



# Respiratory Protection

For Tank Cleaning

aerospace  
climate control  
electromechanical  
**filtration**  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding



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# Respiratory Hazards when Tank Cleaning

Hazardous vapours, gases and fumes can be released at various stages when tank cleaning. Whether the risk is from noxious fumes, particulate or airborne contaminants, effective respiratory protection equipment is essential for the user.

In most cases simple orinasal, cartridge based filtering masks do not provide acceptable protection for the user. Where the risk of contamination is serious an air-fed respirator should be used.

## Hazards of Tank Cleaning

Tank cleaning can be extremely hazardous with obvious physical hazards. Some respiratory hazards have an immediate effect, others have a long-term carcinogenic effect.

- **Oxygen deficiency**  
Working in confined spaces
- **Vapours and fumes**  
From cleaning agents, solvents and disinfectants
- **Chemical exposure**
- **Particulate**
- **Lead**
- **Hydrocarbons**
- **Toxic dusts**
- **Microbiological agents**  
Common when moisture is present at the base of the tank

## Health & Safety Legislation

Employers are obliged under COSHH regulations (Control of Substances Hazardous to Health) to provide Respiratory Protective Equipment (RPE) in addition to Personal Protective Equipment (PPE) wherever there is the possibility of employees or site visitors inhaling hazardous substances. Compressed air used for breathing must comply with local legislation. In Europe the maximum levels of contamination permissible are outlined in EN 12021 and recommendations for selection, care and maintenance can be found in EN 529. It is essential that all items of RPE are tested for compliance at suitable intervals not exceeding one month.

Only approved equipment should be used and employers must take advice from equipment suppliers on correct use to prevent respiratory health problems.

## Respiratory Health Problems

The inhalation of hazardous substances can cause serious health problems including:

- **IDLH**  
Immediately dangerous to life or health
- **Emphysema**  
Lung Disease
- **Chronic Bronchitis**  
Irritation to airways
- **Asthma**  
Attacks of coughing, wheezing and tightness of chest
- **Rhinitis**  
Nasal irritation
- **Conjunctivitis**  
Watery eyes
- **Bronchitis**  
Coughing and shortness of breath
- **Respiratory Sensitisation**  
An irreversible allergic reaction



## Integrated solution

Parker domnick hunter has been supplying industry with air fed respiratory protection equipment for more than 30 years and is a world leader in the filtration, purification and separation of compressed air, gases and liquids.

To assist employers complying with current legislation, Parker domnick hunter offers a full range of respiratory protection equipment from portable systems suitable for single person use to full facility protection. The Parker domnick hunter RPE range filters compressed air to remove harmful particulates, odours and fumes providing a safe working environment.

Full support and guidance on system design, product selection and on site testing to EN 12021 is available to provide the most cost effective solution for your application.

Compliance with International Breathing Air standards means you can be sure of a safe air supply that provides effective protection from harmful substances and maintains employee health.

## Parker domnick hunter Respiratory Protection Equipment

Effective removal of:

- Solid particles
- Oil Mists & Vapour
- Odours & Fumes
- Water Mists & Vapour
- Optional Carbon Dioxide (CO<sub>2</sub>) reduction
- Optional Carbon Monoxide (CO) reduction



**BA-PAC**  
Personal respiratory protection. Lightweight activated carbon filter. Effective removal of odours and tastes.



**BAFP-064B and BAFP-170B**  
Up to eight users. Stationary applications. Wall mounted with integral CO monitor.



**BA-2006 and BA-2013**  
Point of use breathing air system for up to two users.



**BA-2010 / BAP-2010**  
Full facility protection. Five stage purification system, incorporating CO reduction.



**BA-4350 and BA-1400**  
Portable four man respiratory protection housed in a robust carry case.