

## OE750



## Otto Junker chooses the OE750 for ultimate melt process control

Otto Junker GmbH has a worldwide reputation for the design and manufacture of metallurgical furnace equipment and thermo-processing systems.

They also operate a high-grade steel foundry that produces castings for specialist engineering applications. Their experience in the metallurgical field makes them an ideal company to put the OE750 analyser to the test in their state-of-the-art steel foundry.

### OBJECTIVES

Customer: Otto Junker GmbH

- | Complete control of tight melt requirements
- | Supports exotic steel grade innovation
- | Easy to use with minimal maintenance or standardisation

### RESULTS

- | All detection limits exceeded requirements
- | Outstanding long-term stability







## OE750 invaluable in new grade innovation

A significant part of Otto Junker's work involves the innovation of exotic alloys for new applications. And it's here that they were particularly impressed with how easy it is to modify and add new calibrations to the OE750.

They found the long-term stability of the OE750 to be excellent – with no standardisation needed in the two-week trial period. And the argon consumption was also impressively low, with only a 5-bar pressure decrease per day at over 100 analyses a day.

From the perspective of Otto Junker, the OE750 package has been a huge success. In fact, the analyser made such an impression that they have reserved an OE750 for their laboratory and have plans for one more instruments – for the furnace platform at the foundry.

The OE750 is a next-generation, high-performance analyser that delivers results that are usually only possible with far more expensive instruments. It covers the entire spectrum of elements in metal – depending on the application – and has very low detection limits, bringing high quality in-house analysis within reach for the first time for many foundries.

A new optical concept, with four patents pending, plus a newly developed spark stand and spark source are what gives the OE750 high performance. The analyser is also designed to reduce argon and power consumption and requires little maintenance and re-standardisation.

## Measuring melt elements to the lowest limits

As established specialist suppliers of cast steel products to industries such as power generation, environmental engineering and marine technology, including parts for high-technology segments such as aerospace, chemical and pharmaceutical industries Otto Junker produce castings from steel, stainless steel, nickel, cobalt and copper-based materials. Control of all elements within the melt is crucial to the performance of the components in the demanding environments of the finished products. Currently, the company uses several methods for process control, including a wavelength dispersive XRF analyser and four combustion analysers, plus a mobile OES for backup purposes of the other methods.

During the two weeks of extensive beta-testing of the OE750 Otto Junker confirmed that ALL detection limits were perfect for their melt control, including: C, Si, Mn, Cr, Ni, Mo, Nb, Cu, P and S. The accuracy was extremely high, and the instrument easily met their tight requirements. Plus, it was easy to use, and the staff found the OE750's SpArcfire software clearly structured and intuitive.



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