



Product datasheet

Infrared Drying Oven and Moisture Determination Essa RD20HMI & RD20XL

Our Essa Infrared Drying Oven and Moisture Determination systems combine sample drying and moisture analysis capabilities to improve the speed and accuracy of sample preparation and analysis processes. Two systems are available, the Essa RD20HMI and the RD20XL. Both are ergonomic, and they are capable of meeting laboratory requirements while saving energy costs and usage.

Key Benefits

- High-power heating technology for quicker drying times
- Enhanced energy efficiency with infrared heating
- Accurate moisture loss analysis with an internal load cell
- Small and robust design for adaptability

Advanced heating systems that provide seamless sample drying

State-of-the-art infrared drying ovens that optimise moisture analysis

Our Infrared Drying Oven and Moisture Determination systems contain dual-heating capabilities via heating lamps and hotplates to improve sample drying speeds. Also, infrared heating is superior to other types of heating, as it reduces energy usage and costs. Energy is also not wasted, as the oven can concentrate heat directly onto the sample, rather than heating the entire oven chamber.

The RD20HMI and RD20XL both use an internal load cell to measure moisture loss, by weighing samples during the process, ensuring that the sample results are reliable. While the RD20HMI has a smaller footprint than the RD20XL, both are built from high-quality steel and can be easily adapted to suit a variety of sample sizes.

Essa RD20HMI Infrared Drying Oven & Moisture Determination

The Essa RD20HMI Infrared Drying Oven and Moisture Determination is a tray dryer that offers both quick sample drying and precise moisture loss analysis. The Essa RD20HMI can handle samples of up to 8kg in weight and utilises both heat lamps and a hotplate to enhance the drying process.

Temperatures can be pre-set to suit analysis requirements, ensuring that precision is maintained during sample drying.

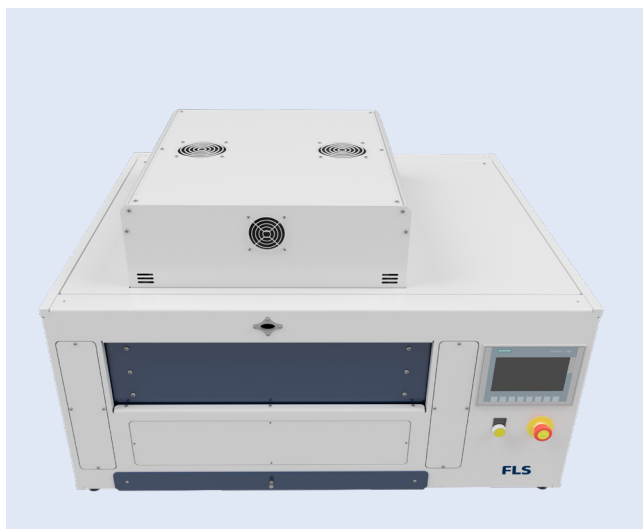
A pneumatic door and sample tray are also used to make sure that sample weighing measurements are accurate. These moisture determination methods comply with the ISO method for iron ore moisture determination and produce more efficient drying times than other methods.

The Essa RD20HMI has two modes, which are designed to suit the specific needs of a laboratory. The first mode is Set Time, which allows the user to specify the drying time. The second mode is Auto Stop, which employs the intelligence of the oven to automatically determine when the drying process is complete, based on sample mass measurements.

Analysis parameters can be viewed with an external touchscreen panel or be part of the dryer. The oven can also be linked to a PC or LIMS to improve data recording and quality control. A version of the Essa RD20HMI can be adapted for use in robot circles, further automating the sample preparation and analysis process.

Essa RD20XL Infrared Drying Oven & Moisture Determination

The Essa RD20XL Infrared Drying Oven and Moisture Determination offers the same advantages as the Essa RD20HMI, as both have nearly the same features. However, the RD20XL's key difference is that it is built to house greater sample sizes. The significantly larger unit boosts productivity, as it eliminates the requirement to reduce sample sizes before the sample drying process.



Key Features

- External touchscreen panel and PC connectivity for improved parameter control
- Combines heat lamps and hotplate for above-and-below sample drying
- Pre-set temperature control for accurate sample measurement
- Versatile drying cycle determination with two drying modes
- Robot circle adaptability and optimisation



Specifications	
Oven dimensions	1070 x 870 x 700 mm
Oven cavity	607 x 436 x 170 mm
Total power	9.1 kVA
Voltage	415 V
Current	13.1 A
Mass	~220 kg
Balance resolution	1 g
Supply air	6 bar

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