



**Safety You Can Count On  
Dräger Chemical Protective Suits**

INDUSTRY  
MARITIME  
FIREFIGHTING

D-3652-2010

## Safety can be planned

Working with hazardous goods is highly stressful for people and materials alike. For more than 50 years, Dräger has made sure that the right equipment is available to you whenever and wherever you need it.

### THE RIGHT PROTECTION FOR ANY HAZARD

Whether taking pre entry measurements, transferring liquids, or responding to emergencies: Dräger offers a large range of chemical protective suits – tailor-made for a large variety of application areas. So that you get the exact protection you need for your specific use.

### FIVE QUESTIONS TO FIND THE RIGHT PROTECTIVE SUIT:

#### 1. To which hazardous substances are you exposed during your work?

- If you know the hazardous substance, you can take tangible measures to protect yourself
- If this is not the case, always assume the worst case scenario and select the highest level of protection

#### 2. Do you have to wear a breathing apparatus during your work?

- If a breathing apparatus is not required, a simple overall is sufficient
- If you work with a filter apparatus, it is best to use a suit equipped with integrated full-face mask or facial cuff
- If you need a compressed air breathing apparatus, make sure the equipment is comfortable to wear either over or under your protective suit

#### 3. What is your work environment like?

- For example, a traffic accident requires you to reach in between or handle sharp-edged objects. A protective

suit with a higher mechanical strength such as a reusable model is recommended when your work environment is unpredictable

- If damage is unlikely, you can also use a limited-use suit
- When working in confined spaces, such as tanks with manholes, it is best to select a close fitting suit and wear the compressed air apparatus over the suit. This way you can strip off the SCBA when passing through especially narrow passages

#### 4. How well can the pollution caused by the hazardous substance be removed again (decontamination)?

- If the hazardous substance is difficult to remove from surfaces, you should wear a protective suit with the breathing apparatus worn on the inside of the suit

#### 5. What are the associated risks of working with the hazardous substances?

- If it is a very cold hazardous substance such as liquefied gas, the material of the suit must not become brittle or break when being exposed to the cold
- If the hazardous substance is flammable at ambient temperatures, the protective suit must be flame-resistant
- If a risk of explosion exists in the area where the hazardous substance is leaking, the suit must have the corresponding electrostatic properties
- If the hazardous substance is a toxic gas, only a gas-tight suit should be used, never a splash suit



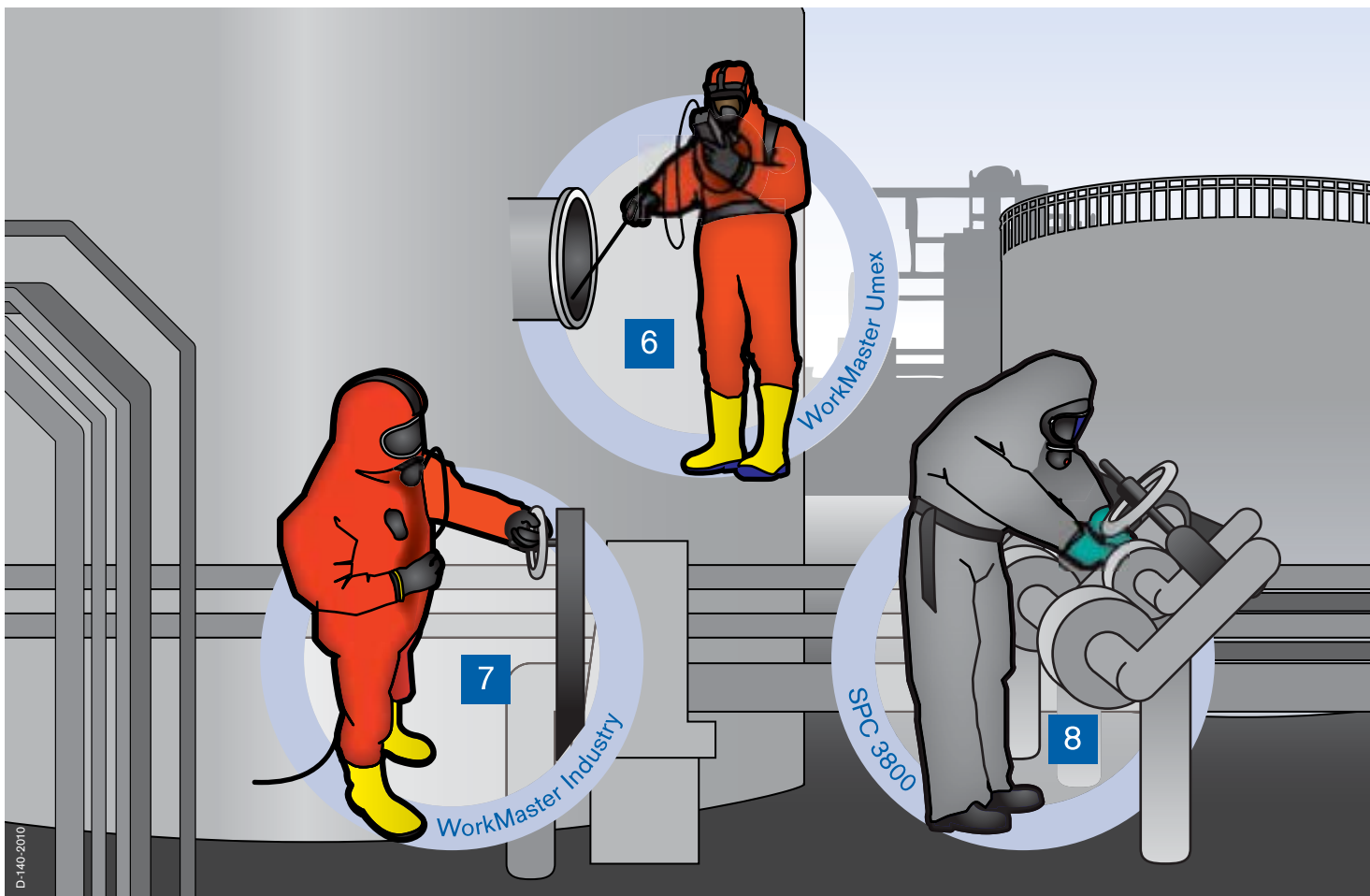
### HOW DO YOU FIND THE RIGHT SUIT?

Dräger protective suit	Breathing apparatus	SUBSTANCE IS KNOWN AND SITUATION IS UNDER CONTROL		SUBSTANCE AND SITUATION ARE UNKNOWN (E.G. FIRST SITE EVALUATION) OR SPECIAL HAZARDS ARE TO BE EXPECTED				
		Liquids/ Solids	Known gases*	Unknown gases*	Mechanical stress	Liquefied gases	Working in explosive zones	Arcthroughs/ Breakthroughs
1 CPS 7900	Inside: SCBA	•	•	•	•	•	•	•
2 WorkMaster pro-ET	Outside: F / SCBA	•	•	•	•			
3 CPS 5900	Inside: SCBA	•	•	•				
4 CPS 5800	Outside: F / SCBA	•	•	•				
5 TeamMaster Umex	Inside: SCBA	•	•			•		
6 WorkMaster Umex	Outside: F / SCBA	•	•			•		
7 WorkMaster Industry	Outside: F / SCBA	•	•					
8 SPC 3800	Outside: F / SCBA	•						
9 Protec Plus TF	Outside: WO / F / SCBA	•						
10 Protec Plus TC	Outside: WO / F / SCBA	•						
11 Workstar PVC	Outside: WO / F / SCBA	•						
12 Workstar Flexothane	Outside: WO / F / SCBA	•						

\*See VOICE (hazardous substances database) for resistance data at [www.draeger.com/voice](http://www.draeger.com/voice);  
 F = Filter, SCBA= Self Contained Breathing Apparatus, WO = No Breathing Apparatus; ■ = New products, ■ = Existing products

#### Main Approvals

1	EN 943-2:2002 Type 1a (ET); SOLAS (pending)
2	EN 943-2:2002 Type 1b (ET); SOLAS; etc.
3	EN 943-2:2002 Type 1a (ET); NFPA 1994-2007, Class 2; SOLAS (pending)
4	EN 943-2:2002 Type 1b (ET); SOLAS; etc.
5	EN 943-1:2002 Type 1a; SOLAS
6	EN 943-1:2002 Type 1b; SOLAS; etc.
7	EN 943-1:2002 Type 1b; SOLAS; etc.
8	EN 14605 Type 3 & 4; SOLAS; etc.
9	EN 1511 Type 3; EN 1512 Type 4; etc.
10	EN 1511 Type 3; EN 1512 Type 4; etc.
11	EN 466 Type 3; etc.
12	EN 465 Type 4; etc.



## Made for High Demands Chemical protective suits for industry

Handling hazardous substances is required in refineries, on drilling platforms, or in industrial plants. Dräger provides you with the right tools to master any risk. Our range of protective suits covers almost any situation and is customized to meet the needs and requirements of various environments.

**7 Dräger WorkMaster Industry**

- Safe working even in the most difficult situations
- Gastight and especially resistant to acids and alkaline solutions
- SYMEX material: long lasting, high abrasion and chemical resistance
- Easy to don and doff: close fitting design, soft materials, and vertical zipper on back

**6 Dräger WorkMaster UMEX**

- Gastight even with cryogenic hazardous substances and acids and alkaline substances in low concentrations
- Material remains flexible even at very low temperatures
- Fits close to the body: Unrestricted maneuverability (advantage when working in restricted spaces)
- Permanently integrated mask or integrated facial cuff: (can be combined with different masks)

**8 Dräger SPC 3800**

- Optimal for use with liquid chemicals
- No additional sealing required: permanently attached gloves, integrated socks with drip cuffs and flexible facial cuff
- Disposable protection for inspections, maintenance, and decontamination activities

**9 Dräger Protec Plus TF**

- Light, impermeable to liquids, suitable for less hazardous tasks
- Protection against very fine dusts and powders
- Protection against many concentrated inorganic acids and alkaline solutions as well as a wide variety of organic chemicals

**10 Dräger Protec Plus TC**

- Light, impermeable to liquids, suitable for less hazardous tasks
- Protection against ultra fine dusts and powders
- High barrier to many inorganic acids and alkaline solutions as well as water-based saline solutions

**5 Dräger TeamMaster UMEX**

- Gastight protection from cryogenic hazardous substances and acids and alkaline substances in low concentrations
- UMEX material: the highest degree of wearing comfort with very good mechanical strength and excellent flexibility
- Ideally suited for handling cryogenic media and for working in cold environments

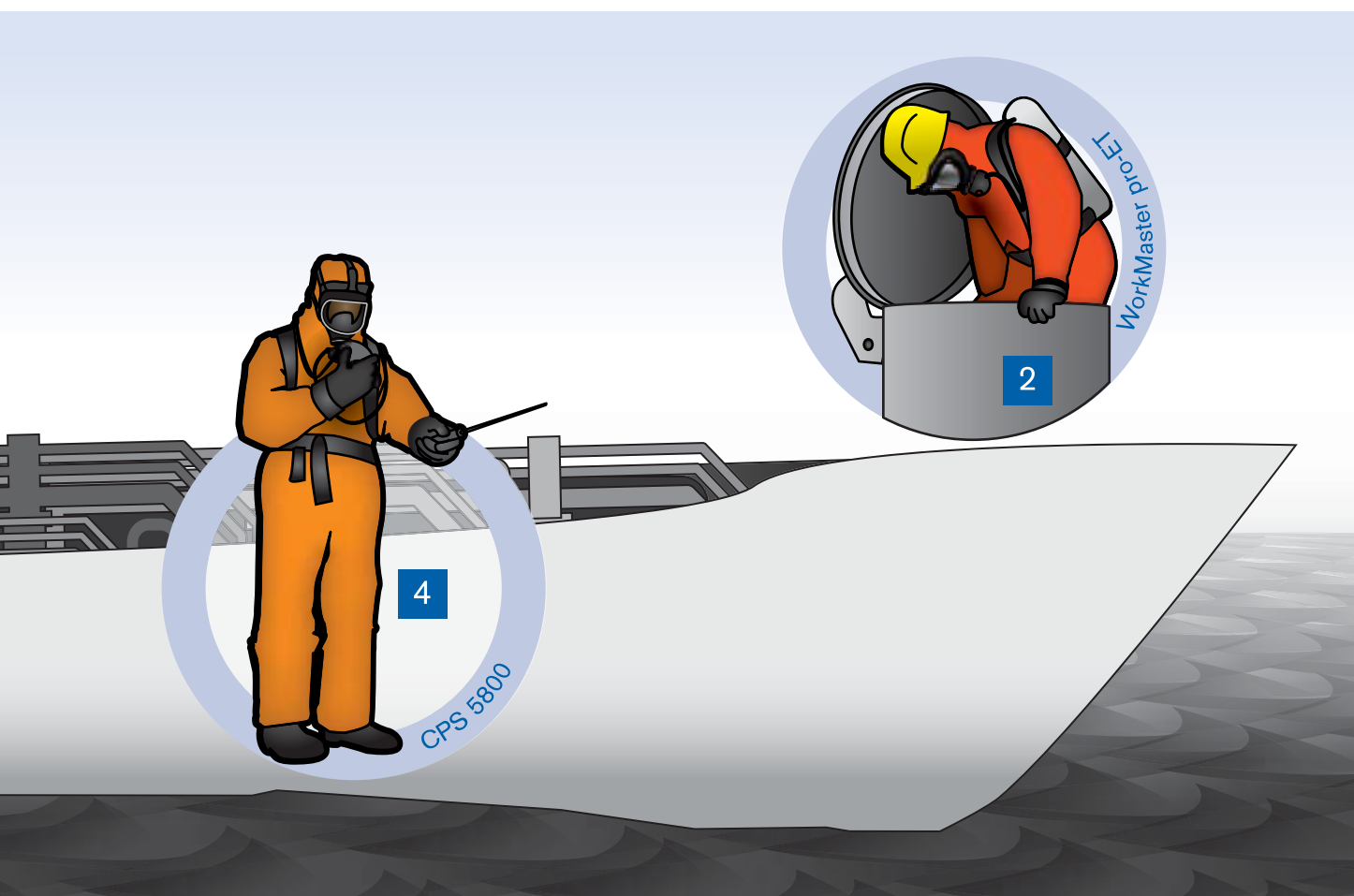
**12 Dräger WorkStar Flexothane**

- High degree of wearing comfort: light material permeable by water vapor
- Ideal for handling lubricants, oils, crude oil, machine oils, and petroleum
- Material remains flexible even at very low temperatures



## On Board Safety Chemical protective suits for maritime applications

Whether cleaning work or loading and unloading or in case of a leakage:  
If you run the risk on board ship of coming in contact with solid, liquid,  
or gaseous hazardous substances, Dräger gives you the security of the  
right equipment approved according to SOLAS to keep you safe.



**8 Dräger SPC 3800**

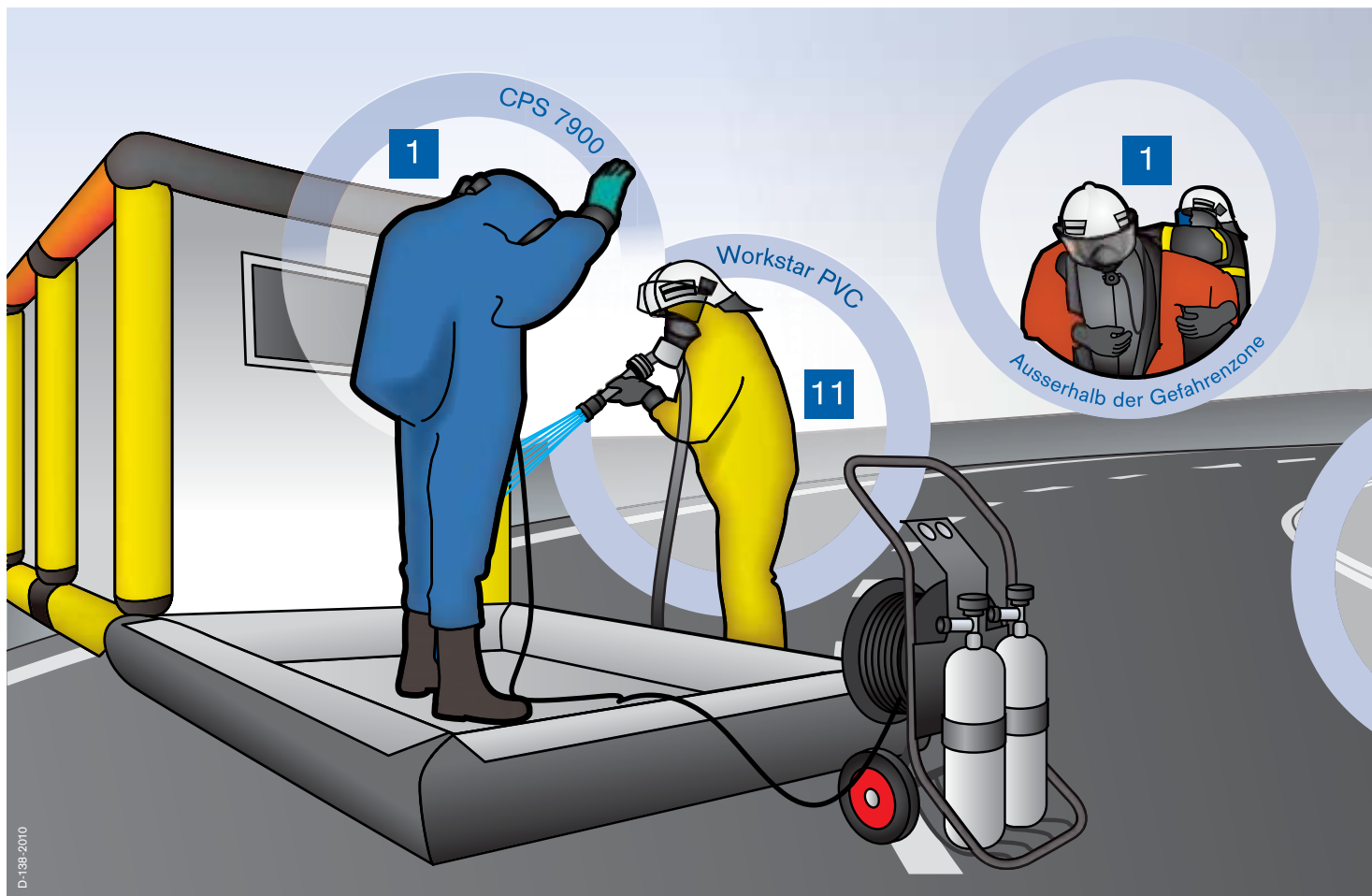
- Optimal for use with liquid chemicals
- No additional sealing required: permanently attached gloves, integrated socks with drip cuffs and flexible facial cuff
- Disposable protection for inspections, maintenance, and decontamination activities

**4 Dräger CPS 5800**

- Perfect gastight disposable protection for less hazardous applications
- Proven WorkMaster pro ET design with flexible facial cuff
- Protects from a variety of industrial chemicals
- Optimal protection for emergencies as well as maintenance and repair work
- Limited use: resistant to mechanical impacts and flames (not the same protection level as the WorkMaster pro ET)

**2 Dräger WorkMaster pro ET**

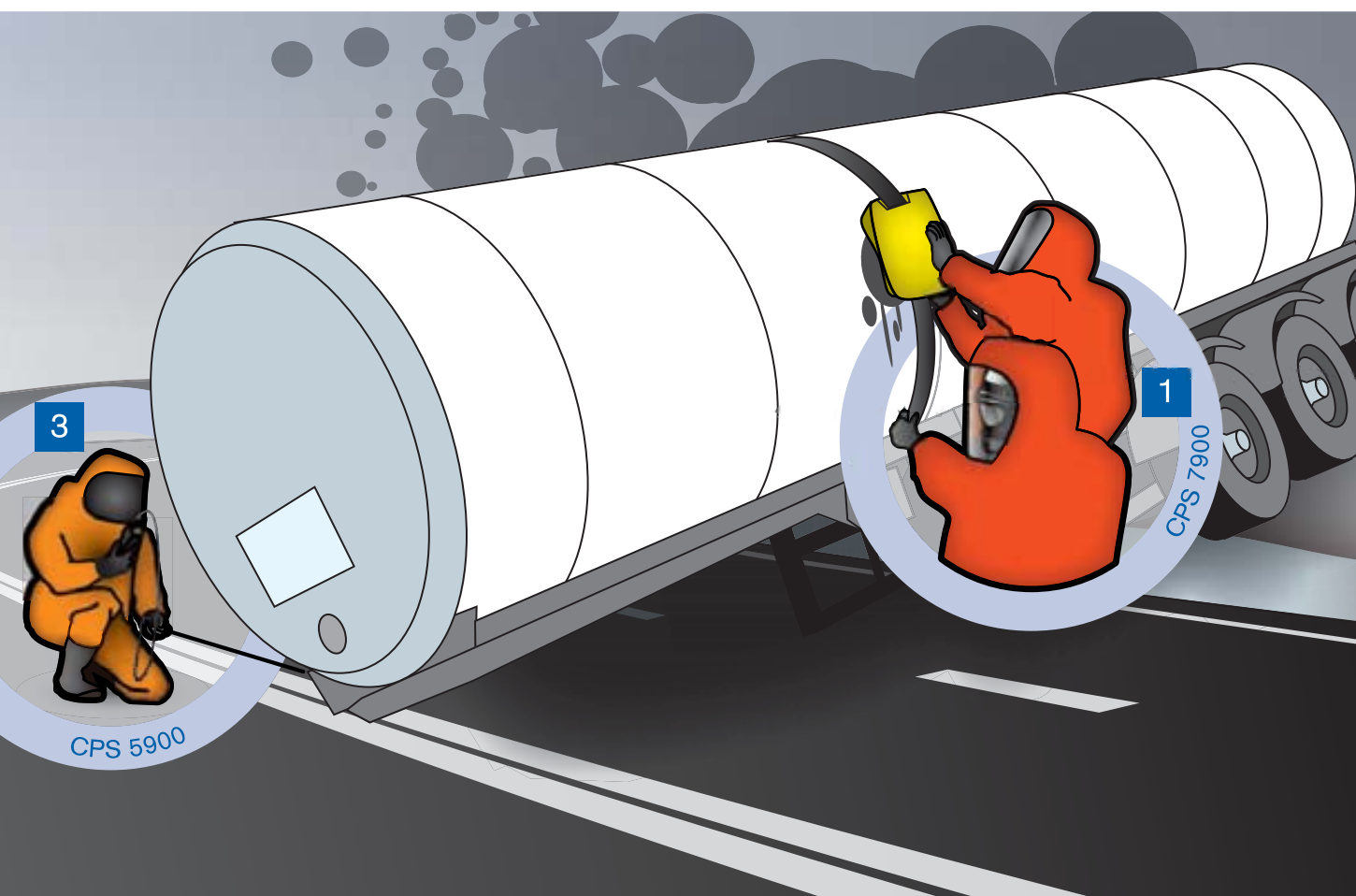
- Reusable, gas-tight protective suit; the breathing apparatus is worn over the suit
- Highest possible protection for the wearer
- High-grade HIMEX material: high chemical and mechanical resistance, excellent resistance to shooting flames
- Permanently integrated mask or integrated facial cuff: (can be combined with different masks)
- Highest protection in CSE areas
- Available in blue and orange



## Trust in performance Chemical protective suits for firefighting applications

Runs and operations involving hazardous goods require equipment you can rely on. Dräger provides you with the protection you need: from splash-protection overalls for decontamination to gastight protective suits for working in explosive atmospheres.





### 1 Dräger CPS 7900

- Tailor-made for use under extreme conditions
- Gastight, reusable protective suit
- Excellent protection from industrial chemicals, chemical warfare agents and other toxic substances
- Innovative material: Suitable for use with cryogenic substances down to - 80°C and in explosive zones
- Flame retardant and self-extinguishing

### 11 Dräger WorkStar PVC

- Reusable protective suit
- Solid protection from liquids for rougher jobs such as cleaning with high pressure equipment or tank cleaning
- Robust material: offers protection when using cleaning agents, low concentrations of acids and base, and inorganic salts

### 3 Dräger CPS 5900

- Gastight limited use protective suit
- Specifically designed for less hazardous tasks such as pre entry measurements or transferring substances without explosion hazard
- High protection against a variety of industrial chemicals and chemical warfare agents
- Limited use: resistance to mechanical impacts and flames not as high as that of the CPS 7900

# After use is before use



## Because testing makes live safer Dräger family of test equipment

Reliable devices for personal protective equipment are the basic requirement for a powerful fire fighting service. With the Dräger Quaestor 7000 a test instrument is available that, as flagship of the versatile Dräger test instrument portfolio is indispensable for every modern respiratory protection workshop with high test volumes. The fully automated and computer-controlled test instrument provides the complete spectrum of static and dynamic tests for respiratory protection products. Maximum comfort is ensured while making your responsible task easier.

The new Dräger Quaestor 5000 or the Dräger Testor product family is available for static tests.



D-6563-2010\_S

Dräger Quaestor 5000



D-6561-2010\_S

Dräger Quaestor 7000



ST-9949-2006

Dräger Testor 3100

## Ready When It Counts Dräger workshop system

The personal protective equipment is your life insurance when battling fire, smoke, heat, and chemicals. Such equipment must be ready for use back at the right location as quickly as possible. Dräger offers workshop systems that are customized to meet your individual needs and requirements, accelerate work flows, and are easy on your protective equipment when properly maintained and repaired. The special Dräger washing and drying systems feature integrated cleaning, disinfection, and drying functions as well as the option to repair, check, and store the protective suits and overalls.



## HEADQUARTERS

Dräger Safety AG & Co. KGaA  
Revalstrasse 1  
23560 Lübeck, Germany

[www.draeger.com](http://www.draeger.com)

## SUBSIDIARIES

### AUSTRALIA

Draeger Safety Pacific Pty. Ltd.  
Axess Corporate Park  
Unit 99, 45 Gilby Road  
Mt. Waverley, Vic 3149  
Tel +61 3 92 65 50 00  
Fax +61 3 92 65 50 95

### CANADA

Draeger Canada Ltd.  
7555 Danbro Crescent  
Mississauga, Ontario L5N 6P9  
Tel +1 905 821 89 88  
Fax +1 905 821 25 65

### P. R. CHINA

Beijing Fortune Draeger Safety  
Equipment Co., Ltd.  
A22 Yu An Rd, B Area,  
Tianzhu Airport Industrial Zone,  
Shunyi District, Beijing 101300  
Tel +86 10 80 49 80 00  
Fax +86 10 80 49 80 05

### FRANCE

Dräger Safety France SAS  
3c route de la Fédération,  
BP 80141  
67025 Strasbourg Cedex 1  
Tel +33 3 88 40 59 29  
Fax +33 3 88 40 76 67

### MEXICO

Draeger Safety S.A. de C.V.  
Av. Peñuelas No. 5  
Bodega No. 37  
Fraccionamiento Industrial  
San Pedrito  
Querétaro, Oro México  
Tel +52 442 246-1113  
Fax +52 442 246-1114

### NETHERLANDS

Dräger Safety Nederland B.V.  
Edisonstraat 53  
2700 AH Zoetermeer  
Tel +31 79 344 46 66  
Fax +31 79 344 47 90

### REP. OF SOUTH AFRICA

Dräger South Africa (Pty) Ltd.  
P.O.Box 68601  
Bryanston 2021  
Tel +27 11 465 99 59  
Fax +27 11 465 69 53

### SINGAPORE

Draeger Safety Asia Pte Ltd  
67 Ayer Rajah Crescent #06-03  
Singapore 139950  
Tel +65 68 72 92 88  
Fax +65 65 12 19 08

### SPAIN

Draeger Safety Hispania S.A.  
Calle Xaudaró 5  
28034 Madrid  
Tel +34 91 728 34 00  
Fax +34 91 729 48 99

### UNITED KINGDOM

Draeger Safety UK Ltd.  
Blyth Riverside Business Park  
Blyth, Northumberland NE24 4RG  
Tel +44 1670 352-891  
Fax +44 1670 356-266

### USA

Draeger Safety, Inc.  
101 Technology Drive  
Pittsburgh, PA 15275  
Tel +1 412 787 83 83  
Fax +1 412 787 22 07