

Respiratory Protective **EQUIPMENT**

Employers have duties concerning the provision and use of personal protective equipment (PPE) at work. PPE protects workers against health and safety risks at work. It include items like safety helmets, gloves, eye protection, high-visibility clothing, safety footwear and safety harnesses. It also includes respiratory protective equipment (RPE). Employers are responsible for providing, replacing and paying for personal protective equipment.

The basic requirements include the protection of:

- the lungs, eg from breathing in contaminated air
- the head and feet, eg from falling materials
- the eyes, eg from flying particles or splashes of corrosive liquids
- the skin, eg from contact with corrosive materials
- the body, eg from extremes of heat or cold

Employers are required to assess health and safety risk and implement measures to control the risk. PPE if needed after implementation of other controls have to be provided for free to every employee. Contractor is responsible to ensure employees are trained to use the equipment and know how to maintain it and detect any damages.

In IBB Builders Merchants depots you will find the range of high quality respiratory protective equipment like filtration half masks used to protect the respiratory tract, in all filtration classes: FFP1, FFP2 and FFP3.

Half masks by Oxyline Sp. z o.o. are manufactured using materials of the highest quality and best technologies, in line with the most up-to-date European standard EN 149:2001+A1:2009. All products comply with the requirements laid down in the European directive 89/686/EEC and have CE mark (CE 1437).

The wide range of makes available make it possible to select an appropriate half mask respirator for any operating conditions, in order to give each worker comfort and to protect the respiratory system efficiently against the harmful impact of dusts, solid and liquid aerosols.

Half mask respirators by Oxyline Sp. z o.o. are marked with the symbol R (reusable) or NR (non-reusable). Half mask respirators marked with the symbol R can be used again, for instance on the next day, in line with the EN 149:2001+A1:2009 standard, after disinfecting with a suitable liquid or a disinfecting lamp. Half mask respirators marked with the symbol NR can't be used again.

The respirator **X 110 FFP1 NR D** and the respirator **X 110 V FFP1 NR D** are designed to protect respiratory system against harmful effect of dust, solid and liquid aerosols (dust, smoke, mist) when OEL is $\geq 2 \text{ mg/m}^3$ and the concentration of dispersed phase of aerosol does not exceed:

- 4 x OEL (Occupational Exposure Limit),
- 4 x NPF (Nominal Protection Factor),
- 4 x APF (Assigned Protection Factor).



Application examples: nontoxic dusts, food industry, agriculture, application in quarries, cement institutions, wood industry with soft wood processing (coniferous), and particularly to such dusts as calcium carbonate, natural and synthetic graphite, plaster, chalk, cement, marble, vegetable dusts, cellulose, sulphur, cotton, fillings of iron metals, coal dust containing less than 10 % of free silicon. Respirators without exhaust valve are designed mostly for work not requiring material physical effort.

The respirator **X 210 V FFP2 NR D** is designed to protect respiratory system against harmful effect of dust, solid and liquid aerosols when OEL is $\geq 0,05 \text{ mg/m}^3$ and the concentration of dispersed phase of aerosol does not exceed 10 x OEL (Occupational Exposure Limit), 10 x APF (Assigned Protection Factor), 12 x NPF (Nominal Protection Factor). Examples of application include: medium toxic solids, asbestos, copper, vanadium, chromium, manganese, hardwood, coal dust with free silica content higher than 10%, mining industry, chemical industry, metallurgical industry, welding, soldering, respirable dusts



The respirator **X 310 SV FFP3 NR D** is designed to protect respiratory system against harmful effect of dust, solid and liquid aerosols when OEL is $\leq 0,05 \text{ mg/m}^3$ and the concentration of dispersed phase of aerosol does not exceed



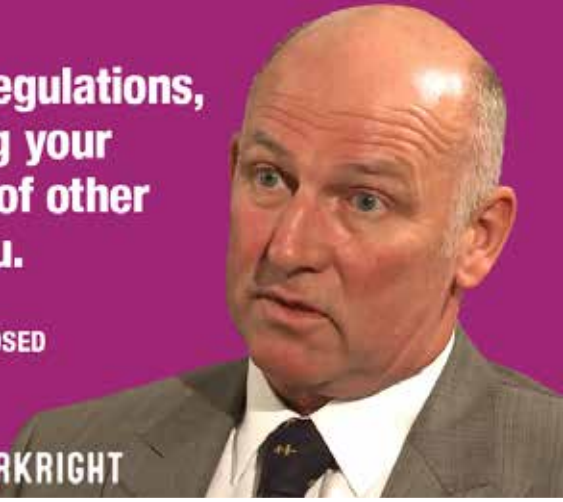
SAFETY FIRST

GO
HOME
HEALTHY

YOUR
BRAND
HERE

**Be aware of the regulations,
you are protecting your
own life and that of other
people around you.**

TERRY McGOUGH
FORMER STONEMASON DIAGNOSED
WITH SILICOSIS AGED 51



JOIN THE CONVERSATION AT **#WORKRIGHT**

GO
HOME
HEALTHY

**He wasn't provided with
overalls, the dust would be
all over his clothes.**

CHRISTINE McGOUGH
TERRY, CHRISTINE'S HUSBAND WAS
DIAGNOSED WITH SILICOSIS AGED 51



JOIN THE CONVERSATION AT **#WORKRIGHT**

GO
HOME
HEALTHY

**They never, ever said about
respirable crystalline silica.
You must protect yourself and
be aware of the regulations,
you are protecting your own
life and that of other people
around you.**

TERRY McGOUGH
FORMER STONEMASON DIAGNOSED
WITH SILICOSIS AGED 51



JOIN THE CONVERSATION AT **#WORKRIGHT**

GO
HOME
HEALTHY

12000

**WORKERS DIE EACH YEAR
FROM WORK-RELATED
LUNG DISEASE**

JOIN THE CONVERSATION AT **#WORKRIGHT**

MODEL FOR ILLUSTRATION PURPOSES ONLY



30 x OEL (Occupational Exposure Limit), 30 x APF (Assigned Protection Factor), 50 x NPF (Nominal Protection Factor). Examples of application include: high concentrations of respirable dusts, welding and soldering, protection against dusts containing beryllium, antimony, arsenic, cadmium, cobalt, nickel, radium, strychnine, radioactive particles.



The **SMOG X 200 V** is one of the simplest and lightest models on the market, providing a high level of comfort for people sensitive to facial covers. The half-mask design allows free breathing, and so is useful in daily life, on the way to work or school. Filtration protects our respiratory system, so it is advisable to use the anti-smog half-mask even on short-time stays in environments where smog norms are exceeded. The anti-smog half-mask protects the respiratory system against the inhalation of PM10 and PM 2.5 dust, connected to smog, along with the carcinogenic, polycyclic aromatic hydrocarbons (PAHs) that often attach to them: benzo(a)pyrene, naphthalene – carcinogenic and strongly poisonous substances. The SMOG X 200 V model filters particles smaller than 2 µm in diameter.

The filtering half masks are made of filtering



material and accessories such as headbands, or exhalation valve, depending on the model. When air is drawn in, it passes through the filtration material where it is cleansed before being inhaled. Exhaled air passes through filtration material (in the masks

without a valve) or through both the exhalation valve and the filtration material (in models with a valve). The cup of the mask should be well adjusted to the user's face. The half mask is designed in such a way as to enable easy breathing throughout the work shift. The anatomical shape and the nose clip, as well as the internal sealing foam, make the half mask easy to fit to most face shapes, so that the necessary tightness can be ensured.

The half mask does not supply oxygen. It does not ensure protection of the respiratory system if there is a lack of oxygen (below 17%). It should not be used in spaces with limited cubic volume, in particular non-ventilated spaces, such as sewers, wells, tanks, etc. The half mask does not provide protection against pollution in the form of gas fumes or mists of substances that are harmful to human health and hazardous to life. Do not use the half mask if the type, characteristics and concentration of the harmful substances are unknown. Do not use the half mask when extinguishing fires. The half mask does not ensure tightness if worn on an unshaven or bearded face. The half masks should be stored at a temperature of -20°C to +40°C and humidity below 70%.

Before the half mask is used, its technical condition should be checked, i.e. whether the elements are not damaged. Damaged or expired half masks must not be used. The half mask should not be folded or bent. In order to ensure the best possible fit on the face, the half masks should be put on and adjusted in the following manner:

1. Before putting on the half mask, form the nose clip by tightening,
2. Place the mask over the face to cover the mouth and the nose;
3. Put the head bands on in such a way as to make the lower band pass around the

nape of the neck below the ear, and the upper band pass around the back of the head above the ear; the length of upper and lower band can be adjusted;

4. Further adjust the nose clip to ensure tightness
5. Check that you have the correct mounting. Press your hands and hold the dome of the mask. Exhale energetically; if there is any looseness adjust the position of the dome, the nose clamp or headbands.
6. Expiry date: 60 month from the production date printed on the product.

When the mask is used, breathing resistance increases due to the settling of dust. If the user decides the resistance has grown significantly, the mask should be replaced with a new one.

To adjust the head bands, put the strap between the plastic hooks as shown in illustration 2. Looping it a number of times between the hooks will shorten the band and tighten the mask when it is put on. In order to extend the length again just take the band off the hooks. For more precise adjustment of the head band, wind or unwind the band on/off each hook, as shown in illustration 3.

Apart of respiratory protection workers might need the additional protection in form of white overalls to protect against heat, chemical or other splashes, leaks etc. Also often required are helmets, protective glasses, ear protectors, standard or self-locking devices for fall protection, gas mask, gas mask filters, partial protection of feet or head.

More information on face masks you will find in March 2018 issue of IBB Builder https://view.publitas.com/ibb-builders-merchants/ibbbuilder_mar_2018/page/22-23?publitas_embed=maximized

Source: HSE, Oxyline Sp. z o.o.

