Combustion Tube Furnace - CFM

General Information

The Carbolite Gero combustion tube furnace has been specifically designed for determining the quantity of carbon, hydrogen and sulphur in the analysis sample of coal and coke using test methods in accordance with the following standards:

Standards to test for Carbon, Hydrogen & Sulphur
BS 1016-6 & 7:1977 Methods for analysis and testing of coal and coke. Ultimate analysis of coal; ISO 609:1996 Solid mineral fuels - Determination of carbon and hydrogen.
Standards to test for Sulphur
ASTM D4239 Standard Test Methods for Total Sulphur in the Analysis Sample of Coal and Coke Using High temperature tube furnace combustion
BS1016-106.4.2:1996 ISO 351:1996 Solid mineral fuels - Determination of total sulphur - High Temperature combustion method
The CFM is available with maximum operating temperatures up to 1200°C (CFM12) and 1400°C (CFM14) and is also ideal for a wide range of laboratory tube furnace applications.

The CMF 14/AUX models include an auxiliary heater for carbon and hydrogen tests in line with international standards BS 1016-6 & 7:1977 - 'Methods for analysis and testing of coal and coke. Ultimate analysis of coal'. The AUX models are used to heat a silver gauze roll for the retention of oxides of sulphur.

Standard features

- Maximum operating temperatures 1200°C and 1400°C
- Carbolite Gero 301 controller, with single ramp to set-point & process timer
- Over temperature control
- For the determination of sulphur, chlorine, hydrogen and carbon in coal and coke
- AUX models use an auxiliary heater to heat the silver gauze portion of the tube

Options (specify these at time of order)

- IAP tubes with 25 mm inner diameter, 32 mm outer diameter and 750 mm length

Technical Specifications

Combustion Tube Furnace - CFM

CFM 12/1	
Max temp (°C)	1200
Maximum continuous operating temp (°C)	1150
Heated tube length (mm)	300
Number of tubes	1
Furnace inner diameter (mm)	38
Worktube inner diameter (mm)	25
Max power (W)	950
Dimensions: External H x W x D (mm)	526 x 422 x 363
Power supply	220V - 240V, 50-60Hz, single phase

CFM 12/2	
Max temp (°C)	1200
Maximum continuous operating temp (°C)	1100
Heated tube length (mm)	300
Number of tubes	2
Furnace inner diameter (mm)	38
Worktube inner diameter (mm)	25
Max power (W)	1800
Dimensions: External H x W x D (mm)	526 x 422 x 363
Power supply	220- 240V / 50-60Hz, single phase

CFM 14/1	
Max temp (°C)	1400
Maximum continuous operating temp (°C)	1300
Heated tube length (mm)	180
Number of tubes	1
Furnace inner diameter (mm)	38
Worktube inner diameter (mm)	25
Power (W)	2250
Dimensions: External H x W x D (mm)	526 x 422 x 363
Power supply	220- 240V / 50-60Hz, single phase

Combustion Tube Furnace - CFM

CFM 14/2	
Max temp (°C)	1400
Heated tube length (mm)	180
Number of tubes	2
Maximum continuous operating temp (°C)	1300
Furnace inner diameter (mm)	38
Worktube inner diameter (mm)	25
Power (W)	2250
Dimensions: External H x W x D (mm)	526 x 422 x 363
Power supply	220- 240V / 50-60Hz, single phase

CFM 14/1 AUX	
Max temp (°C)	1400
Maximum continuous operating temp (°C)	1300
Heated tube length (mm)	180
Number of tubes	1
Furnace inner diameter (mm)	38
Worktube inner diameter (mm)	25
Max power (W)	2333
Dimensions: External H x W x D (mm)	526 x 422 x 363
Power supply	220- 240V / 50-60Hz, single phase

CFM 14/2 AUX	
Max temp (°C)	1400
Maximum continuous operating temp (°C)	1300
Heated tube length (mm)	180
Number of tubes	2
Furnace inner diameter (mm)	38
Worktube inner diameter (mm)	25
Max power (W)	2333
Dimensions: External H x W x D (mm)	526 x 422 x 363
Power supply	220- 240 / 50-60Hz, single phase