FAST Guide: Respirator Selection

Protect Your Respiratory Health

Respirators are one of the most important personal protective devices for working in hazardous environments.译文：呼吸器是工作在危险环境中的最重要的个人防护装备之一。

In order to provide proper protection you will need to assess the hazards, choose an appropriate respirator, fit test, and then train employees on how to use them.译文：为了提供适当的保护，你需要评估危险，选择合适的呼吸器，进行面罩密合性测试，并培训员工如何使用它们。

Know your hazards

In order to provide proper protection, you must first identify the hazards you may be exposed to and select the appropriate respirator for fitting and using.译文：为了提供适当的保护，你必须首先识别你可能暴露的危险，并选择合适的呼吸器来适配和使用。

Respirator Types

Disposable Facepiece Respirators

- Advantages:
  - Light and comfortable
  - Improves comfort and performance
  - Low cost and easy to use

- Limitations:
  - Insufficient protection for most hazards

Reusable Elastic Respirators

- Advantages:
  - Lightweight and comfortable
  - Breathes through when worn properly
  - Filters are available to protect against specific contaminants

- Limitations:
  - Respirator requires more breathing effort
  - Masks are often too large or too small

Power Air-Purifying Respirator (PAPR)

- Advantages:
  - Light and portable
  - Offers low pressure breathing avoidance of airborne contaminants
  - Provides a high level of protection against airborne contaminants

- Limitations:
  - More expensive than other respirators
  - Requires a charged battery or air supply

Atmosphere-Supplying Respirators

- Advantages:
  - Oscillations between low and high pressures
  - Provides a high level of protection against airborne contaminants

- Limitations:
  - Requires high pressure breathing
  - Costly to purchase and maintain

Air-Purifying Respirators

- Advantages:
  - Lightweight and comfortable
  - Improves comfort and performance
  - Low cost and easy to use

- Limitations:
  - Insufficient protection for most hazards

Supplied Air or Airline Respirators

- Advantages:
  - Can use the respirator at any time
  - Provides high levels of protection against airborne contaminants

- Limitations:
  - Respirator must be used at all times
  - May not be suitable for every worker

Self-Contained Breathing Apparatus (SCBA)

- Advantages:
  - Free from hazard of the workplace
  - Provides high levels of protection against airborne contaminants
  - Does not require air supply

- Limitations:
  - Requires constant monitoring
  - High cost of purchase and maintenance

Cost Savings Ideas

- Offer employees a number of different respirators to choose from
- Offer employees corrective lenses or accessories

- Things to consider:
  - Budget
  - Product information
  - Ventilation
  - Workplace conditions


Safety Product Expertise

Respirator Fit Testing

Cost Savings Ideas

Fit Testing

In order to be sure a respirator is providing proper protection, it must properly fit the wearer. How to fit test a respirator will depend on the type of respirator.译文：为了确保呼吸器提供了适当的保护，它必须适配在穿戴者身上。如何对呼吸器进行适配将取决于呼吸器的类型。

QLFT Qualitative Fit Testing

A non-user specific test that makes no use of science or technology. If the respirator is properly fitted, the wearer will report it as comfortable. 译文：定性面罩密合性测试

QNFT Quantitative Fit Testing

A method that provides a quantitative assessment of how well a respirator will fit a wearer. It is also used to fit test respirators that require a facepiece seal. 译文：定量面罩密合性测试

Fastenal Safety Specialists

Looking for help selecting the proper respirator for your workplace? Contact our safety specialists for help. Translate to English: 安全专员

Cost Savings Ideas

Fit Testing

For more help selecting the proper respirator for your workplace, contact our safety specialists for help. 译文：为了帮助您选择合适的呼吸器，请联系我们的安全专员以获得帮助。