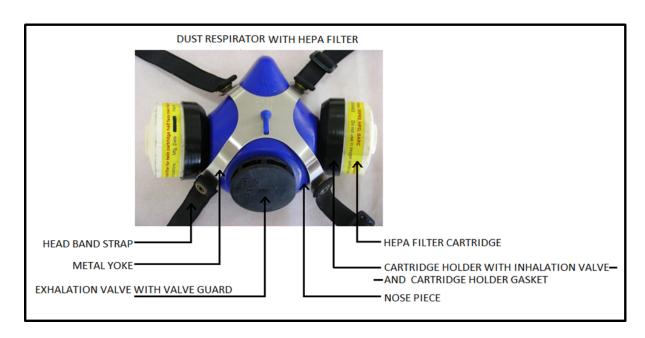
# **Half Face Mask Dust and Airline Respirators**

# **Overview:**

Respiratory protection is a necessary adjunct in any industry where dusty or toxic atmosphere is met within the working atmosphere. Even in the plants having well designed ventilation systems and confinement systems, use of respiratory protective equipment may become necessary under certain conditions to protect workers from inhalation hazards. The degree of respiratory protection needed can vary over a wide range and thus different types of respirators have come to be in use. Bhabha Atomic Research Centre has developed half face mask dust and airline respirators to protect from inhalation of atmospheric contaminants such as radioactive particulates, bacterial and viral loaded particles, dusts, fumes & vapours (using chemical cartridges), smoke etc.

# **Detail Technical Brochure:**

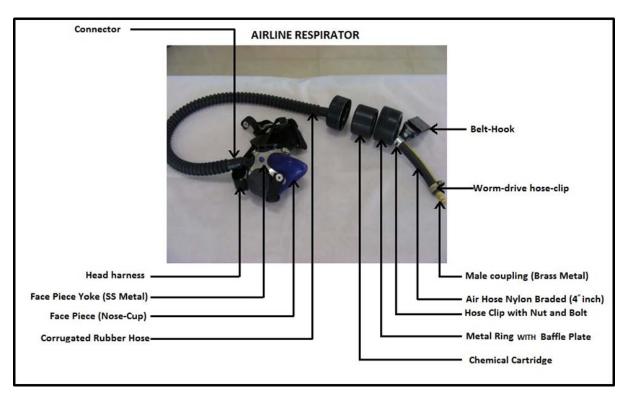
Half Face Mask Dust Respirator: This is an air-purifying respirator having half-face mask to cover nose and mouth. The dust respirator, a half-face mask fitted with HEPA filter cartridges (P100, P3 or FFP3 type) provides respiratory protection of the personnel against inhalation of atmospheric contaminants such as radioactive particulates, bacterial and viral loaded particles, dusts, fumes & vapors (using combination cartridges), smoke etc.. The mask can also be fitted with a pair of combination type filter cartridges to remove organic & iodine vapors in addition to particulates from the working atmosphere. The newly modified face piece of the mask made up of silicon elastomer has soft internally rolled periphery, which assures comfortable and airtight fit on persons of widely varying facial contours and sizes. These Respirators are normally fitted with a pair of high efficiency filter cartridges having minimum efficiency of 99.97% against 0.3-micron size particles.





**Half Face Mask Dust Respirator** 

Half Face Mask Airline Respirator: Airline respirator is a continuous flow air supplying respirator. It has a half mask face piece to which clean and filtered air is supplied through a small diameter air hose. In this type of respirator, a set amount of air is continuously fed to the face piece. This respirator can be used in an atmosphere contaminated with gaseous and /or particulate matter. Positive pressure inside the face piece gives very little possibility for outside contaminated air to leak in. Continuous flow of fresh and cool air to the face piece provides cooling to the face of the wearer. This type of respirator can be worn for long duration without any discomfort.



## **SALIENT FEATURES OF TECHNOLOGY**

#### **Half Face Mask Dust Respirator**

- Air purifying particulate respirator for non-IDLH environment
- New design of face piece for better fit and comfort
- Advance silicone material for increased comfort, greater durability, anti-bacterial and antiviral properties
- Soft Exhalation valve makes breathing easier
- Exhalation valve cover directs exhaled breath and moisture downward to reduce fogging
- New design of metal yoke with lock for easy adjustment of headbands and tight fit
- Low manufacturing cost

## Half Face Mask Airline Respirator

- Positive pressure respirator for non-IDLH environment
- Ideal for use where the wearer needs extended times in environments that are not immediately dangerous to life or health (non-IDLH) such as painting, plant maintenance & operations, welding etc.
- Can be used with various lengths of braided Airline Hose for a combined total of up to 300 feet
- Quick fit Connect option enables easy removal when needed
- Newly developed face piece for better fit and comfort
- Advance silicone material for increased comfort and greater durability
- Newly designed metal yoke for headband easy adjustments with lock
- Corrugated rubber hose for better body movements during work conditions
- No batteries or electronic parts to maintain

# **APPLICATIONS**

## **Half Face Mask Dust Respirator**

- These respirators are mainly used in an atmosphere where protection against fine toxic
  particles such as radioactive dusts, silica dusts, particles carrying bacteria, molds and viruses
  is required.
- The respirators can be used by workers in nuclear facilities such as nuclear reactors, fuel fabrication facilities, mines and other nuclear facilities
- The respirators are very useful for respiratory protection of the workers in the operations involving painting, welding, chemical handling, construction, mining, manufacturing of pharmaceuticals, smelting and oil exploration.