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

GBZ/T 276-2016

**Fit test panels for self-inhalation air-purifying respiratory
protective equipment
(English Translation)**

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1 Scope

This Standard stipulates the fit test panels for the design and inspection of self- inhalation air-purifying respiratory protective equipment.

This Standard is applicable to the design, selection and inspection of self-inhalation air-purifying respiratory protective equipment.

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 5703 Basic Human Body Measurements for Technological Design

GB/T 18664-2002 Selection, Use and Maintenance of Respiratory Protective Equipment

3 Terms and Definitions

The following terms and definitions are applicable to this document.

3.1 Self-inhalation Air-purifying Respiratory Protective Equipment

Self-inhalation air-purifying respiratory protective equipment refers to air-purifying respiratory protective article that overcomes resistance of components through the wearer's respiration.

3.2 Bizygomatic Breadth

Bizygomatic breadth refers to the straight-line distance between the left and the right zygomatic points.

3.3 Face Length / Nasion-menton

Face length / nasion-menton refers to the distance between the nasion and the chin point.

3.4 Fit Test

Fit test refers to the method for testing the suitability of a certain type of sealing respiratory protective equipment for specific users.

3.5 Face-seal Check

Face-seal check refers to a method of tightness inspection performed by the user of respiratory protective equipment to ensure that sealing face mask is worn in the correct position.

4.1 Principle of Fit Test Panel

The indicators of fit test panel are face length / nasion-menton and bizygomatic breadth.

The measurement of face length / nasion-menton and bizygomatic breadth is shown in GB/T 5703. In accordance with the two indicators: face length / nasion-menton and bizygomatic breadth of adults, divide them into 10 facial types, number them by #1 ~

#10. The coverage of the fit test panel is above 95%, and the coverage of the various facial types is larger than 2%.

4.2 Range of Facial Types

In terms of head-face binary fit test panel, the range of bizygomatic breadth is 127.5 mm ~ 158.5 mm; the range of face length / nasion-menton is 96.5 mm ~ 132.5 mm.

4.3 Method of Fit Test Panel

Binary fit test panel for adults complies with the actually measured face length / nasion-menton and bizygomatic breadth. See Figure 1 for facial types.

4.4 Application of Fit Test Panel

When performing fitness test of self-inhalation air-purifying respiratory protective equipment, select testers that meet the various facial types in the sub-column of Figure

1. Please refer to Appendix A for the method of application. Individuals may base on the

facial types to select a corresponding model of self-inhalation air-purifying respiratory protective equipment. Before use, the wear tightness inspection shall be performed, then, the fitness test shall be conducted, so as to guarantee the effect of self-inhalation air-purifying respiratory protective equipment.

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