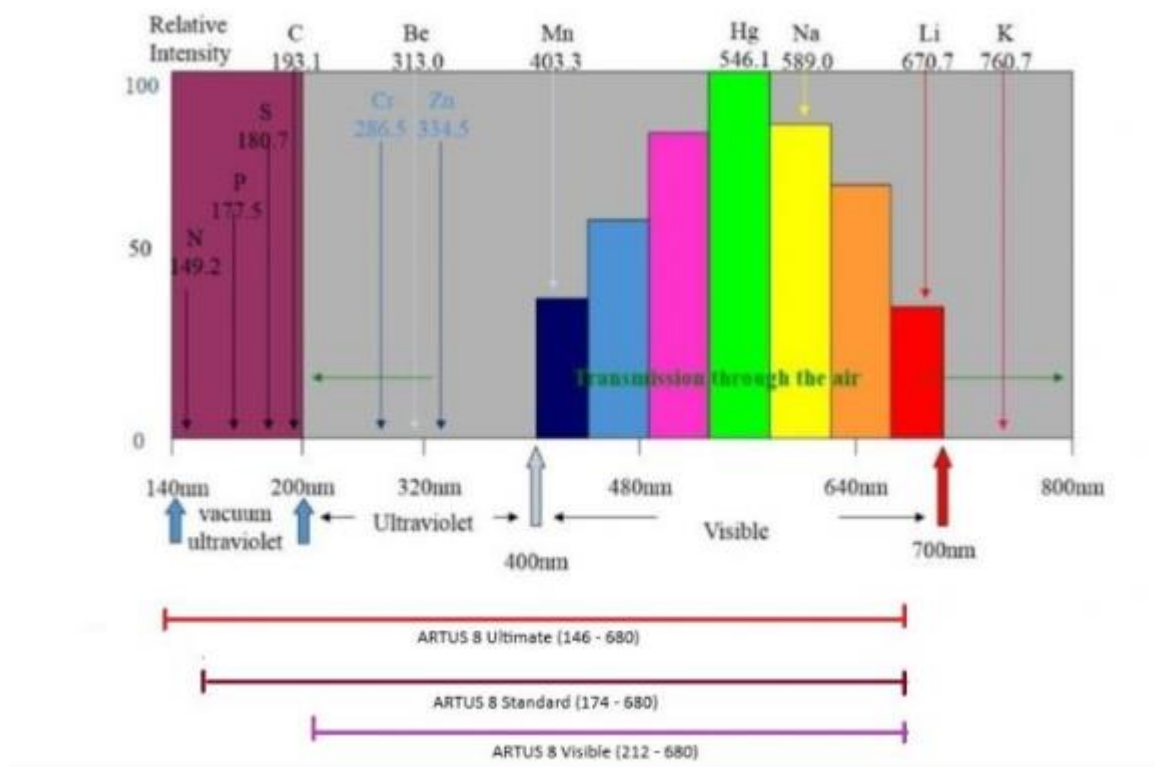
## ARTUS 8

- Compact bench-top model
- 3-side open spark stand with XY sample clamp
- High-resolution, full-spectrum optical systems
- No vacuum pump, nor argon purge in optics
- Holographic diffraction grating
- High-resolution CCDs
- Digital spark source
- Ethernet connectivity



## Available models:

ARTUS 8 Standard	ARTUS 8 Visible	ARTUS 8 Ultimate
UV-VIS-NIR	VIS	VUV-UV-VIS-NIR
Fe, Ni, Co, Cu, Al, Mg, Zn, Sn, Pb, Ti	Al, Mg, Zn, Sn, Pb	Fe, Ni, Co, Cu, Al, Mg, Zn, Sn, Pb, Ti
All alloying elements and major traces	All alloying elements and major traces	All alloying elements and major traces
Digital source for high precision	Digital source for high precision	Digital source for high precision
ARUN factory calibration	ARUN factory calibration	ARUN factory calibration
Gas consumption: Low flows, no optic flush, lower grade	Gas consumption: Low flows, no optic flush, lower grade	Gas consumption: Low flows, no optic flush, lower grade
Light path – direct		Light path – direct



**Quality Control and Assurance are essential to making your business successful. The ARTUS 8 is the ideal companion for incoming material, in-process testing and final quality inspection.**

Risks such as material mix-ups and machinery damage are reduced, thanks to

- adapters which detect and analyse oddly shaped samples and small pieces and
- the optimisable grade library which visually displays non-compliance alloy specifications.

## Technical Specification:

<b>Optical System</b>	Paschen – Runge
<b>Wavelength Range</b>	146-680nm (Ultimate), 174-680nm (Standard) 70-520nm, 212-680nm (Visible)
<b>Power Supply</b>	Line input 90 or 260 Volts AC 50-60 Hz
<b>EMC</b>	IEC61000-4-2, IEC61000-4-4, IEC61000-4-5
<b>Working Temperature</b>	10° to 35° C
<b>Storage Temperature</b>	-10°C to 70°C
<b>Operating Humidity</b>	20-80%
<b>Argon Purity</b>	99.998% or 99.999% purity
<b>Argon Flow</b>	When burning – 3L per minute, Standby 0.1L per minute
<b>Dimensions</b>	721 x 440 x 770mm
<b>Weight</b>	80 kg
<b>Packing Weight</b>	130 kg
<b>Maximum Excitation Power</b>	400VA
<b>Optical Source Type</b>	50VA
<b>Discharge Frequency</b>	400Hz maximum
<b>Discharge Current</b>	150A maximum
<b>Spark Stand Aperture</b>	12mm

## Application programs

The range of factory calibrations is comprehensive with a wide choice of analytical programs for all applications + their alloys that include:

- **Iron and Steel** (low alloy, chrome steel, chrome-nickel steel, tool steel)
- **Cast Iron** (unalloyed cast-irons, chrome cast-irons)
- **Aluminium** (low, aluminium-copper, aluminium-silicon, aluminium-zinc)
- **Copper** (low copper, brasses, bronzes)
- **Magnesium** (pure Mg, Mg rare earths)
- **Nickel** (inconel, hastelloy, pure Ni, incoloy, nimonic, monel)
- **Lead** (lead alloys, pure Pb, lead-antimony, lead-calcium)
- **Tin** (tin alloys)
- **Cobalt** (cobalt-chromium-molybdenum, cobalt-chromium-tungsten)
- **Titanium** (titanium alloys)
- **Zn** (zinc alloys, low zinc, zinc-aluminium-copper)
- **Special Calibration according to agreed specs**



## Software A-PLUS

It is not only optical resolution that determines the analytical power of the instrument. ARUN's A-PLUS software is a bespoke software package that has a powerful spectrometric hub as well as all the needed added features that help in daily routine work and make the use of the instrument efficient and a pleasure to operate.

- Foreign language menu capability
- Factory calibrated programs traceable to CRMs
- Automatic average calculation
- Display of single or multiple analysis
- Display of mean, standard or relative standard deviation
- User configurable results screen
- Formula editor (Carbon, Equivalent, Total Trace, etc...)
- Quality control and identification functions
- User defined export functions
- User configurable grade library
- Report generator, print or PDF output, selected by sample ID field content
- User standardization for global or individual program
- User configurable Type Standardisation
- Storage and retrieval of data

