

Project Title: To study the coal characteristics of north-eastern coals for estimation of gas content with in coasi seams and storage capacity coal

Annexure - III

Proximate Analyzer

To determine the content of moisture, ash, volatile matter and fixed carbon in organic matter such as coal.

Technical Parameters:-

1. Sample quantity/ test time:
2. Moisture 1~16 samples, classic method 60min., 90 min (anthracite, lignite);
3. Ash 1~16 samples, classic fast ash method 45 min, classic slow ash method 150 min;
4. Volatile matter 1~10 samples, 7 min;
5. Self defined method Moisture 12°C 16 samples/25 min, Ash 900°C 16 samples/30 min;
6. Sample mass: 0.5~50g
7. Temperature control precision: +2.5°C (Moisture, +5°C (ash, volatile matter)
8. Furnace temperature range: room temperature to 950°C
9. Analytical balance precision: 0.001g
10. Air flow: 10L-12L /min
11. Power Requirement: 220 V (-15% ~ 10%), 50/60 Hz
12. Max. Power: 4kW.

(Include accessories such as Crucible, Gas regulator, application software, gloves etc.)

Ultimate Analyzer

To determine weight percent of carbon as well as hydrogen, nitrogen and sulfur in coal.

Technical Parameters:-

1. Furnace temperature range: room temperature ~ 999 ° C
2. Temperature control accuracy: ± 5 ° C
3. Sample quality: 0.5g ~ 1g
4. The number of samples: 1 ~ 19
5. Run time :< 10 min
6. Oxygen flow: 3 ~ 5L / min
7. Power supply voltage: AC220V 50Hz
8. Max. Power: 4 KW

(Include accessories such as Gas regulator, application software, spatula, gloves etc.)