

## TEST-MASTER Pro

The rugged industrial work horse for metal analysis



### Continuous operation in industrial applications

The **TEST-MASTER** Pro is a robust, mobile spectrometer for precise analysis, quick grade ID and sorting of metal samples. It is optimised for continuous operation, and is ideally suited for heavy industrial applications; in particular for the outgoing goods inspection in steel plants, rolling mills, tube manufacturing and forging.

### Product highlights

- Rapid sorting in 3 seconds
- Lightweight sample probe
- Heat exchanger for cooling
- High performance analysis
- Input via touch screen

Easy to obtain  
precise results  
in seconds!

### Quick and precise carbon analysis

The **TEST-MASTER** Pro displays the unique capability of producing precise carbon analysis in a surprisingly quick 4 second test.

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## High performance, heavy duty

A software controlled digital high frequency power source produces a controlled spark in argon or an arc discharge in air.

Current, voltage, frequency and inductance can be separately monitored and adjusted to optimise the most efficient parameters for the application.

Frequencies and voltages up to 500Hz / 500V as well as an arc current of up to 6A allow trouble-free excitation.

Speed of analysis, precision and user-friendliness were the most important factors in the design and development of the **TEST-MASTER Pro**.

The high resolution Multi-CCD optics readout system uses DSP (Digital Signal Processing). The 14 CCD-detectors each have a dedicated processor to evaluate the data from the complete wavelength range in only microseconds. This allows the use of Oxford Instruments' dynamic integration algorithm (DIA) which dramatically improves the repeatability of the measurement.

## Maximum uptime and field reliability

Effective cooling is required to maintain maximum uptime and field reliability. This is achieved by a revolutionary secondary cooling circuit with its own heat exchanger. In comparison more conventional methods blow air through the different compartments of the instrument, carrying dust, dirt, moisture and metal vapour into the housing. Even filters do not prevent this completely and need regular replacement resulting in increased costs. The **TEST-MASTER's** housing is hermetically sealed and absolutely dust proof. Less to go wrong means greater reliability and lower costs of ownership.

## Probes

The **TEST-MASTER Pro** is available with the ARC probe and SPARK probe.

The optional UVPro mini-optic probe analyses UV elements and low carbon contents.

Adaptors for the analysis of wires or irregular shaped surfaces, are optionally available for the SPARK probe. The ARC probe can be optionally fitted with a wire adaptor.

## Options

- Bluetooth® printer
- Uninterrupted power supply
- External keyboard
- Sample preparation devices
- Spare parts and consumables kit

## Typical applications:

Analytical mode / identification

- 1.4301 / 1.4306 ~ 304 / 304 L
- 1.4301 / 1.4401 / 1.4571 ~ 304 / 316
- 1.4301 / 1.4305
- Carbon steels C 15 ~ C 35 ~ C 45 ~ C 70S6
- S235J2G3 (ST 37) ~ S355J2G3 (ST 52)

## Sorting

usually with ARC excitation in air

- C 15 / C15 Pb
- ST 52 / 15 Mo3
- 1.4301 / 1.4401
- 1.4401 / 1.4571
- 1.4131 / 17225
- C 15 / C 45 (with spark excitation in argon)

## OiService worldwide service and support

Oxford Instruments Customer Service recognises there are many decisions to make when choosing the right product and company with which to partner. It is not just about superb instrument functionality or the rugged design of the analyser. The OiService teams are aware of the necessity to demonstrate our depth of knowledge, skills, experience and expertise with regard to supporting our customers.

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- Genuine approved Oxford Instruments spare parts
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