Dräger



Engineered for Safety.

DRÄGER PAS COLT DRÄGER PAS MICRO DRÄGER PAS AIRPACK 1 DRÄGER PAS AIRPACK 2 DRÄGER SPC 3800 DRÄGER WORKSTAR PVC



Quality air you can rely on.

Wherever you are and whatever you are doing, your ability to breathe should be as unencumbered and natural as possible. When dealing with leaks, handling chemical spillages and other tasks that can leave you exposed to harmful elements, the last thing you should be worrying about is something as straightforward as breathing.

Dräger airlines and chemical protection suits have been designed to ensure that every breath you take is easy, consistent and, above all, reliable. Compact and versatile, our systems combine quality with ergonomic design, and flexibility in use with durability. Offering reliable protection in practically any situation, they bring you fresh air that you truly can depend on.



Dräger takes care of your health so you can take care of yourself

Providing professional breathing apparatus to the professionals. As a global leader in the field of personal protection and gas detection technology, the products of Dräger are used to save lives under many different circumstances.

Fire fighting, mining, chemical and petrochemical production are just some of the areas where our products are put to the test on a daily basis. Our widespread global network, with over 40 offices around the world, representing Dräger in over 100 countries, allows Dräger products to be purchased, commissioned and serviced no matter where our customers are situated. Having access to this international infrastructure is also of great benefit when it comes to meeting the exact requirements of varied customer profiles.

Through constant customer consultation, we are able to produce products which address the user's traits and provide optimum assistance.

The PAS range of heavy duty airline is no different in this respect. Comprising the Dräger PAS AirPack 1, Dräger PAS AirPack 2, Dräger PAS Colt and Dräger PAS Micro, the system combines versatility, ease of use and the latest in material technology whilst matching the requirements of the customer.

More than an airline - a professional solution



The products of Dräger are tried and tested daily by professionals from around the world.

and your job.

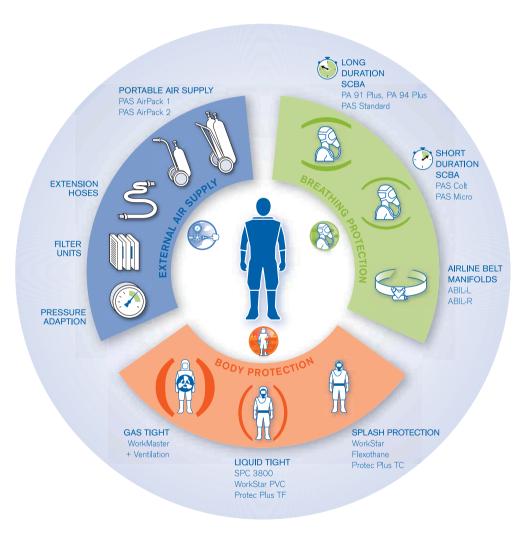
The system has been designed to be as flexible as possible so that each element can be interchanged, when necessary, allowing many different sets of circumstances to be effectively dealt with.

Modular and lightweight, airline systems are worn in all kinds of environments and for all kinds of tasks. For decontamination and inspection purposes, for instance, the Dräger PAS range can also be worn with a wide range of coveralls

such as the Dräger SPC 3800 and Dräger Protec Plus to protect against ultra-fine dusts and powders as well as acids and alkalis. In other circumstances, where liquid solvents and chemicals might be involved, they can be used in conjunction with the Dräger WorkMaster chemical protection suits. Featuring specially sealed seams and gas-tight zip fasteners, these suits can also be used in conjunction with the Dräger PAS airline system to provide a completely, self-contained, ventilated system.

The complete system.

Promote safety by using a complete Dräger airline system. Flexible in design, the Dräger airline system can be configured with different breathing systems and chemical protection suits to meet your needs. Easy to use and easy to achieve – a professional solution for professional users.





AIR SUPPLY



PORTABLE AIR SUPPLY



EXTENSION HOSES



FILTER UNITS



PRESSURE ADAPTION



BREATHING PROTECTION



LONG DURATION SCBA



SHORT DURATION SCBA



AIRLINE BELT **MANIFOLDS**











LIQUID TIGHT SPLASH PROTECTION

For short duration hazardous work, when you need reliability and quality, the Dräger PAS Colt is right by your side.

Combining the very latest harness design with advanced materials and smaller, lightweight cylinders, the versatile Dräger PAS Colt is both easy to use and comfortable to wear.



Dräger PAS Colt:A compact, hip-mounted life saver.

From hazardous chemical spills and decontamination procedures to routine tasks, the Dräger PAS Colt is approved for use as a short duration entry unit, an airline emergency escape breathing apparatus, or a dual function unit.

Worn on the hip, the lightweight harness is quick and easy to don in any environment. An innovative drop down feature, which enables the cylinder to be unclipped from the waistbelt, provides additional manoeuvring capabilities in confined space entry applications or where space is tight.

Suitable for use in extreme conditions and able to retain its shape in a wide range of temperatures,

the harness is made from an anti-static material that is inert to chemicals and oil, and impervious to most acids and alkalis. Durable and machine washable, it also has a high resistance to heat and abrasion and meets the requirements of EN137 heat and flame resistance.

Featuring state-of the-art technology inherited from Dräger's advanced PSS range of breathing apparatus, as used by professional firefighters around the world, the Dräger PAS Colt makes an ideal partner in practically any environment. Approved to EN137 standards as a short duration entry unit, it also carries EN402 approval as an airline emergency escape unit.





Dräger PAS Colt: This Hip-mounted breathing device is suited to short term operations.

Compact and versatile, the Dräger PAS Micro is ready wherever and whenever you need it.

Developed by Dräger to combine ergonomic design with comfort and ease of use.



Dräger PAS Micro:A compact, back-mounted life saver.

Increasing both wearer comfort and stability, the back-mounted Dräger PAS Micro has been ergonomically designed to follow the natural contours of the back. To maximise its streamlined shape and to reduce snagging whilst protecting the pressure reducer, the hose and pressure reducer have both been integrated into the backplate. In addition, to further improve the compact design, the buckles follow the contours of the set and, for maximum safety and flexibility, are easy to locate and quick to adjust, even when wearing gloves. Easy and quick to don and ideal for use in difficult conditions, the lightweight harness has been specially designed to retain its form in a wide range of temperatures. Utilising a flexible, antistatic material that is inert to chemicals and oil, and impervious to most acids and alkalis, it also has a high resistance to abrasion. Durable and machine washable, it also meets the requirements

of EN137 heat and flame resistance.

Offering dual functionality, the Dräger PAS Micro is approved to EN137 standards as a short duration entry unit and carries EN402 approval as an airline emergency escape unit. Based upon state-of-the-art technology inherited from the advanced Dräger PSS range of breathing apparatus used by professional firefighters around the world, it offers optimum versatility as well as high quality performance.

When worn as a short duration entry unit, for example, the pressure gauge can be mounted at the waist to provide an immediate visual update of the remaining air supply. Alternatively, when used independently or in conjunction with the Dräger PAS AirPack 1 or 2 airline systems, the gauge can be integrated into the cylinder valve to allow easy periodical inspection.

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Strong, reliable and constant





Reliable and Constant, the Dräger PAS AirPack 1 Airline System for use where extended duration breathing air is called for.

The Dräger PAS AirPack 1 ensures that chemical tank cleaning, toxic spillage and other longer duration tasks are all made easier.



Dräger PAS AirPack 1: Extended duration breathing apparatus at its best.

Combining trolley mounted cylinders that provide the user with an uninterrupted air supply via a hose reel, and a portable design for easy relocation, it can be positioned in safe zones within close proximity to the user.

A major benefit is its flexibility in use. For sporadic or short duration inspection work, for instance, it can be used with a lightweight harness such as the Dräger PAS Colt. For regular use and extended duration work when cleaning silos or vats, however, it can be quickly connected to the Dräger PAS Standard breathing apparatus. Orthopaedically designed to reduce backstrain, stress and fatigue, the Dräger PAS Standard features adjustable, padded shoulder straps and an anti-static, impact and chemical resistant backplate to ensure wearer comfort over longer periods. Air can be delivered in many ways, for example, direct from cylinders, from a factory ring main or from a mobile compressor. Able to

accommodate up to four 200 or 300 bar compressed air cylinders, each providing up to 12 litres capacity, the Dräger PAS AirPack 1 is supplied with a 50 metre length of hose as standard and can be extended up to 100 metres.

Designed with reliability in mind, the trolley hose reel connector is protected by a cover to minimise inadvertent damage. A smooth winding handle enables the hose to be rewound easily after use, and outgoing hose distribution is controlled via a braking system to prevent possible entanglement. Incorporating Dräger's tried and tested pneumatics system, the Dräger PAS AirPack 1 also features a safety pressure relief valve and, for additional safety, the pressure reducer is shrouded in a protective plate.

Where the site has an installed supply of air, the Dräger AF1400 air filter unit can be used to provide clean air, free from dust and particles, with the Dräger PAS AirPack 1 acting as back-up.





Heavy workloads call for the heavy duty Dräger PAS AirPack 2 Airline system.

Freedom of movement and less stress and fatigue.

Lengthier tasks in hazardous environments call for extended duration breathing air. Allowing the wearer freedom of movement and causing less stress and fatigue than full breathing apparatus over longer periods, the heavy-duty Dräger PAS Airpack 2 is ideal for use in chemical tank cleaning and toxic spillage applications. At home on or offshore, this trolley-mounted system is able to accommodate up to two compressed air cylinders of 50 litres. A 50m length of hose is supplied as standard with optional extensions from 3 to 50 metres.

The trolley hose reel connector is protected with a cover to minimise accidental damage and the

reel is also equipped with a handle to facilitate easy rewinding. Outgoing hose distribution is also controlled with a braking system which prevents inadvertent unwinding and minimises entanglement. For those applications where elevated working may be unavoidable, it can also be supplied with a fully approved lifting eye for safe transfer to height.

For additional flexibility, the Dräger PAS AirPack 2 can be supplied with either one or two pressure regulators and two hose reels to allow joint use of the system, or for two completely independent systems to be run simultaneously.



Dräger PAS AirPack 2: Extended duration breathing apparatus at its best.

Flexibility is the key to airline safety

A host of accessories are available to turn the Dräger PAS AirPack 2 into the ideal partner. Belt Manifolds, known as ABIL-L and ABIL-R, can be selected for use with breathing hoses or positive pressure breathing apparatus to suit the application concerned. Similarly, different Dräger PAS harnesses such as the Colt, Micro and Standard can be used without cylinders to deliver air directly from the airline trolley. Enabling users to connect breathing apparatus to the airline supply, the Dräger ASV brings a new level of safety to airline users. Developed to ensure safety should the external supply fail, this innovative valve will automatically, and without interruption, switch from the airline to the back-up supply. This full switching capability also means that a dedicated airline can be used as a back-up source, supporting emergency sets and full breathing apparatus.

Approved to EN14593 part 1 and EN139 standards, the ASV is approved for use with compressed air breathing apparatus approved to EN137 and EN402 standards.







Dräger Ventilation Systems for use where quality or loss of air isn't the only hazard.

All-round protection with complete ventilation for Dräger WorkMaster range.

Every Dräger WorkMaster chemical protective suit can be turned into a completely ventilated system with Dräger Breathable Air Supply and Ventilation Units. Depending on the type of suit and the nature of the application, a number of options are available and include the Aerotec AL, Aerotec BA and the control valve RV PT 120L

Featuring Euro couplings for an easy fit to both the suit and the air supply, each of these systems is also easy to use. The rate of ventilation is operated by an integral control valve and can be adjusted to provide 0, 5, 30 or 120L/min with a supply pressure of 7.5 bar.

For maximum versatility, different connectors are available for use with different airline systems, from compressed air cylinders and facepieces to CABA with lung demand valves and compressed airlines. In addition, the system can be fitted with the ASV automatic switch over valve. Should the primary air source fail, the ASV will automatically switch off the ventilation to conserve the back-up air supply and ensure uninterrupted breathing air.



Protect yourself from hazardous liquids with the disposable Dräger SPC 3800 Splash Protective Coverall.

Light, comfortable, liquid-tight protection.



Dräger SPC 3800 Splash Protective Coverall

Designed for disposable use and made of tough yet comfortable Tychem®* F material, the Dräger SPC 3800 Splash Protective Coverall offers entire body protection against solid or liquid chemicals. Ideal for decontamination work, inspections and handling oil, it is CE Certificated and classified as a category III chemical protective suit type 3, 4, 5 and 6. Providing effective protection against ultra-fine dusts and powders, it can also be used in those areas where inorganic acids and alkalis can be found as well as water based salt solutions.

With an easy-to-reach zip from shoulder to shoulder, the donning and doffing procedure of this lightweight, one-piece suit could not be easier. In addition, the back zip, which is also protected by a double flap of Tychem®* F, does not interfere with the wearer's work and provides effective protection during decontamination.

Available in four sizes and in a grey version with heat-sealed Silvershield gloves, the suit can also be supplied in orange with Butyl gloves attached. The feet are protected by flexible socks with cuffs in the same Tychem®* F material.

For optimum comfort around the face, the Dräger SPC 3800 also features the Dräger face cuff, a thin, flexible cuff that can be worn either on or underneath a face mask.

*Registered trademark of E. I. du Pont de Nemours and Company





Dräger Protec Plus TC



Dräger Protec Plus TF

Dräger Protec Plus and Dräger WorkStar, industrial chemical protective suits for practically every eventuality.

Effective barrier protection against sprays and splashes.

Dräger Protec Plus

Made from Tychem, a coated Tyvek®* material, Dräger Protec Plus chemical protective coveralls feature elastic drawstrings on the hood, sleeves and trouser cuffs to keep splashes out. The zip fastener, which runs down the middle of the front side, is fitted with two velcro®**-secured covers, and an elastic seal in the neck area ensures an effective seal with a full face mask.

With welded seams for added security, these one-piece, limited use coveralls are impermeable to liquids and are CE certified and classified as chemical protection Types 3, 4, 5 and 6. They are also tested for anti-static properties under EN 1149-1.

Dräger Protec Plus TC - Tychem C

Designed to protect against inorganic acids and alkalis as well as water based salt solutions, the Dräger Protec Plus TC is ideal for use in paint shops, with agricultural chemicals, in asbestos disposal, disinfecting and industrial cleaning applications. It is also suitable for use in resin and glass fibre processing and to protect against industrial paints, virus and blood.

Dräger Protec Plus TF - Tychem F

Used in decontamination work, inspections and when handling oil, these coveralls provide protection against many concentrated inorganic acids and alkalis. They are also suitable for use with a large number of organic chemicals.

- * Registered trademark of E. I. Du Pont de Nemours and Company
- ** Registered trademark of Velcro Industries B.V.



Dräger WorkStar Flexothane



Dräger WorkStar PVC

Dräger WorkStar

Compatible with airline systems, the Dräger WorkStar Flexothane®* and PVC chemical protection suits offer single-piece, reusable protection.

Dräger WorkStar Flexothane®*

Approved as a spray-proof protection suit in accordance with EN 465, Type 4, the Flexothane®* model combines a hood with pull-tie, sleeves with elastic ends and arm cuffs, and press-button trouser leg ends for easy adjustment. Fitted with a double-covered zip fastener, it also benefits from reflective strips on the upper sleeves for added safety in dark or dimly lit conditions. Easy to wash and available in four sizes, it is ideal for those situations where people may come into direct contact with liquid chemicals such a crude oil, lubricating oil and petrol.

Dräger WorkStar PVC

Particularly suited to those applications where acid protection is required or where cleaning agents are applied with high pressure cleaning equipment, the Dräger WorkStar PVC is approved as a liquid-tight protection suit to EN 466, Type 3. Featuring a front zip fastening complete with triple covering, it incorporates elastic wrists and

turned-back cuffs to the sleeves, and elastic ends and a special fastener underneath the chin. Along with elastic ankle adjusters, the trouser legs benefit from foot-straps and turned-back ends complete with velcro[®]** straps. Reinforced at the knees and elbows, this durable suit is also easy to wash.

With an almost infinite number of variables, the Dräger airline range can be mixed and matched to suit every application, and the individual needs of every user.

Both short and long duration sets can be used as primary air sources with installed airline systems as back up, and vice versa. Each of these can be used with limited use and reusable chemical protection suits, with or without helmets, gloves and footwear. Ventilated systems can be used to keep wearers cool, and automatic switch over valves can be incorporated to ensure breathing air integrity even when the primary air source might be lost.

Flexible, versatile and durable, these systems are all designed to be comfortable to wear and easy to use.

- * Registered trademark of Sioen N.V.
- ** Registered trademark of Velcro Industries B.V.



Quality that gives you absolute confidence to do the job.

We know, from working with our customers over the years, that Dräger systems can be relied upon, and our customers know that too. Designed for you, by people who understand your workplace, each of our systems is built to endure the toughest conditions in the harshest of environments. Versatile, practical and comfortable, they not only help you to breathe, they help you to meet the challenges you face with the utmost confidence. Dräger's commitment to quality stands out in their design, ease of use and their performance – and that's something you can rely on.

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