

# NORTHERN DIVER

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HOTWATER SUIT MANUAL  
EVOLUTION 8

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## Advice

The Evo8 Hotwater Suit is a Commercial Diving Hot Water Suit. It's strongly suggested that if you are planning to dive in the Evo8 Hotwater Suit you should read and fully understand these instructions prior to diving.

The Evo8 should only to be used by individuals who've received training specifically for using it, or who are being instructed by an industry recognised instructor proficient in the use of Hotwater suits.

Our Hotwater suit is not a buoyancy aid. The Evo8's buoyancy will decrease with depth.

It's very unlikely and incredibly rare but scalding can occur. To reduce the effects of scalding, we recommend you wear an undersuit, base layer or a form of thermal garment under your Hotwater Suit.

While using the Northern Diver Hotwater Suit, if you expect a work rate increase please watch for signs of over-heating (hyperthermia) and take immediate action.

Please note, although rare, some people have an allergic reaction to some types of neoprene or latex. If while you're wearing your suit any sort of rash appears, remove the suit immediately and seek medical advice. We recommend that you perform a full flow test prior to each dive.

## What's included?

1. Neoprene Hotwater Suit
2. Spare name badge supplied with each suit
3. Instruction Manual

The Hotwater suit is tested to and meets EN 14225-3:2017

Notified Body No. 2452

Vojenský technický ústav, s.p.

odštěpný závod VTÚPV

Víta Nejedlého 691

682 01 Vyškov

Czech Republic

The EU Declaration of Conformity can be found on the Northern Diver (Int) Ltd product pages in the download section, please visit our website :  
[www.ndiver-commercial.com/evolution-8-hotwater-suit](http://www.ndiver-commercial.com/evolution-8-hotwater-suit)

Made from 4mm compressed neoprene that's shrink resistant, the density of the neoprene is increased through the compression process giving the Evo8 Hotwater Suit its massively improved strength. The Northern Diver Hotwater Suit is manufactured from materials which provide the same maximum comfort whilst ensuring excellent resistance to wear and tear. As with all our diving products, performing proper care and maintenance, as outlined in this manual, will ensure an extended product life.

**Features:**

Moulded and overprinted shoulder, knee and elbow pads

Easy to maintain valves

Hook and loop fastening to secure wrists and the zip

Side zip on ankle to taper the suit fit

2x Reinforced bellows pockets

Blind stitched, internally reinforced and sealed seams

**We've developed our suit to be:**

Low friction

- allowing the suit to slide easily whilst being put on and taken off and also during diving.

Lightweight

Low bulk

Ease of movement

Ease of adjustment of the hot water supply

The Northern Diver Hotwater Suit is compatible with all Commercial Diving hot water systems. The suit is compatible with all Commercial harnesses and recovery vests. (Although we'd recommend you use our Northern Diver R-Vest or Safety Harness). If sizing allows, the Evo8 can be used by male or female divers.

Designed to be used as a commercial hot water suit, the Evo8 Hotwater Suit was developed to attach to a hot water delivery system. The suit is designed to be used in an environmental temperature range of 2°C (35.6°F) to 20°C (68°F)

The size of the suit is printed on the left chest above the name label as well inside on the Hotwater Suit's information panel. When choosing a suit, please select one that's closest to the wearers body dimensions - height, chest and C-Floor. For more guidance on this, please check our Hotwater Suit sizing guide. Provision for urination is not required as the suit is not a drysuit.

### Size chart

	S	M	MT	ML	MLT
<b>HEIGHT (FT)</b>	5'6	5'8	6'0	5'10	6'
<b>HEIGHT (CM)</b>	168	173	183	178	183
<b>WEIGHT (ST)</b>	10.5	11	11.5	12.5	13
<b>WEIGHT (KG)</b>	66	70	75	83	82
<b>CHEST (CM)</b>	91 - 96	96 - 102	96 - 102	102 - 106	102 - 106
<b>CHEST (IN)</b>	36 - 38	38 - 40	38 - 40	40 - 42	40 - 42
<b>CROTCH TO FLOOR (CM)</b>	78.5	81.5	83.5	83.5	83.5
<b>CROTCH TO FLOOR (IN)</b>	31	32	33	33	33

### Available Accessories



Hotwater gauntlet gloves



Hotwater boots



Hotwater service kit



**1 Piece undersuits** Hotwater, Metalux, Thermalux, Bodycore



**2 Piece undersuits** Base Layer



**3 Piece undersuits** Thermicore and Sub Zero

L	LT	XL	XLT	XXL	XXLT	XXXL
6'0	6'2	6'2	6'4	6'4	6'5	6'5
183	188	188	193	193	196	196

14	14.5	16	16.5	17.5	18	18.5
89	92	95	102	110	114	117

106 - 112	106 - 112	112 - 117	112 - 117	117 - 122	117 - 112	127
42 - 44	42 - 44	44 - 46	44 - 46	46 - 48	46 - 48	50

83.5	86.5	86.5	91.5	91.5	91.5	91.5
33	34	34	36	36	36	36

### **Wearing an undersuit:**

You're the best judge of your body's thermal protection requirements. Always consider undersuit specifications and combinations to best meet your requirements. Hot water can scald; the dive superintendent must ensure the hot water supply temperature is correctly set and the diver should always wear an undersuit of some description as a barrier which will prevent direct contact with the hot water being supplied through the suit.

Evo8's Thermal Insulation value: 1.06 to 1.08 TOG (mean). Essentially there's no significant thermal insulation protection. The Northern Diver Hotwater Suit is designed to be worn over a wetsuit or a diving undersuit (we recommend our Thermalskin undersuit) that'll act as an outer heated suit and protection layer. Without its hot water supply, the suit itself offers no significant thermal insulation or protection from the cold. The Evo8 should be worn in conjunction with diver's underclothing to provide additional insulating layer(s).

### **Please check your suit before and after use**

#### **Before use**

- Make sure your suit's zip is in good working condition
- Ensure the water distribution valve is secured tightly to your suit
- Perform a full flow test before each dive

#### **After your dive**

- Make sure there are no rips or tears on your suit
- Ensure the suit hasn't picked up any dirt or contamination that'll degrade it
- Clean and dry your suit (as per our cleaning instructions in this manual)

In the event of the suit becoming torn or damaged, it should ideally be returned to your local Hot Water Suit distributor for inspection. The distributor will be able to advise whether the equipment should be repaired or replaced.

### **Donning the Suit**

1. Put on your undersuit
2. Undo the front zip, pull onto your legs and up to your waist
3. Put your arms through the sleeves and pull onto your shoulders
4. Pull up the zip on the front

### **Doffing the suit**

1. Undo the zip
2. Pull the suit off your shoulders and remove your arms from the sleeves
3. Push the suit down to the waist
4. Step out of the legs

### **Hotwater Suit Care Instructions**

#### **Washing**

Use cold, fresh water to rinse your suit thoroughly after every use.

Dry your suit naturally at a normal room temperature, out of direct sunlight.

If the suit is soiled you can use luke warm, clean water to wash it. If your Evo8 is particularly severely soiled, you can wash it in a mild detergent, however we suggest this is only done occasionally.

From time to time we also recommend that you apply silicone spray to the zip.



Tumble drying may cause suit shrinkage

#### **Diesel and Oil**

While using your suit, you could come in contact with diesel or oil. These liquids will eat away at your suit and will have a detrimental effect on the life of your suit. To slow this process, we recommend that you regularly rinse your suit in fresh water. If your suit becomes degraded by diesel and oil this will void your warranty and we can't offer a guarantee against this.

#### **Storage**

After use, the Evo8 Hotwater Suit must be thoroughly cleaned and dried. You can then either:

Fold your suit loosely and store it in a large bag or container, or

Hang your suit on a suitably sized hanger (we recommend our multi-purpose hanger)

Always store in cool dry conditions and keep your suit out of direct sunlight to extend the product life.

Do not leave any neoprene suit folded in a damp condition for longer than absolutely necessary. Be aware, neoprene will crease if not stored correctly.

We supply the Northern Diver Evo8 Hotwater Suit in sealed, plastic packaging. This should be removed before use and can be recycled.

### **Suit Maintenance**

Please follow the cleaning and suit check guidance that's outlined in this manual.

### **Valve & Piping Maintenance**

Periodically flush the valve and tubes through with clean fresh water. You don't need to remove the valve from the suit to flush it.

### **Inspection Intervals**

Your Evo8 should be checked before and after each dive.

If your suit has been stored for any length of time, it should be thoroughly checked and flow tested before it's re-commissioned and used.

### **Repairs**

Small and simple repairs to your Evo8 can be carried out using a quality neoprene adhesive. However, we'd always advise that repairs and alterations are carried out by a trained and skilled repair technician. In the event of the suit becoming torn or damaged, it should ideally be returned to your local Hot Water Suit distributor for inspection. The distributor will be able to advise whether the equipment should be repaired or replaced.

### **Modifications**

Under no circumstances should you modify the suit (unless trimming the arms and legs) without the knowledge and consent of Northern Diver, the manufacturer. Any modifications outside of trimming the arms and legs would nullify your warranty and could affect the Hotwater Suit's PPE status and CE approval.

### **Designed and manufactured by:**

Northern Diver Commercial  
Appley Lane North  
Appley Bridge  
Wigan  
Lancashire  
WN6 9AE

### **Warranty**

Northern Diver's Evolution 8 Hotwater Suit is guaranteed against material and manufacture defects for one year. In the unlikely event you have any problems with your Evo8 in that time, we will repair or replace it free of charge, if after inspection, we believe the product is defective. We will always take wear and tear from use into account when making this assessment. Please note: modifying your suit or exposing it to diesel and oil which will degrade it nullify this warranty.

### **Terms and conditions:**

Regardless of where you have bought your Evo8 or where you intend to use it, it's been sold to you on the understanding that only English Law applies. Please bear this in mind in the case of any and all warranty or product liability claims.



Find Us Online.

View our extensive product range

[www.ndiver-commercial.com](http://www.ndiver-commercial.com)



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