

# AlphaTec®

EN 14605

Chemical Protective Suits

Instructions for Use

**AlphaTec® 66-320 / 66-330 models 151 & 156**



**Ansell**

# CONTENTS

<b>1. Safety considerations.....</b>	<b>5</b>
1.1 Definitions of signal icons used in the instructions.....	5
1.2 Definitions of pictograms used on the suit label.....	6
<b>2. Description of suit.....</b>	<b>7</b>
<b>3. Approvals .....</b>	<b>8</b>
3.1 European EC Type approval.....	8
3.2 UKCA marking .....	9
<b>4. Proper use.....</b>	<b>10</b>
4.1 Intended use .....	10
4.2 Limitations of use .....	10
4.2.1 Antistatic properties .....	10
4.3 Temperature of use.....	10
<b>5. Pre-use .....</b>	<b>11</b>
5.1 Donning .....	12
5.1.1 Hood adjustment .....	12
5.1.2 Fitting the face piece.....	13
5.1.3 Donning the suit .....	13
<b>6. In use .....</b>	<b>15</b>
<b>7. After use.....</b>	<b>16</b>
7.1 Initial decontamination.....	16
7.2 Taking off the suit.....	16
7.3 Final decontamination.....	16
<b>8. Storage.....</b>	<b>17</b>
8.1 Storage conditions.....	17
8.2 Storage methods.....	17
8.3 Shelf life.....	17

# CONTENTS

<b>9. Maintenance .....</b>	<b>18</b>
9.1 Maintenance schedule.....	18
9.2 Visual inspection of suit .....	19
9.3 Cleaning .....	19
9.3.1 Hand wash.....	19
9.3.2 Machine wash.....	20
9.4 Zipper .....	20
9.5 Bayonet ring.....	21
9.5.1 Function.....	21
9.5.2 Maintenance.....	22
9.6 Replacing gloves.....	23
9.7 Replacing rubber diaphragm in AlphaTec Exhaust valve.....	24
9.8 Patching.....	26
9.9 Marking on the suit .....	26
<b>10. Disposal.....</b>	<b>26</b>
10.1. Retirement consideration.....	26
<b>11. Technical Data Package .....</b>	<b>27</b>
11.1 Suit sizes.....	27
11.2 Suit weight .....	27
11.3 Suit colour .....	27
11.4 Materials, seams & components.....	28
11.5 List of spare parts & accessories.....	29
11.6 EU type approval data.....	30
<b>12. Warranty .....</b>	<b>32</b>
<b>Appendix: Customised features.....</b>	<b>33</b>



# 1. Safety considerations

- These instructions for use (IFU) are valid for the following suit material & base model combinations:
  - AlphaTec® 66-320\* (greenish yellow material) model 151 (open legs) and 156 (sewn-in socks)
  - AlphaTec® 66-330\* (orange material) model 151 (open legs) and 156 (sewn-in socks)
- For attached gloves, see separate IFU
- The suit may only be used by trained personnel who are familiar with the contents of this IFU
- Use the suit only for the purposes specified herein
- Do not use a damaged or incomplete suit, and do not modify the suit
- For repair and maintenance, only use genuine AlphaTec® (TRELLCHEM®) spare parts, or the function may be impaired

## 1.1 Definitions of signal icons used in the instructions

The following icons are used in this IFU to highlight the user on situations or actions that need special attention not to risk the safety of user, suit or environment.



### **CAUTION**

Indicates a potentially hazardous situation which, if not avoided, could result in physical injury, or damage to product or environment.









### **NOTICE**

Indicates additional information on how to use the suit.

\* Formerly known as TRELLCHEM® Splash 900.

## 1.2 Definitions of pictograms used on the suit label

<b>CE 0598</b>	The suit has EU type approval and complies with the EU Regulation 2016/425 on Personal Protective Equipment. Chemical protective clothing is category III according to the regulation and 0598 is the number of the notified body that is responsible for production control. 0598 is SGS Fimko Oy.		
<b>UK CA</b>	The suit is UKCA marked according to the Regulation (EU) 2016/425 as brought into UK legislation and amended.		
	The suit offers chemical protection.		This manual has to be read.
	The suit offers protection against infective agents (EN 14126).		The size of the suit (see chapter 11.1)
	Hand wash (max. 40 °C / 104 °F).		
	Do not tumble dry.		

## 2. Description of suit

Chemical splash protective suits in non-encapsulating design, reusable and intended for use with SCBA or other respiratory protective equipment with a full-face mask\*.

Suit descriptions:

- AlphaTec 66-320 model 151: With open legs (inner leg with elastic stirrup), Bayonet rings with attached gloves, face seal
- AlphaTec 66-320 model 156: With sewn-in socks, Bayonet rings with attached gloves, face seal
- AlphaTec 66-330 model 151: With open legs (inner leg with elastic stirrup), Bayonet rings with attached gloves, face seal
- AlphaTec 66-330 model 156: With sewn-in socks, Bayonet rings with attached gloves, face seal or attached Dräger Panorama mask

The following accessories are delivered with every suit:

- AlphaTec® Mini Hood
- Maintenance kit for zipper and Bayonet ring system
- Extra safety locking pins for the Bayonet ring system
- Instructions for use

\* The suit can be used with the major brands of SCBAs, such as Interspiro, Scott, Dräger and MSA. For European users the SCBA must be certified to EN 137.



The suit must be worn with safety boots and a safety helmet.

For more information about materials, components & accessories, see chapter 11.

## 3. Approvals

### 3.1 European EC Type approval

The suits are CE-marked and have EU type approval under the EU Regulation 2016/425 on Personal Protective Equipment and the following European standards:

- EN 14605:2005 + A1:2009, type 3
- EN 14126:2003 infective agent protection
- EN 1149-5:2008 antistatic suit material

The suits have been tested and approved by EU notified body no 0200; FORCE Certification A/S, Park Allé 345, DK-2605 Brøndby, Denmark.

EU Declarations of conformity can be downloaded at [www.ansell.com/regulatory](http://www.ansell.com/regulatory):



The standards according to which the chemical protective suit is approved are marked on the suit inner label.



## 3.2 UKCA marking

The suits are UKCA marked according to the Regulation (EU) 2016/425 as brought into UK legislation and amended.



UK Declarations of conformity can be downloaded at [www.ansell.com/regulatory](http://www.ansell.com/regulatory):



The standards according to which the chemical protective suits are approved are marked on the suit inner label.

## 4. Proper use

### 4.1 Intended use

The suit protects against chemicals in liquid, aerosol and solid form. It also protects against infectious agents, i.e. bacteria, virus and fungi.



A risk analysis must be performed to determine the protection level and type of protective clothing required before any work involving chemicals is performed. Failure to comply with any of the recommendations given herein may result in serious injury.

### 4.2 Limitations of use

- Never use the suits near open flames or intense heat
- The suit is not intended for firefighting
- Avoid explosive environments

#### 4.2.1 Antistatic properties

AlphaTec® 66-320 / 66-330 suit materials fulfil the EN 1149-5 §4.2.1 (material requirements for protective clothing with antistatic properties).



**IMPORTANT:** This information is not a claim that the complete garment is antistatic or in any way safe to use with flammable liquids or vapors or explosive atmospheres. The European standard on antistatic properties of clothing, EN 1149, does not specify any method to evaluate a complete garment. If static charges are a concern the suit may be sprayed with water before and during use to minimize the risk of static charges accumulating.

### 4.3 Temperature of use

- 40°C to +65°C



The risk of heat stress must always be taken into account when working in coveralls. Depending on the type of work and clothing this risk may be considerable even at moderate ambient temperatures.

## 5. Pre-use

Before use, make sure:

- The suit is undamaged (see chapter 9)
- The suit, gloves and boots have the correct size (see chapter 11.1)
- To wear undergarments suited for the situation, e.g. station wear or fire turn-out gear.

If cold weather or risk of contact with cold chemicals, wear insulating underwear.



Never use a suit which is damaged.

## 5.1 Donning

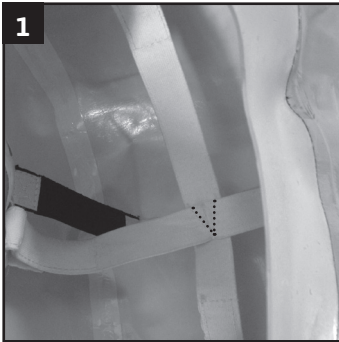
### 5.1.1 Hood adjustment



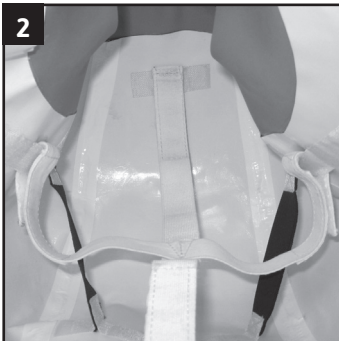
The elastic band shall be attached before the suit is donned.

The suit is delivered with a separate elastic band intended to be used inside the hood to get a tight fit of the face seal around the face. It is optional to use but it is recommended if the wearer has a small or narrow face. When fitted in the hood the elastic band makes it possible to adjust the fit of the face seal.

- 1) The elastic band is shaped as a cross. Place the cross “upside down” inside the hood (sewn arrow pointing down).



2. Attach the band in the loops inside the hood, using the Velcro closing.



There are three loop positions to be able to adjust the band in height to obtain an optimal fit, which is individual for each user.

### 5.1.2 Fitting the face piece

It is very important that the correct size of suit is selected and the fitting and positioning of the RPE (Respiratory Protective Equipment) face piece is done correctly on top of the suit/hood face seal, as described below. Please consult the RPE IFU and any RPE Selection and Use programs in place in the local workplace, regarding fitting and checking of the RPE.



Incorrect fitting may result in poor fit, reduction in protection or leakage.



Increased protection from liquid splashes may be achieved using the AlphaTec® Mini Hood.

### 5.1.3 Donning the suit



See the Appendix for advice on Customised feature “Attached mask”.



Always have an assistant to help you while donning and try to find a clean area to stand on.

- 1) (Sit on a chair) Place both legs into the suit and into the sewn-in socks (if fitted).
- 2) Put on the boots:
  - a) **Model 151/Open legs:** Position the elastic strap underneath your foot. Pull up the outer part/splash guard of the leg. Put on the boot, and make sure the inner part of the leg goes inside the boot. Pull down the splash guard over the boot.
  - b) **Model 156/Sewn-in sock:** Don the boot taking care that the splash guard goes outside the boot shaft. Pull down the splash guard over the boot.
- 3) Put on the comfort gloves.
- 4) (Stand up) Put the arms into the sleeves, then pull the hood over your head and adjust the face seal.
- 5) Let the assistant close the zipper and then the zipper splash guard. Never force the zipper! If it jams, gently pull it back and try again. Make sure the zipper is fully closed!



Handle the zipper with care. A damaged zipper can cause serious injury.

- 6) Put on the breathing apparatus, except the mask.
- 7) Put on the face mask. Position it on top of the grey face seal. Start at the chin and make sure the face mask tightens against the face seal (not to the suit material). Pull the harness over the head and tighten the straps.
- 8) Have the assistant check the mask position and make sure there are no folds on the face seal, which can cause leakage.
- 9) If risk for splash of liquid chemicals, also put on the AlphaTec® Mini Hood.
- 10) Put on the helmet. Ready.



**DISCLAIMER:** AlphaTec® suits with face seal (non-encapsulating) have been tested and approved to the requirements of the EU Regulation 2016/425 on PPE and EN 14605 using two different brands of SCBA (Interspiro and Dräger). It is impossible for Ansell to know beforehand what will be the resulting protection factor of the RPE plus suit system for different brands and types of RPE, different face masks, different users, different work operations and various work place conditions and scenarios of use etc.



**Specific notice to users in the United Kingdom:**

In addition to the EU Regulation 2016/425, and in addition to any local workplace program that may be in place for selection and use of RPE, the approved code of practice for the Control of Substances Hazardous to Health Regulations 2002 (as amended) and the OC 282/28 guidance on the carrying out of fit tests, require face fit testing to be carried out with other personal protective equipment in place. This testing should be carried out to ensure a device fits adequately before the device is first worn, and thereafter if there is a change in circumstances, such that there could be alteration to the wearers face shape.

## 6. In use

During the intervention, make sure to:

- Minimize the exposure to chemicals
- Avoid direct contact with the chemicals as far as possible

## 7. After use

### 7.1 Initial decontamination

After a response in hazardous environment, the suit must be decontaminated before taking it off, to protect the wearer from contamination.

- Make sure to have an assistant for the decontamination.
- The assistant also needs to wear suitable protective clothing and possibly respiratory protection.
- Rinse the suit with plenty of water, preferably with added detergent.

### 7.2 Taking off the suit

After decontamination, take off the suit in reverse order of that described for donning above, and have someone to assist you.

### 7.3 Final decontamination

If the initial decontamination is not enough, a second decontamination is necessary.

- Use protective clothing/equipment when handling the contaminated suit.
- Acids and Alkaline chemicals can be decontaminated using large amount of water. When the rinsing water has pH 7 the suit is clean.
- Inorganic chemicals can often be decontaminated using large amount of water and detergent.
- Volatile chemicals can be aired out of the suit. Hang the suit outdoors or in a well-ventilated area with the zipper fully open. Check the air for residual chemicals by using simple gas detecting tubes.
- For chemicals such as oil/petroleum and other organic chemicals, special decontamination agents may be needed. The type of agents available differ between countries and regions. Contact a local supplier.
- Biological agents (i.e. bacteria, viruses) can be decontaminated using e.g. 3% hydrogen peroxide water solution or other similar disinfectants.



## 8. Storage



When stored the suit should be unfolded and inspected once a year (see chapter 9).

### 8.1 Storage conditions

- Dry, humidity  $50 \pm 30\%$
- Room temperature, +5 to +25 °C
- Away from direct sunlight
- Away from ozone-generating sources, for example electrical engines, fluorescent lamps and air-conditioners

### 8.2 Storage methods

The suit should be stored:

- Folded as upon delivery or hanging
- In the plastic bag delivered with it or in another tight bag or box
- If stored in a box, make sure the box is large enough to easily accommodate the suit without pushing, pressing or squeezing it. Please refer to the boxes listed in the AlphaTec® Gross Price List.
- The zipper should be almost closed with approximately 10 cm open
- If stored folded, the face seal should be as flat as possible, avoiding sharp folds

### 8.3 Shelf life

Shelf life refers to suits in storage, without being used. The storage/shelf life applies under optimal storage conditions (see above) and does not form a guarantee. The recommended Shelf life is 7 years from date of manufacture, but this may be exceeded or be less. Therefore, the condition of the suit needs to be checked regularly to evaluate whether it is in good condition or not (see chapter 9).



Shelf life for attached gloves, see separate Instructions for Use.

## 9. Maintenance

### 9.1 Maintenance schedule

The specified intervals below are Ansell recommendations. For auxiliary equipment (SCBA, full-face mask, helmet etc.), refer to the relevant Instructions for Use.

The maintenance described below can be done by personnel without formal training, provided the instructions in this IFU are followed. For a list of spare parts & accessories, see chapter 11.6.

Area (chapter)	Upon Delivery	After Use	After Repair	Annually	Every 5 years	If Broken
Visual inspection (9.2)	X	X	X	X		
Cleaning (9.3)		X				
Lubricate zipper - if fitted (9.4)		X		X		
Lubricate Bayonet O-Rings - if fitted (9.5)		X		X		
<b>Repair &amp; Replacements</b>						
Patching suit material (9.8)						X
Rubber gloves (9.6)		X (*)				X
Face seal					X	X
Bayonet O-rings (9.5)					X	X
Bayonet locking pins (9.5)					X	X
Diaphragm in AlphaTec® Exhaust valve						

(\*) Rubber gloves to be replaced after use, if chemically contaminated.



For repair or replacement of face seal, visor, boots and zipper, contact an Ansell Service Center, or take a Training course provided by Ansell

## 9.2 Visual inspection of suit

The inspection shall consist of the following steps (see also chapter 9.1):

- Visual inspection of both inside and outside.
- Look for surface damages on material, seams, boots (if fitted) and gloves.
- Look for changes in the material properties such as brittleness, stiffness, swelling, stickiness or other phenomena which could be evidence of chemical degradation or aging.
- Check function of zipper and zipper fitting.
- Check function of the Bayonet glove ring system (if fitted).
- Check the function of the exhaust valve



If any defect/malfunction is found, the suit must be taken out of service.



Note any remarks, found during the inspection, in the inspection log.

## 9.3 Cleaning

For decontamination guidelines, see chapter 7.

### 9.3.1 Hand wash

Ansell recommends hand washing the suit:

- Hand wash in warm water (40 °C) with added mild detergent. E.g. EW80 may be used for cleaning and disinfection.
- Use a piece of soft rag or a smooth brush to clean the suit.



Care should be taken not to scratch or damage the material.

- Let the suit air-dry or use a fan (alternatively a cleaning system such as the TopTrock® may be used).
- Stains of oil or other substances may be washed off carefully with alcohol/ethanol. If this is not effective, a solvent like white spirit may be used carefully.



Take care not to use more solvent than necessary.

- After this, the suit should be rinsed with lukewarm water with a mild detergent followed by water.



Do not use garments that are not thoroughly cleaned and dried.

The suit material will withstand most commercial disinfectants. Your AlphaTec® dealer or Ansell Protective Solutions AB may be contacted for advice.

### 9.3.2 Machine wash

Machine wash is not recommended. Tumble-dry is not allowed (it may damage the suit).



Machine washing the suit is the customer's choice and responsibility.

## 9.4 Zipper

The zipper is an important part of the suit and also a delicate piece of equipment, that has to be handled carefully.



A damaged zipper can cause serious injury.

- Pull the slide using two fingers in the loop attached to the slide.
- Always pull the slide parallel and straight along the zipper. A pull sideways may seriously damage the zipper.
- When closing, make sure that neither suit material nor undergarment material is caught in the zipper.
- If the slide gets jammed or is hard to pull, then pull it back, trace the reason (e.g. dirt or clothing material caught in the chain) and solve the problem. Then slowly try to pull it again.
- Never try to overcome a problem by pulling harder as this will damage the zipper.

## 9.5 Bayonet ring

### 9.5.1 Function

The AlphaTec® Bayonet ring system consists of the following parts:

**Sleeve ring** – glued to the suit sleeve

**Glove ring** – where the glove is mounted

**Inner ring\*** – goes inside the shaft of the rubber glove

**Viton rubber O-rings** – one in the sleeve ring and one in the glove ring. Together with the rubber glove they provide a triple sealing of the system.

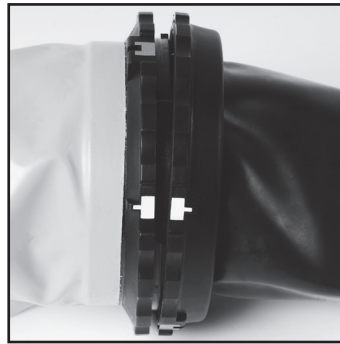
**Safety locking pin** – prevents the system from unintentional opening



#### Closed position

Green marks opposite white marks.

To open the system and detach the glove assembly, remove the red locking pin, push the two rings together and twist counter-clockwise until the white marks meet.



#### Open (detach/attach) position

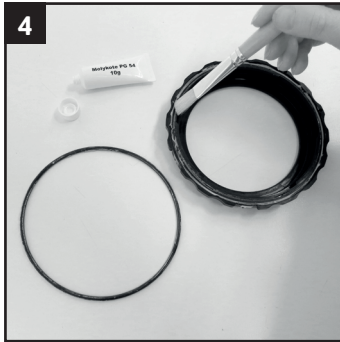
White marks opposite white marks.

To attach the glove ring, match the white marks, push the two rings together and twist clockwise until the white marks meet the green marks. Insert the red locking pin.

## 9.5.2 Maintenance

### Procedure:

- 1) Open the Bayonet ring and take out the two O-rings.
- 2) Apply Molycote all around the groove.
- 3) If replacing the O-rings: Put the two new O-rings into place.
- 4) Use a small paintbrush to spread the grease evenly.



When functioning properly, the safety locking pin “snaps” into place when pushing it with a finger. The pin may after repeated use become too easy to push into place, i.e. it gets worn out, and must then be replaced.

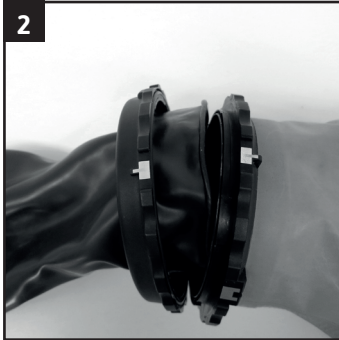


The two O-rings are different size:  
The one with larger diameter goes  
into the glove ring and the smaller  
diameter into the sleeve ring.

## 9.6 Replacing gloves

### Procedure:

- 1) Take out the Safety locking pin.
- 2) Push the rings towards each other, then turn clockwise, to open the ring system.



- 3) Pull the gloves out of the ring.
- 4) Take the new glove and place the black inner ring approximately 5 cm/2 inches into the rubber glove.



- 5) Lubricate the O-rings with Molycote.

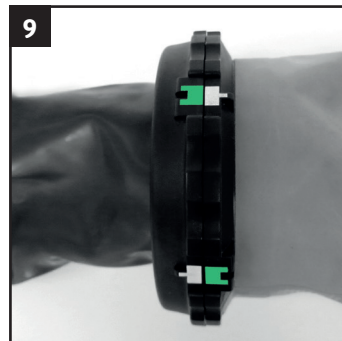
- 6) Push the glove through the glove ring and align the thumb of the glove with the green mark on the glove ring. Push it firmly into place using your thumbs.



- 7) Fold the glove shaft into the glove ring.

- 8) Position the glove ring and the sleeve ring so that the two white marks are opposite each other.

- 9) Now push the two rings towards each other and turn counter-clockwise, so that the white and the green marks meet.



- 10) Attach the safety locking pin.

## 9.7 Replacing rubber diaphragm in AlphaTec Exhaust valve



Follow these instructions to remove the cover from the AlphaTec® exhaust valve.

Lay the suit out on a flat surface and locate the exhaust valve on the chest.



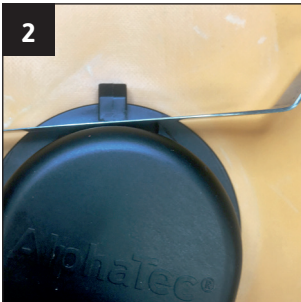
When removing the valve cover, do not hold the inner valve retaining collars, as this may loosen the valve from the suit.

### Procedure:

- 1) To remove outer valve cover, first rotate cover clockwise so the cover lug is 6-8 mm past the valve body stop.



- 2) Carefully insert a thin blade (do not use a knife) between the "cover lug and the body stop.



Do not try to lever the lug and valve body stop apart, as this could damage the exhaust valve.

- 3) Slowly turn valve cover anti-clockwise over the blade, this allows the cover lug to move past the body stop. Repeat this action until the valve cover is unscrewed from the valve body





- 4) Remove the old diaphragm and scrap it.



- 5) Check that the new diaphragm is clean before mounting it.
- 6) To refit the exhaust valve cover, screw the cover clockwise onto the valve body, turning the cover until there has been 3 clicks on the cover lug and valve body stop.

Take care not to cross thread.



The suit must be pressure tested before it is used again.

## 9.8 Patching

Minor damage, e.g. tears, punctures, scratches, can be patched using the AlphaTec® (TRELLCHEM®) Repair Kit, which also contains instructions (see chapter 11.6).

## 9.9 Marking on the suit

Marking on the suit can be made by a “permanent marker” type of pen.



Make sure the ink has dried before folding/packing the suit for storage.

# 10. Disposal

Worn out suits should be disposed of according to local regulations for rubber/plastic waste. Incineration is recommended.

Suits that are not completely decontaminated must be disposed of in a safe manner, taking local regulations for the specific chemical into account.

## 10.1. Retirement consideration

A suit should be retired when fulfilling one or more of the below criteria:

Criteria for retirement:	Explanation
Beyond repair	The damage is too big and therefore not possible/not safe to repair.
	The suit has already been patched 10 times.
	The cost for repair is higher than to buy a new suit.
Chemically degraded	Chemical degradation cannot be stopped or repaired.

## 11. Technical Data Package

### 11.1 Suit sizes

SUIT SIZE	HEIGHT (cm)	CHEST/BUST GIRTH
XXS	158-170	80-88
XS	164-176	84-92
S	170-182	88-96
M	176-188	92-100
L	182-194	96-104
XL	188-200	100-108
XXL	194-206	104-112
XXXL	200-212	108-116
<b>NOTE:</b> The data refers to a wearer without SCBA or any other equipment.		

### 11.2 Suit weight

Approx. 2.5 kg / 5.5 lbs for a suit size L.

### 11.3 Suit colour

AlphaTec® 66-320: Greenish yellow

AlphaTec® 66-330: Orange

# 11.4 Materials, seams & components

Suit part/Component	Description
<b>Suit material:</b>	
66-320:	Polyamide (nylon) knitted (stretch) fabric coated on outside with PVC, total weight 430 g/m <sup>2</sup> .
66-330:	Polyester fabric coated on both sides with PVC, total weight 510 g/m <sup>2</sup> .
<b>Suit seams:</b>	Welded
<b>Glove material - if fitted:</b>	AlphaTec® 08-354 (Scorpio) made from Neoprene (chloroprene) rubber.
Attachment:	Gloves are attached with a Bayonet ring system (see chapter 9.5). The ring is glued to the suit.
<b>Footwear (model 156):</b>	Sewn-in sock made from the suit material.
Attachment:	Welded
<b>Zipper:</b>	PVC coated watertight zipper.
Length:	850 mm
Attachment:	The zipper is welded to the suit.
<b>Exhaust valves:</b>	1 pce/suit, placed on the chest.
	<b>Construction:</b>
Valve seat/washer/ nut/cover:	Glass-fibre reinforced polypropylene
Valve/Suit gasket:	Chloroprene rubber
Diaphragm (membrane):	Silicone
Attachment:	Attached to the suit with a screw and nut.

## 11.5 List of spare parts & accessories

Description & Name	Sizes	Article no
<b>Gloves:</b>		
AlphaTec® 08-354 (Scorpio)	9 10	K72 250 160 K72 250 170
Cotton comfort inner glove, 5 pairs	10	K72 240 201
<b>Footwear:</b>		
PVC Safety boot	41 42 43 44 45 46 47	K72 203 410 K72 203 420 K72 203 430 K72 203 440 K72 203 450 K72 203 460 K72 203 470
<b>Storage:</b>		
AlphaTec® Bag		K78 751 786
Hanger		K72 400 100
Storage box, plastic (small)		K78 700 120
<b>Maintenance &amp; Repair:</b>		
Lubrication for Bayonet ring system, 5 pcs		K69 095 006
Viton O-rings for Sleeve ring, 10 pcs		K72 000 606
Viton O-rings for Glove ring, 10 pcs		K72 000 611
Safety locking pin for Bayonet ring system, 10 pcs		K73 103 586
Repair kit AlphaTec® 66-320, greenish yellow*		487 080 214
Repair kit AlphaTec® 66-330, orange*		487 080 079

\*Instructions included.

## 11.6 EU type approval data

See EU type approval on page 8. Tests and classification according to EN 14325:2004, EN 14325:2018 and EN 14126:2003.

It should be noted that all chemical testing was performed on swatches of suit material under laboratory conditions, not under actual workplace environments. The user must determine the applicability of the results obtained under laboratory conditions to the actual conditions of use. Information presented is subject to change without notice.

<b>SUIT MATERIAL AND SEAM - MECHANICAL DATA</b>				
<b>PROPERTY</b>	<b>TEST METHOD</b>	<b>CLASS REQUIREMENT</b>	<b>CLASS (66-320)</b>	<b>CLASS (66-330)</b>
Abrasion resistance	EN 14325:2004/2018, EN 530	> 2000 cycles	6	6
Flex cracking resistance	EN 14325:2004, ISO 7854:B	Class 6: > 100000 cycles Class 4: > 15000 cycles	4	6
Flex cracking resistance	EN 14325:2018, ISO 7854:B	Class 6: > 50000 cycles Class 5: > 20000 cycles	5	6
Flex cracking @ -30°C	ISO 7854:B	Class 6: > 4000 Class 4: > 1000	4	6
Tear resistance	EN ISO 9073-4	> 60 N	4	4
Tensile strength	EN ISO 13934-1	Class 6: > 1000 N Class 4: > 250 N	4	6
Puncture resistance	EN 863	Class 3: > 50 N Class 2: > 10 N	2	3
Resistance to flame*	EN 13274-4 method 3	1 sec in flame, leak tight afterwards	2	2
Antistatic properties, garment material*	EN 1149-5:2018	$t_{50} < 4$ sec	Pass	Pass
Seam strength	EN ISO 13935-2	Class 6: > 500 N Class 5: > 300 N	5	6
Limited flame spread index (LFI)*	EN ISO 14116:2015	Afterflame/afterglow $\leq 2$ s	1	Not tested

\* Not part of EN 14605 and EN 14325 requirements.

<b>SUIT MATERIAL AND SEAM - RESISTANCE TO PERMEATION BY CHEMICALS</b>				
<b>CHEMICAL</b>	<b>SUIT MATERIAL (66-320)</b>	<b>SEAM (66-320)</b>	<b>SUIT MATERIAL (66-330)</b>	<b>SEAM (66-330)</b>
Formaldehyde solution	6	6	6	6
Hydrochloric acid, 37%	6	6	6	6
Sodium hydroxide, 40%	6	6	6	6
Sulphuric acid, 50%	6	6	6	6
Tested according to ISO 6529, breakthrough criteria 1.0 µg/min/cm². NOTE: AlphaTec® 66-320 and 66-330 are not suited for exposure to solvents.				

<b>COMPONENTS - RESISTANCE TO PERMEATION BY CHEMICALS</b>	
<b>CHEMICAL</b>	<b>ALPHATEC® 08-354 (SCORPIO) GLOVES</b>
Formaldehyde solution	6
Hydrochloric acid, 37%	6
Sodium hydroxide, 40%	6
Sulphuric acid, 50%	6
Tested according to ISO 6529, breakthrough criteria 1.0 µg/min/cm².	

<b>CLASSIFICATION OF PERMEATION BREAKTHROUGH TIME</b>						
<b>CLASS</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>PERMEATION TIME</b>	> 10 min	> 30 min	> 1 hr	> 2 hr	> 4 hr	> 8 hr

<b>SUIT MATERIAL – RESISTANCE TO PENETRATION BY INFECTIVE AGENTS</b>		
<b>CHEMICAL</b>	<b>SUIT MATERIAL (66-320)</b>	<b>SUIT MATERIAL (66-330)</b>
Synthetic blood (ISO 16603:2004)	6	6
Phi-X174 bacteriophage (ISO 16604:2004)	6	6
Penetration by biologically contaminated aerosols, using Staphylococcus aureus ATCC 6538 (ISO/DIS 22611:2003)	3	3
Dry microbial penetration, using Bacillus subtilis (ISO 22612:2005)	3	3
Wet bacterial penetration, using Staphylococcus aureus ATCC 29213 (EN ISO 22610)	6	6
Tests and classification according to EN 14126 - infective agents.		

## 12. Warranty

In case of faults or defects, if any, in the protective suits, including gloves and other accessories, the following is applicable:

If a fault or defect appears in the protective suit as a result or in the course of any use, function or state of the protective suit, the purchaser is requested to contact the company from which the suit was purchased. The terms of sale agreed upon between the purchaser and the said company shall apply in this case. Ansell Protective Solutions AB shall have no liability to purchasers of the protective suits other than when the suit in question was purchased directly from Ansell Protective Solutions AB.

The liability of Ansell Protective Solutions AB for faults or defects of a protective suit shall be subject to the Standard Warranty set forth in its General Conditions of Delivery for Industrial Rubber Products, unless otherwise stated in a separate agreement in writing between Ansell Protective Solutions AB and the purchaser. The General Conditions of Delivery are available on request and for download on <https://www.ansell.com/fi/en/legal/aps-trade-conditions>.

This manual does not in any way comprise a guarantee or warranty on the part of Ansell Protective Solutions AB, and Ansell Protective Solutions AB expressly excludes any implied warranty of merchantability or fitness. Ansell Protective Solutions AB is not in any way nor under any conditions liable for compensation to the purchaser or commercial user of a protective suit for injury to (including death of) any person or loss of or damage to property of any kind or for costs, loss of profits or other damage or loss of any nature whatsoever.



## Appendix: Customised features

Below follows a list of customised features, available for selected customers, and donning instructions.

### A. Attached mask

The attached face mask is Dräger Panorama Nova. It is glued to the suit and taped on both inside and outside. The harness is outside the suit hood.



See separate Instructions for Use for the Face mask.

### Donning:



Always have an assistant to help you while donning and try to find a clean area to stand on.



Check that the face mask has the valve open, to be able to breath without the breathing apparatus.

- 1) (Sit on a chair) Place both legs into the suit and into the sewn-in socks.
- 2) Put on the boots taking care that the splash guard goes outside the boot shaft.  
Pull down the splash guard over the boot.
- 3) Put on the comfort gloves.
- 4) (Stand up) Put the arms into the sleeves, then pull the hood over your head and position the face mask.
- 5) Tighten the face mask harness.
- 6) Let the assistant close the zipper and then the zipper splash guard. Make sure the zipper is fully closed!
- 7) Put on the breathing apparatus and connect it to the face mask.
- 8) Put on the helmet. Ready.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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