

Types of Gas Respirators Most Widely Used in Japan

Norikazu Kurano, Meguru Inai and Hiroshi Yamada

Shigematsu Works Co., Ltd.
267 Yashita, Iwatsuki, Saitama 339-0046, Japan
Tel:048-757-2611 Fax: 048-756-7969
e-mail: n-kurano@sts-japan.com

ABSTRACT

Gas respirators with a half facepiece and one or two chemical cartridges directly mounted to the facepiece are most widely used in Japan nowadays, due to the circumstances that toxic gases are rarely generated at high concentrations in usual workplaces.

The gas respirators with lighter weight, smaller size and lower breathing resistance will be the most desirable for wearers. On the other hand, gas respirators must provide sure function of performance for the respiratory protection. Therefore, considering the aspects of safety, convenience and the cost for users, it will be most practical to use smaller and inexpensive cartridges which can meet the work environment.

We verified the above situation by the following methods.

- a. Setting out a questionnaire on type of gas respirator, working environment and using situation to industrial users
- b. Evaluating the remaining capacity of organic vapor cartridges with dichloromethane after being used in the actual workplaces.

The results of questionnaire show that chemical cartridges were widely used in work place. And the results of evaluating the remaining capacity of the cartridges show that the capacity still remains in many cases. We will discuss on the future trend what type of gas respirators will be required.