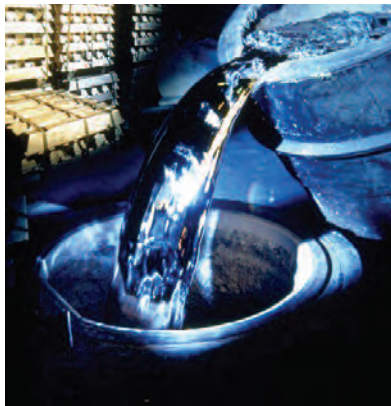


The well-known Thermo Scientific ARL 3460 has been specifically configured to address the analytical requirements of foundries and metals processing companies.

Named ARL 3460 Advantage, this new model combines cost effectiveness and high quality, performance and reliability of the most reputed optical emission spectrometer in the world.

ARL 3460 Advantage

OES Metals Analyzer
Aluminum / Copper



Designed to meet your needs

With an installed base of more than 5,000 units worldwide, the Thermo Scientific ARL 3460 metals analyzer is recognized today as the reference in terms of stability, reliability, lifetime and performance.

The ARL 3460 Advantage is the worthy child of the ARL 3460. It shares with him the well proven technology and the superior overall performance of PMT detectors.

The ARL 3460 Advantage has the typical performance of the standard ARL 3460, in particular regarding detection limits and precision. ARL 3460 applications notes will give you a better idea on how well the ARL 3460 Advantage performs.

Two instrument configurations are proposed, tailored to the needs of foundries and metals processing companies analyzing aluminum or copper samples.

Like other Thermo Scientific OES instruments, the ARL 3460 Advantage is calibrated in the factory, ensuring excellent accuracy. The calibrations have to be chosen in the table corresponding to the selected instrument configuration (see back page).

The ARL 3460 Advantage provides an immediate cost-effective and high-performance «turn-key» solution, ready to analyze samples on the installation day.

ARL 3460 Advantage Al III

| Element | OE-34-CAL-AL-02 | OE-34-CAL-AL-03 | OE-34-CAL-AL-04 | OE-34-CAL-AL-08 |
|---------|---------------------------------------|-----------------|-----------------|-----------------|
| | Low Alloy Aluminum 1xxx & 3xxx & 6xxx | Al-Si 4xxx | Al-Si-Cu 4xxx | Global Al |
| Al | 93 - 99.99 | 72 - 97.5 | 72 - 93.3 | 72 - 99.5 |
| B | 0.0001 - 0.0075 | - | - | 0.0002 - 0.01 |
| Be | 0.0001 - 0.01 | 0.0003 - 0.024 | - | 0.0002 - 0.025 |
| Bi | 0.001 - 0.08 | - | - | 0.001 - 0.2 |
| Ca | 0.0001 - 0.013 | 0.0001 - 0.023 | 0.0002 - 0.012 | 0.0001 - 0.023 |
| Cd | 0.0002 - 0.03 | - | - | 0.0002 - 0.05 |
| Cr | 0.0003 - 0.35 | 0.001 - 0.4 | 0.001 - 0.15 | 0.0005 - 0.4 |
| Cu | 0.0002 - 0.5 | 0.0005 - 0.6 | 0.5 - 5 | 0.0005 - 12 |
| Fe | 0.0005 - 1.6 | 0.01 - 1 | 0.04 - 1.25 | 0.001 - 1.25 |
| Ga | 0.001 - 0.04 | - | - | 0.0002 - 0.04 |
| Li | 0.0001 - 0.01 | - | - | 0.0001 - 0.01 |
| Mg | 0.0001 - 1.4 | 0.005 - 1.4 | 0.01 - 1.7 | 0.0005 - 11 |
| Mn | 0.0005 - 1.8 | 0.005 - 0.9 | 0.004 - 0.7 | 0.001 - 1.8 |
| Na | 0.0001 - 0.025 | 0.0001 - 0.015 | 0.0001 - 0.009 | 0.0001 - 0.025 |
| Ni | 0.0003 - 0.1 | 0.0005 - 0.1 | 0.001 - 2.8 | 0.0005 - 2.8 |
| P | 0.0006 - 0.006 | 0.0006 - 0.0045 | 0.0006 - 0.016 | 0.0012 - 0.016 |
| Pb | 0.0005 - 0.08 | 0.001 - 0.1 | 0.0005 - 0.3 | 0.0005 - 1 |
| Sb | 0.0008 - 0.04 | 0.0008 - 0.45 | 0.002 - 0.3 | 0.001 - 0.45 |
| Si | 0.0003 - 1.5 | 1 - 27 | 3 - 27 | 0.001 - 27 |
| Sn | 0.001 - 0.08 | 0.001 - 0.1 | 0.005 - 0.35 | 0.001 - 0.35 |
| Sr | - | 0.0005 - 0.15 | 0.001 - 0.15 | 0.001 - 0.15 |
| Ti | 0.0001 - 0.15 | 0.003 - 0.25 | 0.005 - 0.2 | 0.0003 - 0.25 |
| V | 0.0002 - 0.045 | - | - | 0.001 - 0.13 |
| Zn | 0.0008 - 0.2 | 0.003 - 0.3 | 0.003 - 3.6 | 0.002 - 8 |
| Zr | 0.0005 - 0.05 | - | - | 0.0005 - 0.27 |

Note

The global aluminum calibration covers all the aluminum qualities, namely: Low alloy aluminum (series 1xxx, 3xxx and 6xxx), Al-Si (4xxx), Al-Si-Cu (4xxx), Al-Cu (2xxx), Al-Zn (7xxx) and Al-Mg (5xxx)

ARL 3460 Advantage Cu V

| Element | OE-34-CAL-CU-02 | OE-34-CAL-CU-03 | OE-34-CAL-CU-04 | OE-34-CAL-CU-05 | OE-34-CAL-CU-06 | OE-34-CAL-CU-07 | OE-34-CAL-CU-09 |
|---------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | Brass | Bronze | Cupro Aluminum | Cupro Nickel | Cu/Zn/Ni | Gunmetal | Low Alloyed Cu |
| Cu | 53 - 88 | 74 - 95 | 75.5 - 94 | 64 - 88 | 55 - 65 | 80 - 87 | 99.3 - 99.99 |
| Ag | - | 0.005 - 0.09 | - | - | - | 0.01 - 0.06 | 0.001 - 0.1 |
| Al | 0.001 - 8 | 0.002 - 0.2 | 7 - 12 | 0.001 - 0.1 | - | 0.005 - 0.12 | 0.001 - 0.04 |
| As | 0.001 - 0.2 | 0.005 - 0.24 | 0.001 - 0.45 | 0.002 - 0.02 | 0.001 - 0.03 | 0.02 - 0.25 | 0.001 - 0.1 |
| Bi | 0.001 - 0.14 | 0.005 - 0.2 | 0.001 - 0.013 | 0.001 - 0.01 | - | 0.001 - 0.05 | 0.001 - 0.02 |
| Cd | 0.001 - 0.02 | - | 0.0005 - 0.05 | 0.001 - 0.015 | - | - | 0.0005 - 0.03 |
| Co | 0.001 - 0.02 | - | 0.001 - 0.027 | 0.001 - 0.15 | - | - | 0.001 - 0.06 |
| Cr | - | - | 0.003 - 0.05 | - | - | 0.005 - 0.05 | 0.001 - 0.04 |
| Fe | 0.005 - 4.5 | 0.01 - 0.5 | 0.02 - 6 | 0.05 - 2.5 | 0.005 - 1 | 0.05 - 0.35 | 0.0015 - 0.06 |
| Mg | 0.0005 - 0.02 | - | 0.001 - 0.15 | 0.001 - 0.035 | - | - | 0.0005 - 0.02 |
| Mn | 0.001 - 5.2 | 0.002 - 1 | 0.002 - 3.3 | 0.008 - 2 | 0.005 - 0.7 | 0.001 - 0.09 | 0.002 - 0.05 |
| Ni | 0.03 - 6.5 | 0.005 - 2.9 | 0.005 - 7.5 | 8 - 33.5 | 8 - 20 | 0.2 - 2 | 0.002 - 0.1 |
| P | 0.001 - 0.3 | 0.004 - 0.9 | 0.001 - 0.035 | 0.001 - 0.03 | 0.002 - 0.1 | 0.004 - 0.1 | 0.004 - 0.07 |
| Pb | 0.002 - 3 | 0.01 - 12 | 0.002 - 0.6 | 0.002 - 0.08 | 0.003 - 1.2 | 1 - 6.5 | 0.003 - 0.1 |
| S | 0.001 - 0.045 | 0.002 - 0.15 | 0.001 - 0.02 | 0.001 - 0.08 | 0.001 - 0.1 | 0.005 - 0.2 | 0.0005 - 0.02 |
| Sb | 0.003 - 0.35 | 0.005 - 1 | - | 0.001 - 0.01 | - | 0.04 - 0.25 | 0.003 - 0.09 |
| Si | 0.001 - 1.3 | 0.003 - 0.45 | 0.003 - 2 | 0.003 - 0.85 | 0.0021 - 0.25 | 0.003 - 0.1 | 0.001 - 0.05 |
| Sn | 0.002 - 2.7 | 3 - 15 | 0.002 - 0.8 | 0.0015 - 0.1 | 0.005 - 0.13 | 2.5 - 9.5 | 0.004 - 0.1 |
| Te | - | - | - | - | - | - | 0.002 - 0.03 |
| Zn | 13 - 45 | 0.02 - 6.3 | 0.003 - 1.8 | 0.003 - 0.8 | 17 - 34 | 1 - 6.7 | 0.003 - 0.1 |
| Zr | - | - | - | - | - | - | 0.0005 - 0.01 |

To see our complete OES product portfolio, visit www.thermo.com/oes.

