



ST 18205-2008

No better preparation for real life

RESPIRATORY
PROTECTION
TRAINING GALLERIES



Experience counts for everything in an emergency – every move you make must come automatically

Working with respiratory protective equipment entails an enormously high level of physical and psychological stress. Dräger will help to give you the very best preparation for real life operational situations so that every move you make becomes automatic as you work.

For over a century, Dräger has been developing products and systems to help protect people and keep them safe. Dräger sees itself not only as a designer and manufacturer of high quality protective equipment, but also as a provider of facilities which allow realistic training in how to operate and manage this equipment, giving personnel the best possible preparation for real-life situations. Exercise and fitness equipment which has been specially adapted to reflect the particular challenges of their work can be used to test and enhance the physical fitness of workers who are required to wear respiratory protective equipment and chemical protective suits. Hazardous situations are realistically simulated and combined with high temperature

environments, smoke machines and sound effect systems to challenge both the physical and psychological aptitude of personnel. Their safety is given the highest priority and is ensured with a variety of monitoring systems.

Make your vision a reality with Dräger

Our specialists give expert advice and work together with you to create a concept which will turn your vision of the ideal training meeting all the applicable regulations and guidelines. Flexible modular systems are used to put your individual suggestions into practice and to create an economic solution. Even after installation the exercise procedures and routines can be quickly and easily

modified to prevent people from getting too familiar with a particular set of exercises. All training galleries can be installed permanently at your facility, or housed in a mobile training container. Dräger provides a reliable and professional partnership all the way, from initial concept to final installation. We offer also a range of flexible financing packages.

At your service even after installation

It goes without saying that we train you in how to operate all the systems and equipment in your new training facility. If you wish, Dräger is also happy to service your facility – anywhere in the world.

Everything from a single provider. Dräger training galleries

If training is to be as realistic as possible, sophisticated training facilities are needed which confront wearers of respiratory protective equipment with the sort of challenges and levels of stress which they typically face in real-life operational situations. Dräger offers the full range of products from a single provider.

A respiratory protection training gallery generally comprises a training room, a conditioning room that can include heat and humidity, an exercise room with training gallery and a target area. All these rooms are monitored and controlled from a central panel in the control room.

Fit or not?

Dräger offers a range of exercise equipment, such as exercise bikes, horizontal and vertical treadmills, arm ergometers, steppers and impact apparatus to test physical fitness before personnel enter the training gallery. What's more, all the exercise equipment is ideally suited to individual endurance training or normal fitness training, with special programs and monitoring systems, for example; the Cardio Control System allows precise analysis and optimization of training. Because the pulse rate is constantly monitored online, excessive strain on the cardiovascular system is avoided. Modern software systems are

used to display all the data on a monitor in the control room, this data can also be stored, printed out and analyzed.

Fit for work

Dräger has a broad range of products on offer to meet all your training requirements. Tube training facilities with tanks large enough to enter, "leaking" flanges, instruments, hose connections and valves, not to mention truck loading platforms and multilevel exercise mazes featuring many different obstacles which allow personnel to practice and enhance their orientation skills and stress endurance. Additional effects such as smoke, background noise, colored lights and darkness create realistic conditions, putting the psychological stress resistance of participants to the test.

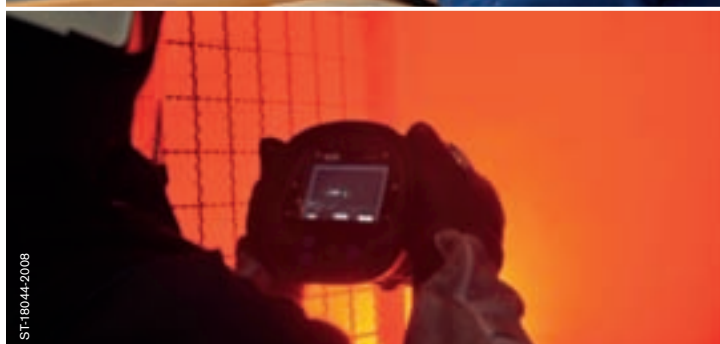
The nerve centre

Only one person is needed in the control room to monitor the entire training facility and control all the different elements and

equipment. A clear arrangement of controls and exercise equipment is a key requirement here: monitors, for example, are centrally located and allow continuous monitoring through cameras. All the acoustic devices (communication and noise effect systems), light, smoke and air extraction units are also operated from the control room. The Dräger FitnessControl-Software allows all exercise data to be recorded and saved, meaning that data can be precisely analyzed together with participants and compared with previous training sessions. The self-explanatory Dräger visualization software allows you to control and monitor the entire training session on a PC installed in the central panel in the control room.

Dräger training galleries: for total peace of mind

Despite creating realistic training conditions, Dräger training galleries maintain maximum safety in every situation.



- Floor contact sensors are used to track the position of participants at all times and communicate this information to the control room
- Thermal imaging and infrared cameras (either fixed-position or operated remotely from the control room) transmit images to the control room
- Intercom systems allow acoustic monitoring of participants and can also be used to broadcast instructions

- Emergency stop buttons can be activated to immediately illuminate a room and extract any smoke
- All the bars and grids in the training areas can be easily removed to give quick access to the trainees
- Temperature sensors monitor the room temperature

Time to modernize?

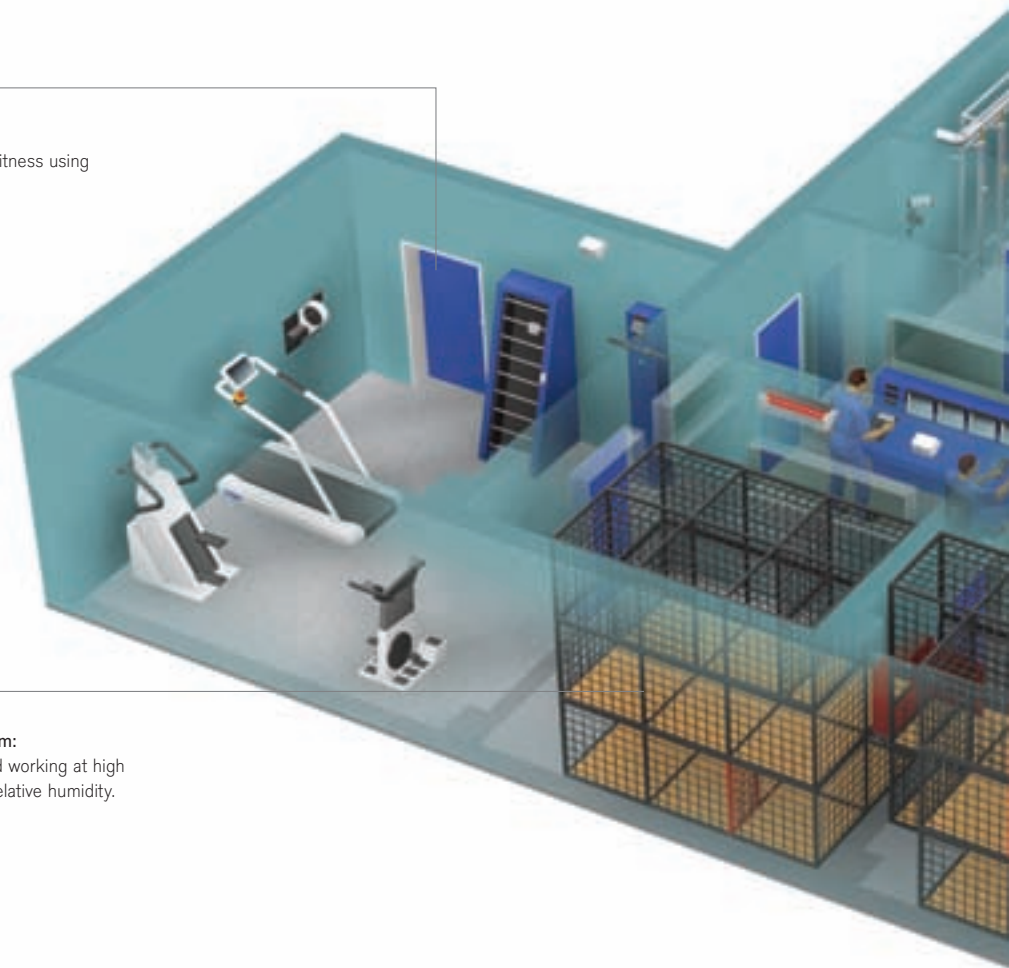
If you already have a training gallery, we can also update it with modern control and monitoring equipment. For example, it is possible to optimize the control systems, with direct operation of fitness equipment, transmission of user data with the aid of transponders, ergonomic form and optimum user-friendliness through visualization software.

Realistic training for maximum safety



ST-1766-2008

Fitness room:
Test and improve fitness using sport equipment.



ST-2282-2006



ST-1766-2008

Conditioning room:
Moving around and working at high temperature and relative humidity.



Target area:
Practicing rescue operations
and how to cope with
specific types of danger.

ST-18021-2008



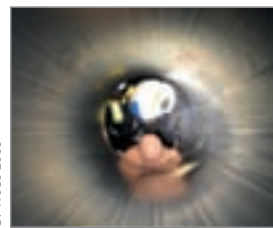
Control room:
Control and monitoring for safe
operation.

ST-18167-2008



Exercise room:
Orientation exercises, moving around
and learning how to respond appropriately in
conditions of heat, smoke and noise in
confined and confusing rooms, in tanks,
and near leaking valves and pipes.

ST-17935-2008





D-237749-2009

Take to the road with your mobile training gallery

Mobile respiratory protection training galleries offer all the same options as any fixed on-site facility, plus the added benefit that they can be transported in a suitable vehicle at any time to personnel requiring training.

Dräger offers these training galleries in different trailer sizes which can be equipped to your specifications. You can also order a combined system featuring gas fuelled fire training gallery. The roof of the trailer can be used as additional training area.



ST-10E-2000

Mobile respiratory protection training gallery:
efficient training at just about any location.



ST-2206-2006

Mobile respiratory protection training gallery:
in a trailer with pull-out side section to increase space available for training.



ST-29E-2000

Combined training gallery:
a combination of respiratory protection and gas fuelled fire training system.

OBSTACLES

Access hatch



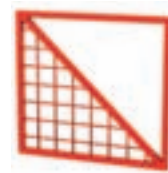
ST-2224-2006

Bulkhead door



ST-2229-2006

Crawling gallery with diagonal division



ST-2234-2006

Walking gallery with diagonal division



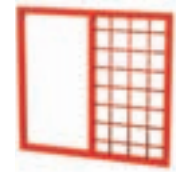
ST-2223-2006

Crawling gallery divided into top and bottom sections



ST-2228-2006

Crawling gallery divided into left and right sections



ST-2233-2006

Walking gallery with vertical division



ST-2222-2006

Crawling tube



ST-2227-2006

Manhole



ST-2232-2006

EXERCISE EQUIPMENT

Vertical treadmill

realistic exercise machine, infinite adjustment of step speed from 3 to 25 m/min and of the distance to be climbed, including automatic start/stop function, different versions available



ST-2211-2006

Bike

featuring a range of exercise programs, including an automatic program with pulse rate-based intensity regulation, different versions available



ST-2216-2006

Impact apparatus

to lift and lower a 22 kg weight, the number of strikes is clearly displayed on an LED panel, different versions available



ST-2219-2006

Horizontal treadmill

hard wearing for robust use, optionally with infinitely variable incline adjustment from 0 to 20%, different versions available



ST-2210-2006

Arm ergometer

for training of specific upper body muscle groups, precision mechanics allows the ergometer to be used in a sitting or standing position, different versions available



D-51-2010

Stepper

to simulate climbing stairs, different exercise programs, different versions available



ST-2218-2006

EXERCISE SYSTEMS

Tank training facility

the tank training facility provides realistic conditions in which to practice working in and rescuing people from tanks, containers and confined spaces, any number of elements can be combined



ST17623-2008

High temperature door

incorporated into the orientation section, creates an exercise scenario to prepare personnel for real life operations



ST-2213-2006

Truck loading platform

genuine truck load bed with tarpaulin and hoops for exercises with and without chemical protective equipment, special dimensions possible



ST-2423-2006

Seal-pad training facility

can be incorporated into existing orientation sections, different dimensions possible



D-50-2010

Valve and pipework training facility

allows intensive exercises to be performed to simulate work on gas, water and other piping systems



ST-2419-2006

CONTROL / MONITORING

Visualization

compact visualization software for control of the entire training facility on a PC, includes analysis and documentation functions for all exercises involving respiratory protection



ST-18169-2008

Pulse telemetry system
for monitoring the pulse rate to protect against over-exertion of the cardiovascular system and to allow a controlled training progression



ST-2214-2006

FitnessControl-Software

software for organizing, analyzing and documenting a range of exercises involving respiratory protection



ST-18162-2008

ACCESSORIES

Equipment stand

to mount equipment for the purposes of testing, suitable for all types of compressed air and closed circuit breathing apparatus



ST-2221-2006

Smoke machine
different versions available



ST-2226-2006

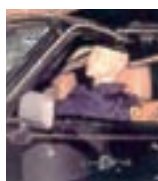
Infrared thermometer
for non-contact temperature measurement, different versions available with the temperature ranging from -36 to +760°C



ST-2231-2006

Rescue manikin

extremely robust rescue manikin for all different types of rescue exercises



ST-2220-2006

Fire extinguishing manikin
suitable for exercises involving fire blanket or handheld extinguisher, different versions available



ST-2225-2006

Dräger thermal imaging camera

extremely robust, watertight, heat-resistant and fully automatic camera, different versions available, e.g. with monochrome or color displays



D-16392-2009

Fire fake

mobile device for highly realistic design of fire-fighting exercises using simulated flames and noises



ST-2279-2006

Bang box
to illustrate the flammability of different media and the energy they can release



D-237150-2009

Aquarium

experimental box for combustible gases to explain the flashover phenomenon by means of simulations



D-237151-2009

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