



Proximate Analyser / TGA/ **prepASH® 340 Series**
Special application for Coal & Coke as per **ASTM no D 5142-09**
Automatic Moisture, Volatiles, Ash, Fixed Carbon & Drying System

Precisa

■ The Balance of Quality ■

3 times as efficient.



The three new models in the prepASH® 340 series represent the highest level of thermo-gravimetric analysis and offer a unique combination of important advantages:

- Massive reduction of the work-load through the simultaneous evaluation of the moisture and ash content of up to 29 samples in one cycle without dessicator.
- Fully automatic thermo-gravimetric analysis with end-point recognition replaces drying oven and muffle furnace.
- High performance ceramic crucibles and turn-table enable operation at temperatures of up to 1000° C.
- Freely programmable temperature profile and various stop-modes mean that each cycle can be specifically adapted to the sample undergoing test.
- Selectable atmosphere (N₂, O₂), exhaust option for measure sulphate-ash.

The optimum solution for each application

- prepASH 229 for 29 samples or 12 samples in Conradson Crucibles*
- prepASH 219 for 19 samples or 12 samples in Conradson Crucibles*
- prepASH 212 for 12 samples in Conradson Crucibles*

*for example, flour

Convincing features.



Swiss precision and excellence in engineering bring about a significant improvement of measuring results by:

- Built-in high performance analytical balance enables direct weighing-in and continuous control of the analytical cycle and end-point recognition.
- Rotation of the turn-table and other features of construction provide homogenous temperature distribution and identical conditions for each sample.
- Fully automatic cycle ensures best reproducibility.
- Graphical report of measuring values, either single or in groups, with sample recognition in colour.
- Software corresponds to the requirements of FDA CFR 21 Part 11.
- Measurements meet the requirements of DIN, ASTM, ICC and others.
- Carbon application per ASTM
Carbon application per ASTM D 5142 Special software for the simultaneous determination of moisture, ash, volatiles and fixed carbon in coal, coke etc.

Everything under control at all times.



In order that you are always in control and can prove the quality of your products and services:

- Real-time evaluation of loss of weight during the drying and ashing process is shown directly on the prepASH display and via network to external computer (prepASH can also be operated without computer !).
- Print-out showing the weight changes of all samples either singly or in groups, with sample recognition in colour.
- Automatic calculation of results in chosen units.
- Error free reports conform to GLP guidelines.

Additional optional features

- Sample results tables, preparation and evaluation by networked computer.
- Various communication ports such as Ethernet, USB and RS232.

Technical Data

Model	prepASH 229	prepASH 219	prepASH 212
Samples, Crucibles			
Samples	29	19	12
Turn-table for Precisa Crucibles	yes	yes	no
Turn-table for Conradson or standard Crucibles	optional	optional	yes
Precisa Silicate Ceramic Crucibles	35	25	no
Precisa Aluminum Oxide Crucibles	optional	optional	no
Conradson Crucibles (for flour application)	optional	optional	15
Weighing system			
Weighing range	120 g	120 g	120 g
Readability	0.0001 g	0.0001 g	0.0001 g
Minimum sample weight	0.1 g	0.1 g	0.1 g
Heating control system			
Temperature range	50 °C – 1000 °C	50 °C – 1000 °C	50 °C – 1000 °C
Temperature stability	+/- 2 %	+/- 2 %	+/- 2 %
Process control system			
Maximum program steps	10	10	10
Maximum total analysis time	36 h	36 h	36 h
Auto stop	0.1-100 mg/min, mg/30min, mg/60min	0.1-100 mg/min, mg/30min, mg/60min	0.1-100 mg/min, mg/30min, mg/60min
Atmosphere			
Oxygen, 0/3/6/9 l/min	optional	optional	optional
Nitrogen, 0/3/6/9 l/min	optional	optional	optional
Air, 0/3/6/9 l/min	optional	optional	optional
Exhaust	yes	yes	yes
Absorption unit for sulphuric acid	optional	optional	optional
Results			
Weight loss/Residual weight	%, ‰, g	%, ‰, g	%, ‰, g
Weight loss/Residual weight related to pre-interval	%, ‰, g	%, ‰, g	%, ‰, g
Monitoring			
Remote on PC via Network	yes	yes	yes
Acoustic	yes	yes	yes
Alarm output for external control	yes	yes	yes
Operation			
Display	5.7" VGA color	5.7" VGA color	5.7" VGA color
Keyboard	touch screen	touch screen	touch screen
Menu-controlled	yes	yes	yes
PC independent operation	yes	yes	yes
Sample list, preparation and evaluation on PC via network	yes	yes	yes
Sample preparation outside (with balance)	yes	yes	yes
Printout			
Graphic	yes	yes	yes
Table	yes	yes	yes
Method	yes	yes	yes
Memory capacity			
Methods	unlimited	unlimited	unlimited
Measured values	unlimited	unlimited	unlimited
Data output, interfaces			
RS232 Interface (PC, Printer)	yes	yes	yes
USB Interface (Printer, Memory stick)	yes	yes	yes
Ethernet (Network for PC, Printer, ...)	yes	yes	yes
Alarm output	yes	yes	yes
Calibration			
Balance	yes	yes	yes
Temperature	yes	yes	yes
Connection			
Mains voltage	230 VAC (+15/-20 %)	230 VAC (+15/-20 %)	230 VAC (+15/-20 %)
Frequency	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz
Current input	15 A	15 A	15 A
Weight and dimensions			
Weight	57 kg	57 kg	57 kg
Dimensions (H) Height with cover opened	H (H) x B x T / 620 (980) x 590 x 870 mm	H (H) x B x T / 620 (980) x 590 x 870 mm	H (H) x B x T / 620 (980) x 590 x 870 mm

Accessories

PC software for extended data evaluation and monitoring, «Multi Monitoring Professional»	yes	yes	yes
Desktop PC incl. Windows XP Prof. engl.	yes	yes	yes
Tablet PC incl. Windows XP Prof. engl.	yes	yes	yes