

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

DZ/T 0207-2002

**Specifications for glass-grade silicon materials, ornamental
stone, gypsum, chrysotile asbestos, wollastonite talc and
graphite exploration
(English Translation)**

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1 Scope

This Standard specifies the exploration and control level, the quality of exploration work, mineral resources / reserves classification and type conditions, mineral resources / reserves estimates, and other requirements for glass-grade silicon materials¹, ornamental stone², gypsum³, chrysotile asbestos⁴, wollastonite, talc, graphite. It puts forward the feasibility of the basic requirements for evaluation, and the types of deposit exploration for analogy and the general spacing of exploration projects for reference.

This Standard applies to mineral exploration, mineral resources / reserves estimates, acceptance, review geological exploration report of glass-grade silicon materials, ornamental stone, gypsum, chrysotile asbestos, wollastonite, talc, graphite. It can also be used as a basis for evaluation and estimation of mineral resources / reserves in the transfer, listing, exploration and financing of mineral exploration and mining of the above-mentioned minerals.

2 Normative references

The provisions in following documents become the provisions of this

Standard through reference in this Standard. For dated references, the subsequent amendments (excluding corrigendum) or revisions do not apply to this Standard, however, parties who reach an agreement based on this

Standard are encouraged to study if the latest versions of these documents are applicable.

For undated references, the latest edition of the referenced document applies.

GB/T 12719-91, Exploration specification of hydrogeology and engineering geology in mining areas

GB/T 13908-2002, General requirements for solid mineral exploration

1 The glass-grade silicon materials referred in this Standard are mainly used for flat glass commonly used silicon materials, including quartzite, quartz sandstone, vein quartz and quartz sand.

2 ornamental stone refers to the natural stone which is mainly used for the decoration of interior and exterior surfaces of buildings. There are mainly two types, that is, marble and granite.

3 Gypsum includes gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) and anhydrite (CaSO_4).

4 Chrysotile asbestos is also known as serpentine asbestos.

industrial value. When necessary, it circles exploration area for pre-feasibility studies, mine master plans and mine project proposals. For the deposit that can directly provide the development and utilization, its processing beneficiation test level shall reach the design requirements for mine construction.

Exploration is for a prospecting area that is known to have a deposit of industrial value or has been through the detailed investigation. By encrypting various sampling projects, the spacing is sufficient to confirm the continuity of the ore body. It determines the geological characteristics of the deposit in detail. It determines the ore body morphology, occurrence, size, spatial location and ore mass characteristics. It has a detailed identification of ore mining technical conditions. It performs laboratory flow test or continuous laboratory expansion test on mineral processing and dressing performance.

When necessary, it shall carry out semi-industrial test for the feasibility study so as to provide the basis for the design of mine construction.

4.1.1 Pre-investigation stage

Make a comprehensive collection of regional geological data and mineral distribution and other relevant information. Research to predict the geology and tectonics in the area, the distribution of ore spots and prospects of mineralization. When necessary, select favorable locations to carry out route geological reconnaissance. Make an analogy with known deposits of similar geological characteristics. Put forward potential mineralization areas for further work.

4.1.2 General investigation stage

Fully collect and study regional geological data and mineral distribution.

According to the distribution of prospecting minerals, encircle a detailed investigation area or look for deposits (spot) found for further work. Make a general identification on the general investigation area geology and tectonics, ore-bearing, deposit distribution and prospects of mineralization. For ore deposits (spots) with further work value, it shall generally find out the distribution range of ore body, the number of ore bodies, scale, shape, occurrence, distribution and influence of sandstone, and the factors that affect, destroy the ore body.

4.1.4.2 Research on orebody geology

Determine in detail the spatial distribution of ore bodies and their extent.

Identify the scale, shape, occurrence and distribution of the main ore body and the distribution of the post-ore-bearing faults and magmatic rocks to the ore body. Find out the contrast sign of the ore body, make it connect rationally well.

Make a basic identification on the ore body's oxidation zone, weathering zone depth and cover thickness and distribution range. And understand its material composition. Study the effects of weathering (oxidation) on ore mining, mineral processing and other aspects. Study the karst development, distribution and destruction of the carbonate ore body.

For ornamental stone, it shall the nature, occurrence, distribution and regularity of joint fissures and bedding planes in ore bodies, the joint fissures, the spacing between bedding planes, the joint fissure rate, the aspect ratio (bars/m); the species, shape, size, quantity, occurrence, distribution of intensive conditions and laws of detachments, remnants, xenoliths, fine veins and other stains, color lines in ore bodies as well as the impact on blocks and block rate.

For gypsum, it shall study the impact or destruction of leaching, hydration on the ore bodies.

For chrysotile asbestos, it shall study the cotton body in the ore, cotton veins group, stone folder and other components; basically identify the cotton fiber type, output characteristics, cotton separator, nature of the composition and structural features; basically find out the cotton combination type within the cotton group, cotton spacing, stone folder output characteristics and the scale of the cotton group; study in detail the number of cotton groups in the ore body, the mutual arrangement of the form and spacing, the inter-cotton group stone folder output characteristics; study in detail the nature and distribution of graded or non-serpentine rock mass and its influence on ore body and ore.

4.2.1 Pre-investigation stage

Compare with the known deposit and understand the mass of ore in the pre- inve...

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