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

DZ/T 0175-2014

**Specifications for Geological Mapping of Coal (1:50000 1:25000
1:10000 1:5000)
(English Translation)**

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1 Scope

This Standard stipulates the technical requirements of coalfield geological mapping work (1:50000 1:25000 1:10000 1:5000), such as working level requirements, data collection and geological survey, design formulation and review, work content and precision requirements, original catalog and data organization, field quality inspection and acceptance, report formulation and submission, etc.

This Standard is applicable to coalfield geological mapping (1:50000 1:25000 1:10000 1:5000) in the various stages of coal resource survey and coalfield geological survey in exposed and semi-exposed bedrock areas. It is the main basis for the design, construction, quality control, achievement submission and acceptance review.

2 Normative References

The following documents are indispensable to the application of this document. In terms of references with a specified date, only versions with a specified date are applicable to this document. In terms of references without a specified date, the latest version (including all the modifications) is applicable to this document.

GB/T 18341 Specifications of Survey for Geological and Mineral Resources
Exploration;

GB/T 25283 Specification for Comprehensive Exploration and Evaluation of Mineral Resources;

DZ/T 0078 Procedures for Original Geological Record of Solid Mineral Exploration;

DZ/T 0079 Solid Mineral Exploration Report Requirements for Comprehensive Arrangement and Study of Geological Data;

DZ/T 0080 Specifications for Geophysical Logging of Coal;

DZ 0141 Probing Specification of Geological Exploration;

DZ/T 0215 Specifications for Coal, Peat Exploration;

MT/T 1042 Quality Standard of Drill for Coal Geology Exploration;

e) Prospecting stage 1:10000 or 1:5000.

4 Requirements of Working Level

4.1 1:50000 Coalfield Geological Mapping

4.1.1 Preliminarily identify stratigraphic sequence. In accordance with the requirement

of multiple stratigraphic division, divide rock stratigraphic unit and chronostratigraphic unit. If conditions allow, divide bio-stratigraphic unit. Mapping unit shall be divided into

"group", if necessary and if possible, key seams¹ shall be divided into "section". The quaternary system shall be divided in accordance with the actual demand.

4.1.2 Preliminarily identify coal-bearing stratum era; understand the thickness and

distribution range of coal-bearing stratum; understand the number and the thickness of coal seam. Preliminarily establish regional contrast signs. If conditions allow, conduct preliminary contrast of the main coal seams.

4.1.3 Preliminarily understand geological structure. Preliminarily identify the ground

location and the nature of fault with the stratigraphic separation of more than 100 m, or, with the exposed length of more than 1,000 m. Preliminarily identify the ground location of pleated crankshaft with the length of more than 2,000 m.

4.1.4 Preliminarily understand the distribution of various types of production mines and

old kilns.

4.1.5 Preliminarily understand the type and the quality of coal.

4.1.6 Preliminarily understand the condition of other mineral products.

4.1.7 Preliminarily understand the type, nature and basic distribution range of
magmatic rocks.

4.1.8 Preliminarily understand the features of surface hydrogeology, engineering
geology, environmental geology and disaster geology.

4.2 1:25000 Coalfield Geological Mapping

4.2.1 Identify stratigraphic sequence. In accordance with the requirement of multiple

stratigraphic division, specifically divide stratum; the unit of geological mapping shall be divided into "group". If conditions allow, key seams shall be divided into "section".

The quaternary system shall be divided in accordance with the actual demand.

4.2.2 Identify coal-bearing stratum era; specifically understand the thickness and

distribution range of coal-bearing stratum; understand the number, position, thickness, structure and possible variation of main coal seams. Establish whole-region coal seam

1 Contain coal stratum, overlaid key seam and other seams that are worth paying attention to.

rocks. Preliminary understand the influence of magmatic rocks on coal seams and coal quality.

4.3.8 Understand the features of surface hydrogeology, engineering geology, environmental geology and disaster geology. Preliminarily identify the location of flooding line of main rivers.

4.4 1:5000 Coalfield Geological Mapping

4.4.1 In accordance with the requirement of multiple stratigraphic division, specifically

divide the stratum. The unit of geological mapping shall be divided into "group"; key seams

shall be divided into "section" or "sub-section" (or "seam", "belt"). Other strata may be divided in accordance with the actual demand.

4.4.2 Specifically study coal-rock seam contrast; preliminarily identify the number, position, thickness, structure and surface variation rule of exploitable coal seams.

Establish contrast signs (including regional signs) of various coal seams; whole- regional exploitable coal seams shall be clearly contrasted; mostly exploitable coal seams and partially exploitable coal seams shall be basically contrasted. Estimate the main exploitable coal seams of resources/reserves. In principle, the exposure site of coal seam shall be actually measured. If conditions allow, the main marker seam shall be actually measured.

4.4.3 Preliminary identify the features of geological structure. Preliminarily identify the

ground location and the nature of fault with the stratigraphic separation that equals to or is more than 20 m (15 m ~ 10 m under good geological conditions), and, pleated crankshaft with the exposed length of more than 100 m. Fault whose stratigraphic separation is less than 20 m (10 m under good geological conditions) in work shall be added to geological map; try to identify its ground location and nature. In terms of small structures (joints and cracks, etc.), conduct observation and description.

4.4.4 Specifically survey the distribution and exploitation of various types of production

mines and old kilns; understand the range and water accumulation of old worked-out kilns.

4.4.5 Specifically survey the coal quality features and surface variation of exploitable

coal seams. Preliminary determine the type of coal.

4.4.6 Specifically understand the surface reserves of other mineral products.

4.4.7 Understand the type, nature, occurrence and distribution range of magmatic

rocks. Preliminary understand the influence of magmatic rocks on coal seams and coal quality.

4.4.8 Understand the features of surface hydrogeology, engineering geology, environmental geology and disaster geology. Identify the location of flooding line of main rivers. Preliminarily identify the type, location and range of disaster geology.

geological interpretable degree.