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

GB/T 50862-2024

Replacing GB 50862-2013

Standard for measurement of blasting works

爆破工程工程量计算标准

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1 General provisions

1.0.1 The standard was drawn up in order to regulate the measurement of quantities in construction projects and to unify the rules for calculating quantities of blasting works and the method of preparing the bill of quantities.

1.0.2 It applies to the measurement of quantities and to the preparation of bills of quantities for blasting works, both at the award of the contract and during the execution stage.

1.0.3 Measurement of quantities of blasting works shall be carried out in accordance with this standard.

1.0.4 Besides complying with this standard, the measurement of quantities of blasting works shall also comply with the provisions of the relevant current national standards.

2 Terms

2.0.1 measurement of quantities: the activity of calculating engineering quantities in accordance with the engineering design documents, the technical standards and unified standards for the calculation of quantities.

2.0.2 blasting works: works in which the energy released by the explosion of an explosive performs work so as to reach a predetermined objective.

2.0.3 rock-soil blasting: an operation in which the energy released by the explosion of an explosive performs work on a rock or soil medium so as to reach a predetermined objective.

2.0.4 surface blasting: rock-soil blasting operations carried out at the ground surface.

2.0.5 underground blasting: rock-soil blasting operations carried out underground, for example in underground mines, underground chambers and tunnels.

2.0.6 chamber blasting: an operation in which concentrated or elongated charges placed in chambers are used to blast and excavate rock and soil.

2.0.7 demolition blasting: an operation in which buildings or structures are demolished by blasting according to the design requirements, with measures taken to control the adverse effects.

2.0.8 underwater blasting: blasting operations carried out in water or in the medium at the bottom of the water.

2.0.9 oil and gas well perforation blasting: a blasting operation in which shaped-charge perforating devices are used down the well, at the oil or gas bearing horizon, to perforate the casing and the oil bearing rock.

2.0.10 blast processing: a processing method in which the instantaneous high temperature and high pressure of the explosion of an explosive are used to deform material at high speed, to cut it, to bond (weld) pieces together, or to change the structure of the substance.

2.0.11 adverse effects of blasting: the harmful influence that blasting may have on the objects to be protected near the blasting area, including ground vibration, individual flying fragments, air shock wave, noise, underwater shock wave, dynamic water pressure, surge waves, dust and harmful gases.

2.0.12 blasting tests: test items carried out at the blasting site on the explosive performance of the blasting materials and on the blasting effect, and test and monitoring items intended

to establish the material of the object to be blasted, the performance of the blasting materials, and the parameters of the safety design.

2.0.13 blasting environment: the natural conditions and the state of the surroundings, in the blasting area and around it, that affect the safety of the blasting.

2.0.14 grades of blasting works: the division of blasting works into the four grades A, B, C and D, according to the type of works, the total charge of a single blast, the complexity of the blasting environment and the characteristics of the object blasted, as provided by the current national standard GB 6722 Safety regulations for blasting.

3 Measurement of quantities

3.0.1 Besides the provisions of this standard, measurement of quantities shall also be based on the approved construction design drawings and their explanatory notes, on the relevant technical standards, and on other relevant technical and economic documents.

3.0.2 Measurement during the execution of the works shall comply with this standard and also with the relevant provisions of the current national standard GB/T 50500 Standard for bills of quantities and valuation of construction works.

3.0.3 When quantities are measured, the number of significant figures in the total of each item is fixed: items expressed in tonnes keep three decimal places, the fourth being rounded; items expressed in metres, square metres, cubic metres or kilograms keep two decimal places, the third being rounded; items counted in pieces, units, lengths, sets, systems, points or occurrences are taken as whole numbers.

3.0.4 Unless this standard provides otherwise, items of blasting works that involve manual earth excavation, rock excavation and support works shall follow the corresponding items of the current national standard GB/T 50854 Standard for measurement of building and decoration works, and items that involve installation work such as electrical work and water supply and drainage shall follow the corresponding items of the current national standard GB/T 50856 Standard for measurement of general installation works.

4.1 General requirements

4.1.1 The bill of quantities shall be prepared on the basis of this standard and the current national standard GB/T 50500; of other measurement standards, valuation rules and supplementary rules for the calculation of quantities issued by national, provincial or sectoral construction authorities; of the design documents and technical data of the construction project; of the standards and codes relating to the project; of the tender documents; of the conditions of the construction site and the geological and hydrological data; and of other relevant material.

4.1.2 The item features in the bill of quantities shall be described in the light of the