COMPLETE RANGE OF RAPID

MOISTURE REGAIN OVENS

To determine the moisture content and regain % in textile materials.
Mesdan's regain ovens are ranked N°1 in both cotton and wool textile industry, thanks to their temperature control accuracy, automated functions, and unrivaled testing speed.

Two available models:

- LIBECCIO, manual
- SCIROCCO, fully automatic

The latter is distinguished by its unique features:

- Fully automatic execution of the drying cycles, automatic temperature control, automatic sample weighing, automatic stop at the end of the tests, automatic calculation of the commercial mass of a material lot
- Extremely rapid (testing time for a sample of 100 grams is about 10 minutes)
- Automatic correction of the humidity regain according to the environment RH%
- Neither the operator, nor the environment conditions can influence the results
- PC algorithm temperature control (± 1°C, as prescribed by most stringent International Standards) ensures that samples are not damaged
- Connection to ethernet user network

MESDAN LAB

SCIROCCO CODE 172B

LIBECCIO CODE 245B

SCIROCCO testing procedure:

To determine the commercial mass (the basis of fibre trade) the sample must undergo drying cycles (through a suction process) at +105°C (or +140°C in case of silk) until no weight variation is detected.
At the beginning of the cycle, the oven is pre-heated at the usual working temperature. The operator only sets the test parameters (temperature, n° of cycles and duration of each cycle) and inserts the sample in the chamber. Then the test is automatically performed. Before starting the test and at the end of the last cycle the sample is automatically weighed. The test automatically stops when the difference between 2 consecutive weighings is below 0,05%.
SCIROCCO's software controls the instrument functioning during each test phase. During the test, it is possible to visualize a graph for temperature monitoring.

Example of printout of Scirocco oven

Date 18/02/21	Time 13.47.37	
Customer Code	P1	
Test Code	G100	
Stock	Stock	
Lot	Lot	
Operator	Ex	
Parcel	Test	
Material	Wool (worsted)	
Material R.R.	18	%
Conditioning Temperature	105	°C
Number of Samples	1	
Humid Weight	402,5	g
Real Regain Rate	11,517	%
Humidity	10,328	%
Dry Weight	360,75	g
Present Dry Weight	360,93	g
Corr. Coeff. of Net Mass	5,813	%
Net Mass	180	kg
Commercial Mass	190,464	kg
Testing Machine	SCIROCCO MESDAN	
Testing Conditions	20	°C
Humidity	60	%
Sample Description		

LIBECCIO testing procedure:

Pre-heating setting, sample insertion in the basket, temperature setting, test starts. At the beginning and at the end of each drying cycle, the operator weighs the sample (without opening the oven door) and checks the weight variations till the difference between 2 consecutive weighings is below 0,05%.

SCIROCCO LIBECCIO

TECHNICAL FEATURES OF LIBECCIO AND SCIROCCO

- Electronic thermoregulator
- CD for dedicated software installation - only for SCIROCCO
- Temperature range up to +140°C
- Accuracy of the set temperature: ± 1°C
- Accuracy of the temperature reading probe: ± 0.01°C
- Safety system to avoid overheating
- Electronic movement of the basket to perform sample weighing
- Adjustment of the air exhausting flow
- Heating system: 9 resistances
- Conditioning chamber dimensions: 340 x 350 x 420 mm

REFERENCE STANDARDS

UNI EN ISO 2060, ISO 2060, ISO 6348, ISO 6741-1, ISO 6741-2, ISO 6741-3, ASTM D1576, ASTM D2495, IWTO 33 - 03, IWTO 34 - 98, UNI 1335, UNI 9213-1, UNI 9213-2, UNI 9213-3, UNI 9213-4, UNI 9213-5, UNI 9213-6.

Photographs and descriptions of the present leaflet have to be considered as purely indicative and not binding

INCLUDED ACCESSORIES

Laboratory Analytical and Precision Balance weighing capacity: 2.200 g; readability: 0,01 g; weighing pan size: 182 x 182 mm; enables to start weighing right	Code	165.760
Personal Computer - only for SCIROCCO	Code	237.92
LCD monitor - only for SCIROCCO	Code	250.300
Ink jet A4 printer - only for SCIROCCO	Code	250.4
Two baskets (sample holders) Ø 215 x H 220 mm each one		
Bar with hooks for sample holder baskets handling		

OPTIONAL

Calibration report	Code	172B CC1

DIMENSIONS / POWER SUPPLY

Weight: 150 kg (LIBECCIO) - 209 kg (SCIROCCO)
Dimensions (LIBECCIO): (L) 980 x (W) 700 x (H) 1350 mm
Dimensions (SCIROCCO): (L) 1000 x (W) 700 x (H) 1230 mm
Power supply: 3 x 230 Vac or 3 x 400 Vac, 50/60 Hz, three-phase + N
Installed power: 7,2 kW for LIBECCIO & SCIROCCO

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ACIMIT ITALIAN TEXTILE MACHINERY
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