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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 6948-2008

Replacing GB/T 6948-1998

**Method of determining microscopically the reflectance of
vitrinite in coal**

煤的镜质体反射率显微镜测定方法

(English Translation)

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Foreword

This revised standard adopts ISO 7404-5:1994 (E) "bituminous coal and anthracite coal and rock analysis methods --- Part 5. vitrinite reflectance Microscopic determination "rate (in English).

This standard is based on ISO 7404-5. redraft 1994 (E). For ease of comparison, the information listed in Appendix A of this national standard List of international control and provision of standard terms and conditions.

Because of legal requirements and the actual situation, the present standard in the use of international standards has been modified. These technical differences vertical single Line identification in which they are involved in terms of margin. Appendix B gives a list of the technical differences and their reasons, for reference.

For ease of use, this standard also made the following editorial changes.

- a) "this International Standard" be replaced by "this standard";
- b) use a decimal point instead of a decimal comma " , " . " , " ;
- c) Remove the foreword and introduction of international standards.

This standard replaces GB/T 6948-1998 "coal vitrinite reflectance microscopy determination." the main changes in the standard of GB/T 6948-1998 compared as follows.

--- The GB/T 6948-1998 of the "instrument", "microscope photometer technical requirements" of the content included in MT/T 1053-2008 "Determination of vitrinite reflectance microscope photometer technical conditions" in Chapter 6 and 8.2 of this standard references to the coal industry standard;

--- Increased the determination of Coal Blending vitrinite reflectance (8.3.4 of this standard).

The Standard Appendix A, Appendix B, Appendix C, Appendix D is an informative annex.

The standard proposed by China Coal Industry Association.

This standard coal by the National Standardization Technical Committee (SAC/TC42) centralized.

This standard was drafted. Coal Research Institute, Xi'an Institute.

1 Scope

This standard specifies the method for the determination of the polished surface of coal vitrinite maximum reflectivity and the random reflectivity under a microscope, oil immersion objective.

This standard applies to single seam of bituminous coal and anthracite coal blending or mixing the reflectivity measurement. Lignite reflectometry, carved rocks Reflectance measurement using bulk organic matter can be referred. This standard does not apply to explain vitrinite by a computer software by automating microscopic analysis the method of measuring the reflectance values. This standard does not apply to the determination of the composition of mixed blending ratio.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 12937 Rock term coal (GB/T 12937-2008, ISO 7404-1:1994, Methodsforthepetrographica-nalysisofbituminouscoalandanthracite-Part 1. Vocabulary, MOD) GB/T 16773-2008 analysis of coal sample preparation method (ISO 7404-2. 1985, Methodsforthepetrographica-nalysisofbituminouscoalandanthracite-Part 2. Methodofpreparingcoalsamples, MOD) MT/T 1053-2008 measuring microscope photometer technical conditions vitrinite reflectance

3 Terms and Definitions

Terms and definitions GB/T 12937 in established apply to this standard.

Principle 4

Oil immersion objective under the microscope, the reflected light on the inner surface of the mirror polishing plastids defined area of \u200b\u200bvertical incident light ($\lambda = 546\text{nm}$) photoelectric Converters measured intensity, with a standard material of known

reflectance intensity of reflected light under the same conditions for comparison.

Because of minor differences between each single coal seam in the optical properties of vitrinite particles, the greater the difference in Coal Blending in, it must be different from the particles Obtain a sufficient number of measured values \u200b\u200bto ensure the representation of the results.

5.1 Oil solution

Should be easy to dry, non-corrosive, non-toxic substances in liquid oil, at which time refractive index n_D at 23 °C ($\lambda = 546\text{nm}$ of light) Was 1.5180 ± 0.0004 , the temperature coefficient of less than 0.0005K^{-1} .

Should regularly check the oil liquid refractive index.

5.2.1 Reflectance standard substance

It should be used in a range of biomass and coal reflectance standard reflectance similar. We should use the former State Quality and Technical Supervision approved Measuring instruments --- microscope photometer reflectance standard substance in Table 1. Coal can also be used with other similar reflectivity certified Standard material.

So please keep the reflectance standard material surface finish. Polished surface of the microscope optical axis vertical.