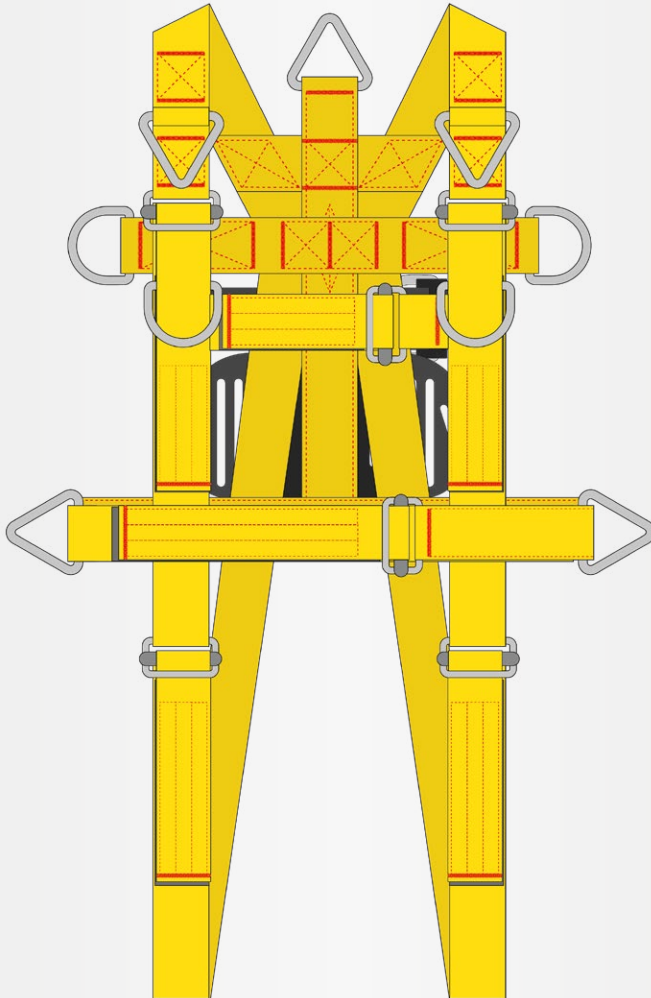


NORTHERN DIVER

COMMERCIAL SUITS & EQUIPMENT



BELL SAFETY HARNESS WITH BUILT IN BACK PLATE USER MANUAL

EN 15333-1:2008

NORTHERN DIVER BELL SAFETY HARNESS WITH BUILT IN BACK PLATE - USER MANUAL

Thank you for purchasing the Northern Diver Bell Safety Harness With Built In Backplate. To help ensure your future diving safety, do not use this product before reading this manual. It is important to fully understand its proper handling for safe usage. This manual is supplied as a guideline for equipment use and care. It is not a substitute for proper qualified instruction and is not supplied as such.

QUALITY YOU CAN COUNT ON - TESTED AND COMPLIANT.

We've had it independently tested against the European Standard 15333-1:2008 clauses 5.11.2 (Lifting Harness), 6.2 (Visual Inspection), 6.8 (Lifting Harness), 6.9 (Sea Water Resistance), 6.13.3 (Basic Testing) and 6.13.4 (Functional Testing when Diving). The Bell Safety Harness meets Regulation (EU) 2016/425 of the European Parliament and of the Council.

This means our Bell Safety Harness With Backplate:

- Can be used to lift an unconscious diver from the water.
- Doesn't need to be removed along with any diving gear attached to it in an emergency.
- Has lifting points on both the back and front.
- Each lifting point (and the adjustment buckles) can withstand a tensile force of 1000kg.
- Had no tearing or indication of failure when subjected to a tensile force of 1000kg for 5 minutes in a direction of lift on each lifting point.
- Passed a sea water resistance test. This test means it was submerged for 8 hours in seawater and then, without being cleaned in fresh water, left in air for 16 hours with a relative humidity of no more than 75%, all at a temperature of between 15°C - 25°C. This cycle is completed four times for the test.

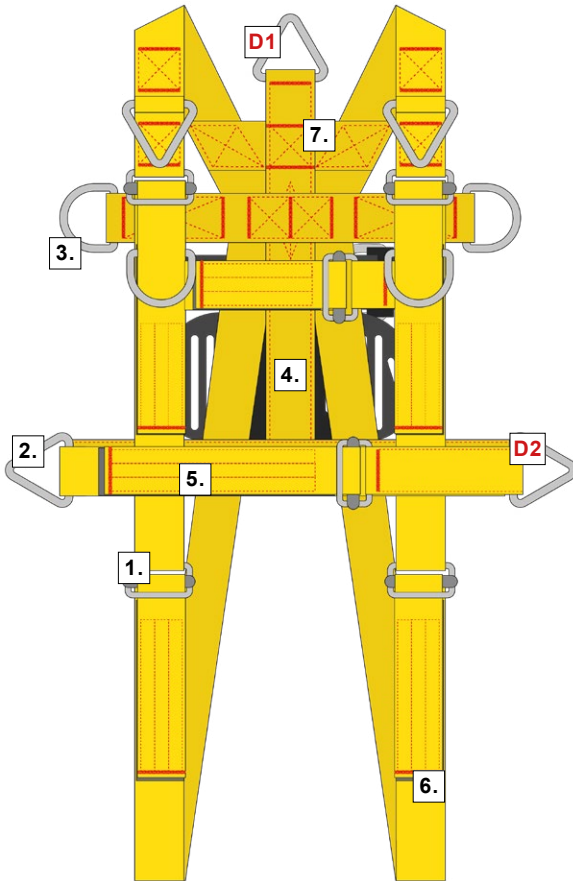
The testing our harness underwent was done independently from Northern Diver. The tests were performed using at least six test subjects working in pairs as an observer/ operator and as a wearer. They tested the security of the fastenings and couplings, the comfort and checked that there were no sharp edges or protrusions that could injure a diver wearing it. They checked how the harness functioned out of the water and made sure that it was easy to don and doff without help on land - this included the adjusting of all the straps.

Notified Body No. 2452
Vojenský technický ústav, s.p.
odštěpný závod VTÚPV
Víta Nejedlého 691
682 01 Vyškov, Czech Republic

Declaration of Conformity can be found on the Northern Diver (Int) Ltd product pages in the documents section, please visit our website:

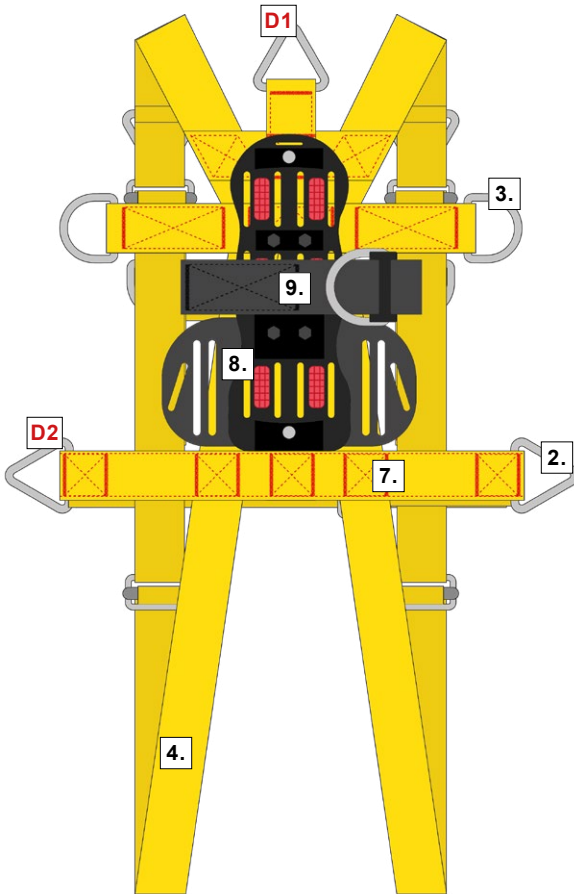
www.ndiver-commercial.com/backpack-harness

HARNESS PARTS BREAKDOWN. FRONT VIEW



1. Stainless steel slide lock adjustment buckles (qty 6)
2. Certified diver recover lifting points - special triangular shaped stainless steel d-rings (qty 5)
3. Approved stainless steel equipment d-rings (qty 4)
4. Highly visible 50mm wide heavy duty, durable webbing build
5. Easily adjustable shoulders, chest, waistband and leg straps
6. All straps are secured with hook and loop Velcro so there is no risk of snag hazards
7. Reinforced red stitched areas provides additional strength and is easily identifiable for inspections
8. Integrated heavy-duty back plate.
9. Supplied with a single cam band, however this is capable of holding twin cylinders, if twinning bands are purchased and fitted.

HARNESS PARTS BREAKDOWN. BACK VIEW



1. Stainless steel slide lock adjustment buckles (qty 6)
2. Certified diver recover lifting points - special triangular shaped stainless steel d-rings (qty 5)

D1: UK umbilical D-ring

D2: USA umbilical D-ring

3. Approved stainless steel equipment d-rings (qty 4)
4. Highly visible 50mm wide heavy duty, durable webbing build
5. Easily adjustable shoulders, chest, waistband and leg straps
6. All straps are secured with hook and loop Velcro so there is no risk of snag hazards
7. Reinforced red stitched areas provides additional strength and is easily identifiable for inspections
8. Integrated heavy-duty back plate.
9. Supplied with a single cam band, however this is capable of holding twin cylinders, if twinning bands are purchased and fitted.

SIZE CHART.

The harness is available in a STANDARD size.

CHEST (CM)	CHEST (IN)
91-116	36-46

The harness is fully adjustable as to its position, which allows divers of different sizes to position and lock it in the most suitable place.

BACKGROUND.

Diver harnesses are for work safety. If a diver becomes unconscious or incapacitated they will be rescued and recovered to the diving bell via a recovery hoist. The recovery hoist will be attached to the divers harness and the diver would be raised into the diving bell to receive treatment. The harness acts as the strong point to attach the divers umbilical.

Lifting can be via the rear of neck recovery lifting point or using a spreader bar across the two front recovery lifting points (certified triangular shaped D-rings)

MAINTENANCE.

As per other lifting equipment is it strongly recommended that the Bell Safety Harness is added to the users/companies planned maintenance schedule. The harness should be inspected by a competent person every 6 months for any signs of abrasion or stitching failure, as well as signs of any other damage to component parts or straps.

You may also use IMCA's policy on such life support equipment as a guide to ensure the harness continues to be fit for purpose. Refer to IMCA document DESIGN D018 detail sheet 34.

STORAGE.

The harness should be stored in a cool dry place away from direct sunlight. The harness should be thoroughly dried before storage.

CLEANING AND DISINFECTION.

After use the harness should be washed with clean water to remove salt and prevent build up of grime over time.

Should the harness need to be disinfected i.e. after use in contaminated water, a diluted bleach/water solution can be used. This should be thoroughly rinsed off after washing and harness allowed to completely dry.

ACCESSORIES.

The Bell Safety Harness is a stand alone piece of lifting equipment.

It is designed to be used with any recovery hoist that can be attached to one of the 'D' rings on the harness.

The Bell Safety Harness may also be used with a spreader bar attached to the two front recovery lifting points (certified triangular shaped D-rings).

The harness is intended to be used as a strong point to attach the divers umbilical. There are no other accessories required or designed for use with this product.



BEFORE USE

Please ensure that a visual inspection is performed on the Bell Safety Harness before each dive.

The operator should check the webbing, thread and d-rings to make sure they show no signs of damage.

AFTER USE

Rinse the Bell Safety Harness in fresh warm water making sure that any dirt / salt is removed and leave to dry.

CORRECT FITTING OF THE HARNESS.



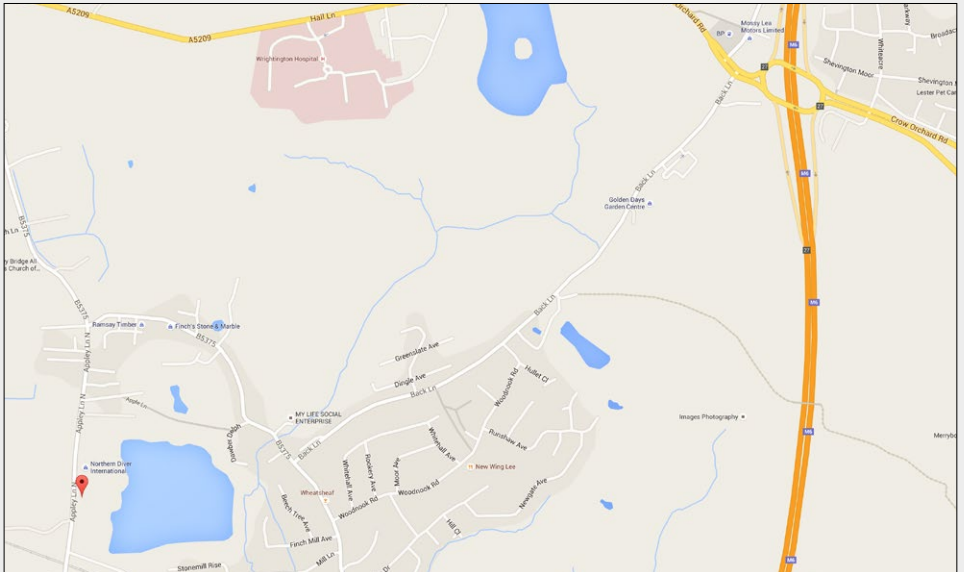
In order to don the harness: step into the leg holes, pull the harness over shoulders, tighten the straps evenly at each adjustment point so that the harness is snug but comfortable.

In order to doff the harness reverse the above procedure.

LABEL.

The below label is stitched to the inside chest strap webbing of the harness.

NORTHERN DIVER COMMERCIAL SUITS & EQUIPMENT		BELL SAFETY HARNESS STANDARD	
EN 15333-1:2008 W L L (Working Load Limit) : 1000 kg		MANUFACTURE DATE	(MONTH) (YEAR)
Designed & developed in the UK. Northern Diver International Ltd, East Quarry, Appley Lane North, Appley Bridge, Wigan, WN6 9AE Tel: +44 (0) 1257 25 44 44, email: neil@ndiver.com, visit website www.ndiver-commercial.com		SERIAL NUMBER	
		IN SERVICE DATE	(MONTH) (YEAR)



FIND US.

We are happy to answer any questions you may have. We are located in Appley Bridge, Lancashire, UK - only 5 mins from the M6 motorway (J27). Manchester & Liverpool international airports are only 40 mins away. Wigan North Western rail station is 2 hrs & 3 mins from London Euston. We are more than happy to collect clients and return them after their visit

View our full commercial product range

www.ndiver-commercial.com

Call our office

+44 (0) 1257 25 44 44

Email any enquiries to

info@ndiver.com



Certificate Number 1666
ISO 9001, ISO 14001



Northern Diver International Ltd

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