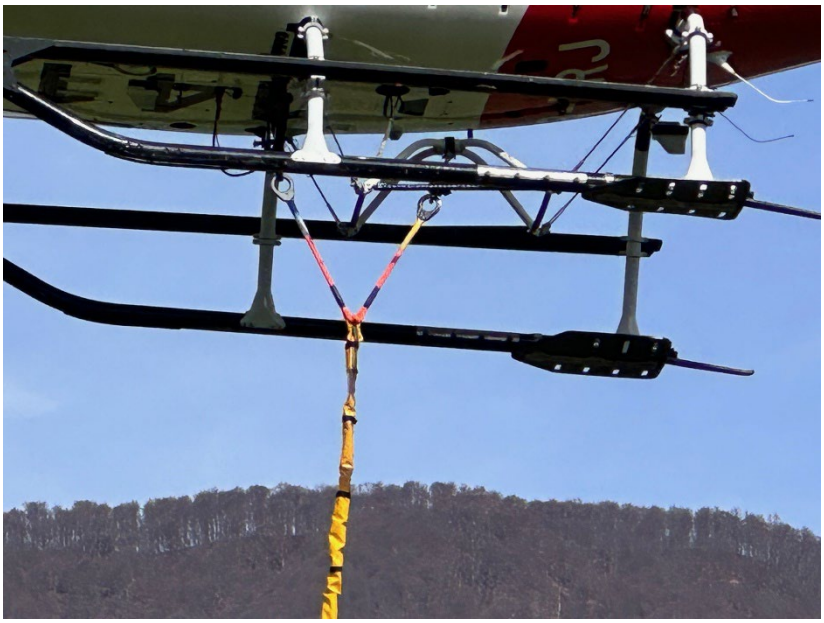
Instructions for use and maintenance

(Translation of the original instructions for use and maintenance (AWA))

Human External Cargo (HEC) fixed rope system
For WLL 500 kg for AS350 B3 (H125)

P/N: HEC_5_H125

EASA STC no. 10085893
TCCA STC no. SH21-6



Picture AeroFEM © 2024

0. Content

1. Use

Correct Use

The rope system HEC_5_H125 is used for human external cargo (HEC) operation with the helicopter type AS350 B3 (H125). A maximum HEC mass of 500kg can be attached and carried. The HEC system is attached to the helicopter Dual Cargo Hook System (DCHS), consisting of the Primary Cargo Hook (PCH) on swing (named as **CARGO HOOK YELLOW**) and the Boost Secondary Cargo Hook (SCH) (named as **HEC HOOK BLUE**) manually. The HEC load is connected to the rope system at its lower end using a suitable simple PCDS or an additional complex PCDS.

This document provides instructions for the proper use and maintenance of the equipment HEC_5_H125. Usage limitations are addressed as well.

If used in the correct way, the HEC_5_H125 guarantees safe handling.

It is designed to be used only and exclusively in the above mentioned way, that is, as a lifting device for the Human External Cargo transport by helicopter.

2. User training

Personnel assigned to using this device must have adequate instruction and training prior to its first use. During the introduction to its use and subsequent in-depth training, particular emphasis should be set on gaining a good knowledge of the present instructions for its use and maintenance.

The training must be refreshed at least annually. The training must be documented in an appropriate way (content, date, instruction personnel, etc.).

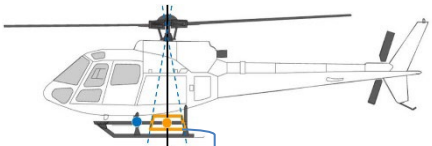
Picture by A&H © 2024

3. Overview

Note: not to scale

3.1 Definitions

Rotorcraft EASA CS-27



AS350 B3 (H125)

with double cargo hook system (DCHS)
PCH = Swing, SCH = Boost B1310, EASA STC 10081304
WLL 500 kg, limit for all parts used with Y-Rope.

Y-Rope

Important
The Y-rope limits the WLL to 500kg

Human external cargo equipment

(Examples)

Fixed rope

static ropes in WLL ≤ 600 kg

Lengths between min. 5.0 m and 200m
(4 x 50 m or other combinations of lenghts)

WLL 500 kg whole system

Important
The length of this complex PCDS is limited to 220m
(upper tolerance of length, nominal 207.8m)

Load element (buoy)

Stabilisation weight at the bottom of the rope, reduces turn up and acts as a swivel, incl. rescue hook.

Sharp Edge Protection

2.6 m - 5.6 m

Load element and sharp edge protection also extension

Rescue hook or other approved parts

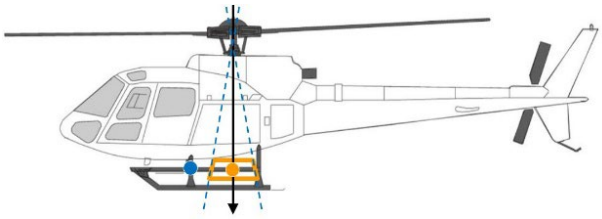
Personal Protective Equipment (PPE)

simple PCDS, e.g. EN 354, EN 358, EN 362 and others
or complex PCDS
or other approved parts for specific operations

3.2 Type of helicopter

AS350 B3 (named as H125)

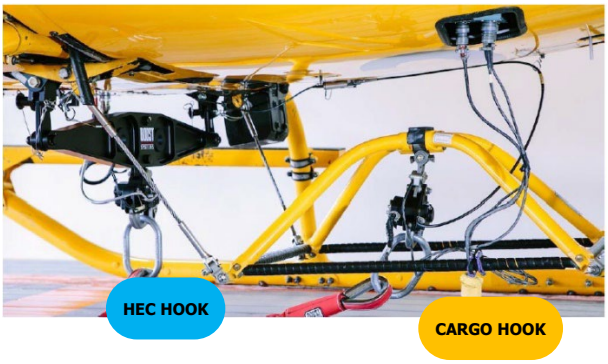
- Suitable for version(s): all series



3.3 Cargo hook installation (including all Amdt.)

Dual Cargo Hook Provision P/N:

- The compatible provisions on the helicopter are clearly defined in the RFMS (AEF-0819-FMS-0005)
- PCH: Swing .. (**CARGO HOOK YELLOW** right hand or CG)
- SCH: Boost B1310, EASA STC 10081304 (**HEC HOOK BLUE** left hand or FWD)



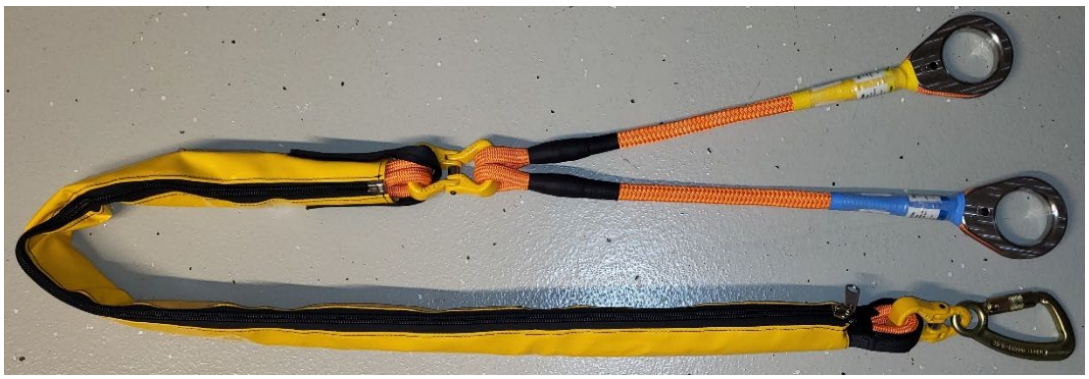
View from left side

View from front side

3.4 Y-Rope

P/N: HEC_Y_5_H125, WLL 500 kg (1100 lbs). Mass: 2.75 kg, L max. 2.2 m (6.0 lbs, 7.2 feet)

subP/N: - **Leg YELLOW** to Cargo Hook (Swing): sHEC_Y_5_H125_L1
- **Leg BLUE** to HEC Hook (Boost): sHEC_Y_5_H125_L2
- Leg YELLOW protective coat Damper: sHEC_Y_5_H125_L3.

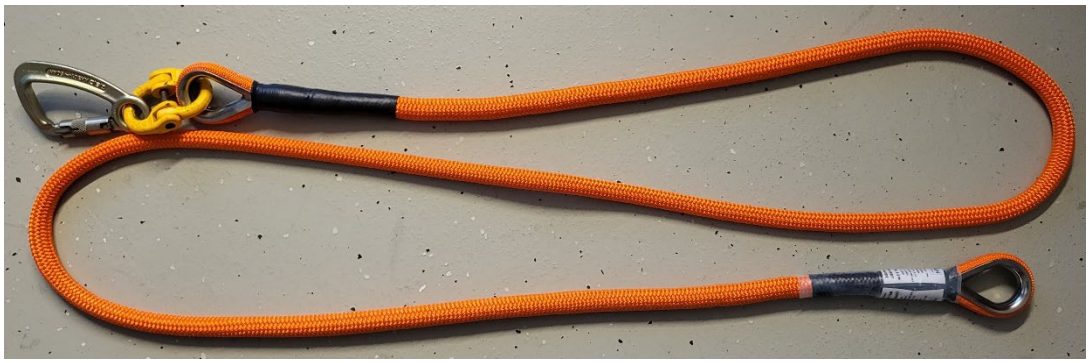


3.5 Fixed rope

P/N: HEC_BT_6_x, WLL 600 kg (1320 lbs), length min. 5 – max. 50 m per each (15 – max- 165 feet), max. 200 m (4 x 50 m or combinations of other lenghts).

Mass in kg: 5 m = 1.7 kg; 10 m = 2.5 kg; 20 m = 4.1 kg; 50 m = 8.75 kg

Mass in lbs: 15 feet = 3.7 lbs; 30 feet = 5.25 lbs; 60 feet = 8.4 lbs; 165 feet = 19.4 lbs)

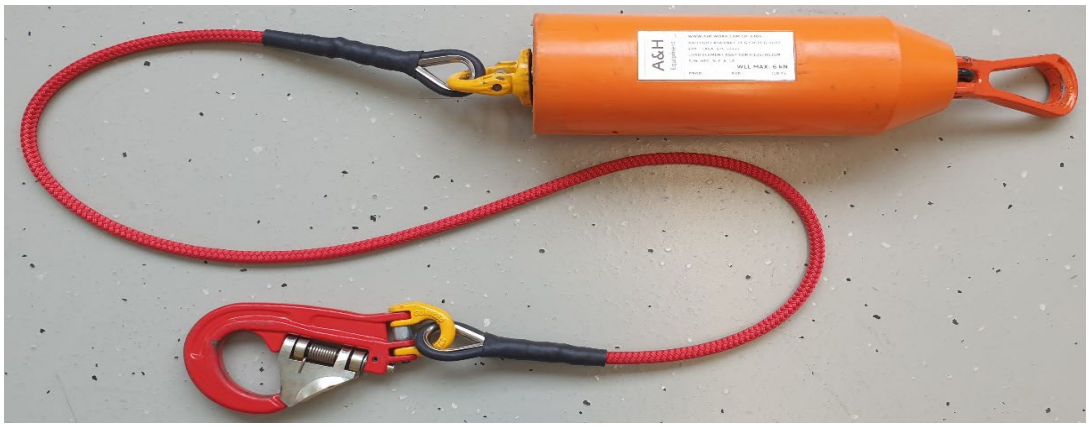


3.6 Load element, incl. Buoy, sharp Edge Protection (SEP)-Rope

3.6.1 Variant with HUB-Rescue Hook (standard)

P/N: HEC_SLE_6l-x-HUB, WLL 600 kg (1320 lbs).

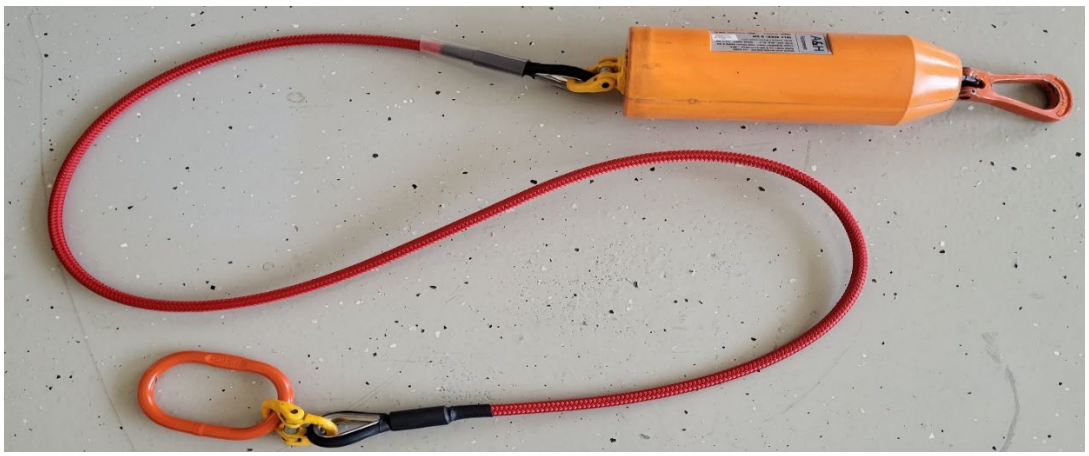
- HEC_SLE_6l-2-HUB = 12.4 kg, length 2.6 m (27.3 lbs, 8.5 feet)
- HEC_SLE_6l-5-HUB = 13.5 kg, length 5.6 m (29.75 lbs, 18.4 feet)



3.6.2 Variant with Oblong Ring AW-13-10

P/N: HEC_SLE_6l-x-AW, WLL 600 kg (1320 lbs).

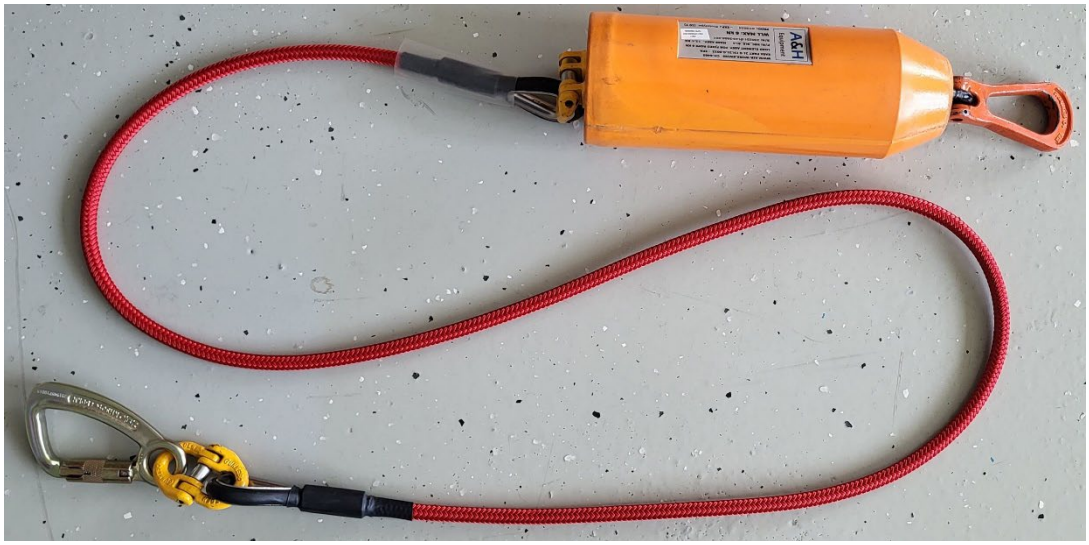
- HEC_SLE_6l-2-AW = 12.0 kg, length 2.6 m (26.45 lbs, 8.5 feet)
- HEC_SLE_6l-5-AW = 13.2 kg, length 5.6 m (29.1 lbs, 18.4 feet)



3.6.3 Variant with Carabiner KH-301-SSB1

P/N: HEC_SLE_6l-2-CAR, WLL 600 kg (1320 lbs).

- HEC_SLE_6l-CAR-2 = 11.9 kg, length 2.6 m (26.2 lbs, 8.5 feet)
- HEC_SLE_6l-CAR-5 = 13.0 kg, length 5.6 m (28.65 lbs, 184 feet)



3.6.4 Variant with HUB Rescue Hook without SEP

P/N: HEC_SLE_6l-HUB, WLL 600 kg (1320 lbs).

- HEC_SLE_6l-HUB = 11.2 kg, length 0.54 m (24.7 lbs, 1.77 feet)

3.6.5 Variant with AW Oblong Ring without SEP

P/N: HEC_SLE_6l-AW, WLL 600 kg (1320 lbs).

- HEC_SLE_6l-AW = 10.75 kg, length 0.55 m (23.7 lbs, 1.8 feet)

3.6.6 Variant with CAR KH-301-SSB1 without SEP

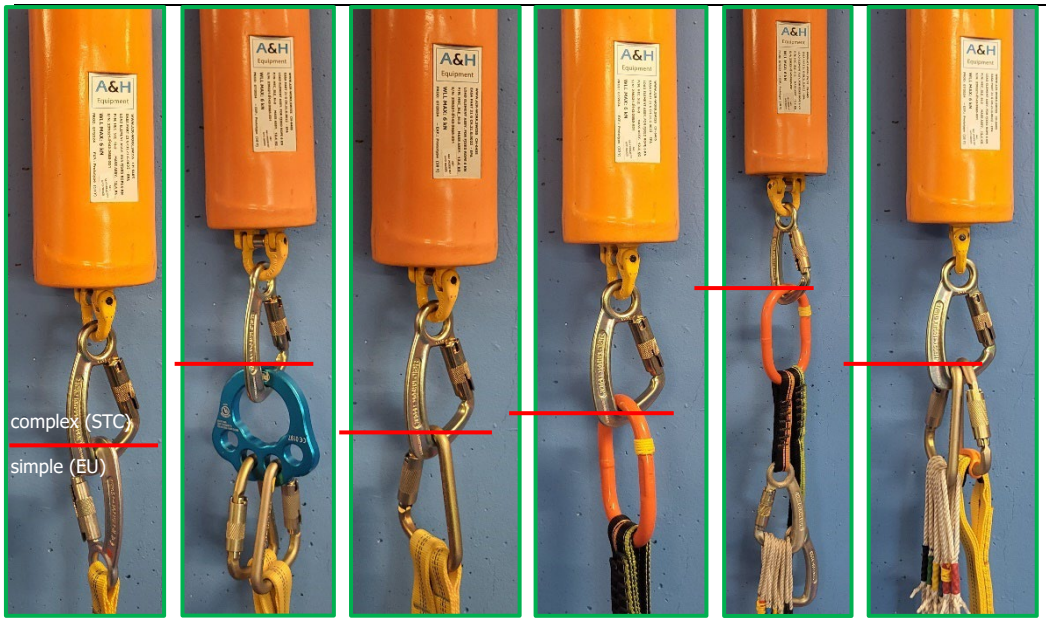
P/N: HEC_SLE_6l-CAR, WLL 600 kg (1320 lbs).

- HEC_SLE_6l-CAR = 10.65 kg, length 0.55 m (23.47 lbs, 1.8 feet)

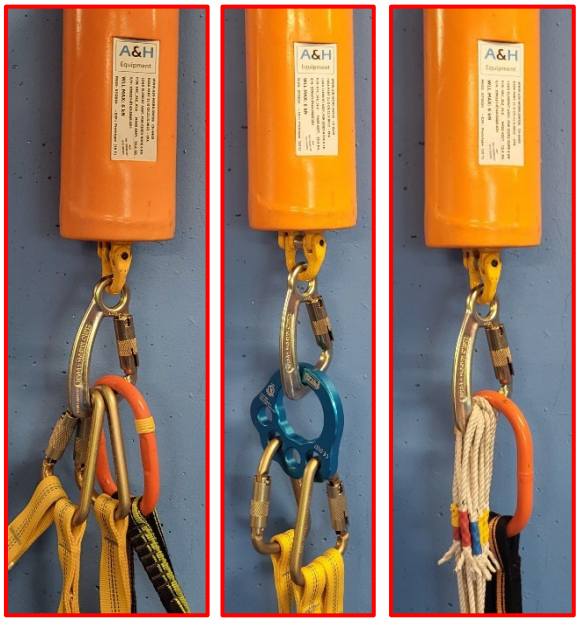
3.7 Interfaces between complex PCDS and simple PCDS.

3.7.1 Photo gallery showing simple vs. complex PCDS interfaces. Red frame = configuration/assembly prohibited

3.7.1.a to 3.7.1.f and 3.7.1.h is valid within EASA-Regulation; relevant especially for carabiners; limits and restrictions
3.7.1.g and 3.7.4.i is valid worldwide (limitation of carabiner to 2 fittings)



3.7.1.a 3.7.1.b 3.7.1.c 3.7.1.d 3.7.1.e 3.7.1.f



3.7.1.g 3.7.1.h 3.7.1.i

Legend
„complex (STC)" means WLL up to 500/600 kg HEC-Load,
„simple (EU)" means mx. 2 persons per fitting/lanyard

Approved configurations

3.7.1.a	Standard – carabiner to carabiner, single
3.7.1.b	complex carabiner (STC) in straight pull with rigging plate and 2 carabiners with one leg each. The rigging plate is simple PCDS
3.7.1.c	complex carabiner (STC) in straight pull with one carabiner and 2 lanyards (simple PCDS)
3.7.1.d	complex carabiner (STC) in straight pull with a sling with 2 lanyards (simple PCDS)
3.7.1.e	complex carabiner (STC) in straight pull with a sling with 2 lanyards, with a horizontal net and a rescuer (simple PCDS)
3.7.1.f	complex carabiner (STC) with two attached carabiners with spread angle and one leg per person (simple PCDS).
	Note: maximum 2 permissible fittings in the complex carabiner (three fittings are permitted with Oblong Ring AW-13 and HUB Rescue Hook).

Forbidden configurations!

3.7.1.g	complex carabiner (STC) with 3 fittings and 5 strands Note: three fittings are permitted with Oblong Ring AW-13 and HUB Rescue Hook.
3.7.1.h	complex carabiner (STC) with one rigging plate (simple PCDS), 2 carabiners and 3 lanyards. The rigging plate is not complex. Note: three fittings are permitted with Oblong Ring AW-13 and HUB Rescue Hook.
3.7.1.i	Complex carabiner with 1 horizontal net and 2-strand harness = 3 people Note: The loops of the horizontal net are damaged by the fitting. For correct use, see 3.7.1.e or .f

The following applies to all variants:

- **the HUB rescue hook or the oblong ring can accommodate a maximum of 3 simple PCDS fittings with a person load, and**
- **a maximum of 2 people per simple PCDS fitting**
- **an additional 1 or 2 fittings with a lighter load (backpacks)**
- **a total of no more than the permissible WLL of the system or**
- **the maximum possible load on site is permitted, as instructed by the pilot.**

PROHIBITED: Replacing or exchanging an approved fitting with other fittings is not permitted

For the correct use of the HUB Rescue Hook, see the AWA HEC_6_HUB (Ref. [10])

4. Operational conditions

4.1 Conditions HEC_5_H125

Working Load Limit WLL HEC (each both cargo hooks):	500kg/1100 lbs	[3] FMS-B1310-EASA, Section 2.1.3 [4] AEF-0819-FMS-0005, Section 3.4
Speed max. VNE:	60 kts	[3] FMS-B1310-EASA, Section 2.1.6.1.1 [4] AEF-0819-FMS-0005, Section 3.5
Recommended speed with HEC-Load	40 kts	this document (experience)
Minimum Ballast Load	11.4 kg/25 lbs	[3] FMS-B1310-EASA, Section 2.1.6.1.1
Angle in all directions	≤ 30°	[1] EASA CS-26.865(a) [4] AEF-0819-FMS-0005, Section 3.6
Altitude, climbing rate	no limits	
Temperature	-/+ 50°C	
Rate of Descend (RoD) max. Wind velocity on ground	1500 ft/min 35 kts	[4] AEF-0819-FMS-0005, Section 3.7 [4] AEF-0819-FMS-0005, Section 3.8

4.2 Configurations HEC_5_H125, examples

Part	Parts number	Length in m	Mass in kg
- Double Cargo Hook Y-Rope	P/N: HEC_Y_5_H125	2.2	2.75
- Fixed rope	P/N: HEC_BT_6_5	5.0	1.7
- Fixed rope	P/N: HEC_BT_6_10	10.0	2.5
- Fixed rope	P/N: HEC_BT_6_50	50.0	8.7
- Load Element with sharp edge protection (SEP)	P/N: HEC_SLE_6l-5-HUB	5.6	13.5
- Load Element with integrated HUB Rescue Hook	P/N: HEC_SLE_6l-HUB	0.54	11.2

Minimum length: Y-Rope 2.2 m and short Load Element, without SEP-Rope, integrated HUB 0.54 m **= 2.75 m**

Standard length: Y-Rope 2.2, Fixed Rope 50 m and long Load Element 5.6 m = **57.8 m**

Maximum length: Y-Rope 2.2 m, Fixed Rope 4 x 50 m, Load Element 5.6 m = **$208^{+/-2}$ m (≤ 220 m)**

Minimum mass: Y-Rope 2.75 kg and short/heavy Load Element 11.2 kg = **13.95 kg** (see Boost req. 2.1.6.1.1)

Standard mass: Y-Rope 2.75 kg, Fixed Rope 50 m 8.7 kg and long/heavy Load Element 13.5 kg = **24.95 kg**

Maximum mass: dead weight with maximum length 210 m (Y-Rope 2.75 kg, 4 x Fixed Rope 50 m 8.7 kg and long/heavy Load Element 13.5 kg = **51.0 kg**

plus max. Working Load Limit on booth hooks and per each 500 kg = **max mass 550 kg** (+ 10% into Limits)

Load Indication: The load meter mounted to the Primary Cargo Hook (**Cargo Hook YELLOW**, Swing) indicates in vertical climb/hover only a fraction of the total attached HEC mass since the Y-Rope total load shares between the two hooks.

Following approximate indication is displayed:

- with **500 kg** attached HEC mass,
- the indication on the load meter is approximate **300 kg**.

NOTE: This value may be subject to larger tolerances since the load distribution between the primary & secondary leg of the Y-Rope depends on the helicopter attitude in vertical climb/hover. Relative movement of the HEC load to the helicopter vertical axis will also lead to variations of the load meter indication.

The minimum HEC_5_H125-configuration for the use of attached simple PCDS or other complex PCDS is the Y-rope (HEC_Y_5_H125) and the Load Element (HEC_SLE_6l-HUB) with integrated HUB Rescue Hook,

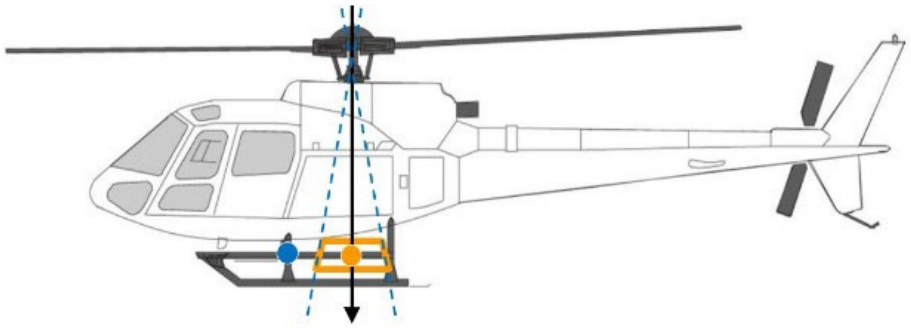
- **with a minimum Mass of 14 kg and 2.8 m length**

Line lengths and weights may vary.

Line length tolerance +/- 10%; metal weight tolerance approx. 1%; lines damp > wet + 20 -25%, +/- difference in length.

5. Specifications (symbolic illustration)

5.1 HEC load path in operation (not to scale)



HEC HOOK	CARGO HOOK
FWD BLUE	Swing (CG +/-) YELLOW
Backup	Main
HEC	HEC and non HEC (HESLO)
Labeled:	
HEC HOOK	CARGO HOOK
HEC Limited:	
HEC 500 kg	HEC 500 kg

5.2 Views of Cargo Hooks and Y-Rope in positions 0° and 30° BWD/FWD (not to scale)

PCH The primary cargo hook (**CARGO HOOK YELLOW**, Swing), equipped with load indicator, shares the load with the Secondary Cargo Hook (SCH) from "Boost";

SCH The secondary cargo hook (**HEC HOOK BLUE**, Boost) without load indicator, shares the load with the Primary Cargo Hook (PCH);

PCH and SCH both load hooks are loaded forwards and backwards (FWD/BWD) via the Y-rope up to a deflection of the rescue rope of +/- 25°. The load display in the PCH shows partial load (indication for vertical climb).

For deflections >25° forward or aftward, either the PCH or the SCH is fully loaded, the other leg of the y-rope being slack.

DP The damper fulfils two functions:

1. Limitation of the impact loads in case of a hook release (primary or secondary) and subsequent stretching of the second potentially slack line of the Y-Rope. This situation may occur for angular deflections fore/aft larger than approx. 20°.
2. Limitation of the impact loads in case of a slack rope system and abrupt stretching due to a drop of the HEC load or pickup from the ground.

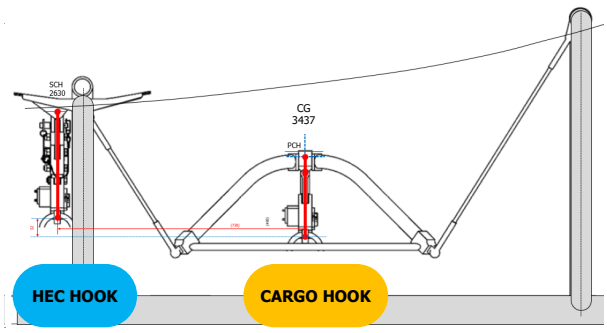


Fig. A: Hook arrangement, unloaded, 807 mm$^{+/-20}$ (moment 34370 – 2630 = 807 mm)

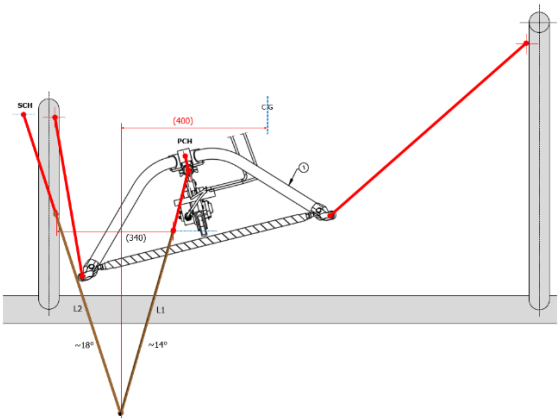


Fig. B: Hook arrangement loaded, ~ 340 mm

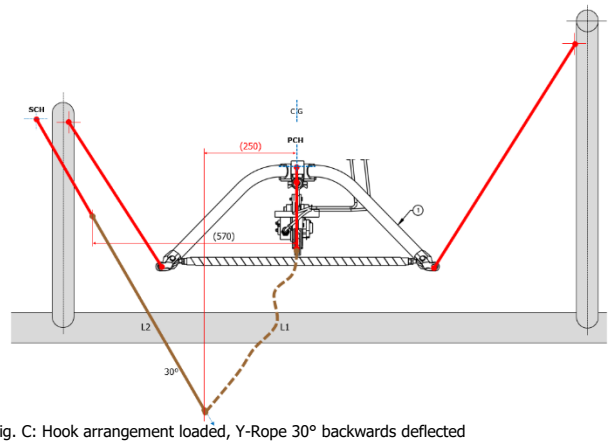


Fig. C: Hook arrangement loaded, Y-Rope 30° backwards deflected

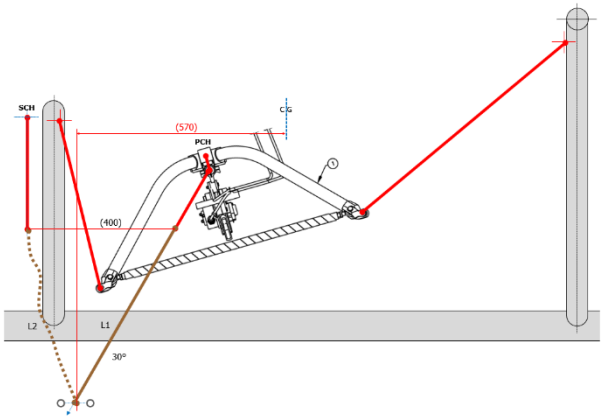


Fig. D: Hook arrangement loaded, Y-Rope 30° foreward deflected

C and D: in both cases the distance is no longer relevant

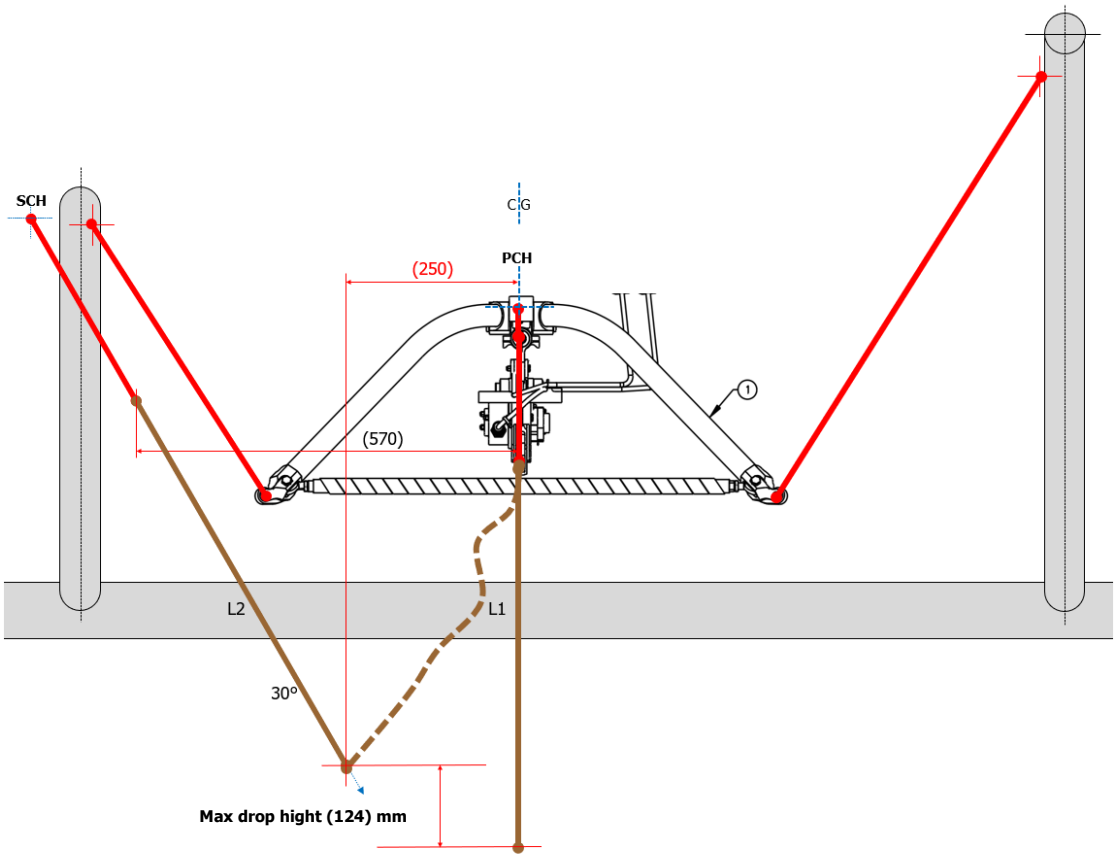


Fig. E: Maximum drop height estimation (most unfavourable condition, rope initially 30° backward deflected)

6. Pre-flight preparation

6.1 Preparation of the PCDS – Examples (P/N: HEC_5_H125)

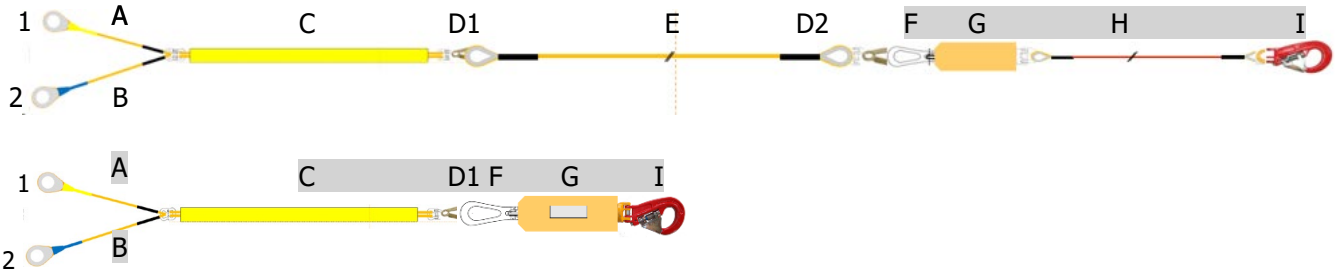
1. Primary Cargo Hook (**CARGO HOOK YELLOW**), WLL 500 HEC
2. Backup Cargo Hook (**HEC HOOK BLUE**), WLL 500 kg only HEC

A. Main rope WLL 500 kg, static rope
B. Backup rope WLL 500 kg, static rope
C. Shock absorber WLL 500 kg, dynamic rope
D. Captive eye carabiner

} Assembly, must not be separated

E. Fixed Rope(s), thimble bottom
F. Suspension Link
G. Load element (Buoy) bottom
H. Steel rope or protectet textle rope as Sharp Edge Protection (SEP; optional)
I. Rescue Hook or other approved part;
interface to any simple PCDS or other complex PCDS

} Assembly, must not be separated

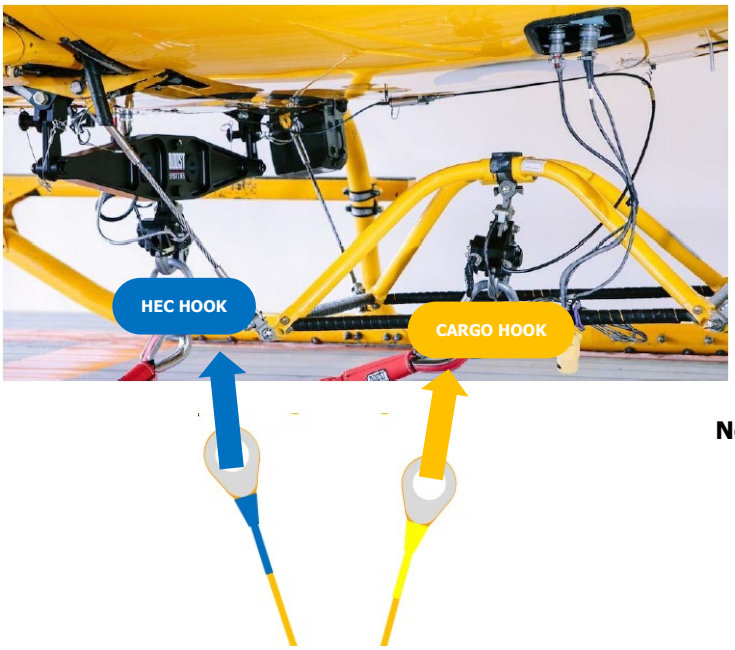


For the lifting and transport of peoples, it is compulsory to place a low-torque swivel between the rope and the cargo (rule of technology). Without a low-torque swivel, due to load rotation, the rope can be already irreparably damaged during one flight cycle.

The use of other components of non-approved suppliers, mainly carabiner made from aluminium alloys, can compromise the aforementioned characteristics or lead to malfunctions and/or failure (see also Ref. [7] AWA part 1, "Disclaimer" and "Warranty").

6.2 Attaching of the PCDS "HEC_Y_5_H125"

Connect the fittings into the Cargo Hooks (side view)



No drills into and between both legs

6.3 Attaching of the PCDS "HEC_BT_6_x" and "HEC_SLE_6_x"

- Connect the carabiner **D1** with thimble fix rope(s) **E** — Y-Rope to fix rope
- Connect the carabiner **D2** with suspension link F of buoy **G** — fixed rope to load element
- or connect the carabiner **D1** with suspension link **F** of buoy **G** — Y-Rope to load element

6.4 Safety precautions

Lay the ropes down from the double cargo hook-system in flight direction (forward).

Check the landing skid (landing gear): never lay ropes/legs on the landing skid.

Always secure the ropes during takeoff and landing of the helicopter.

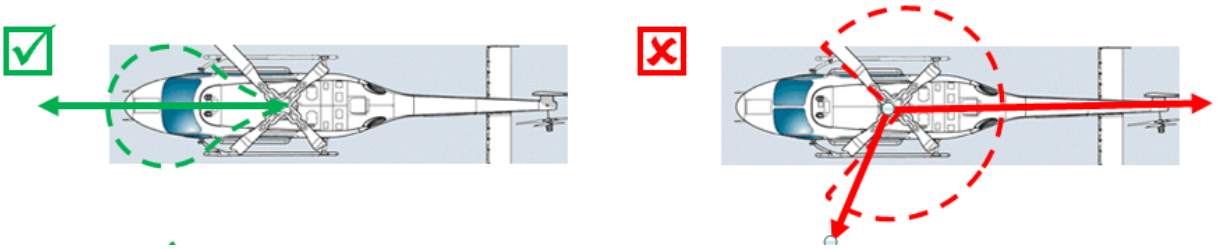
All ropes shall be separated as far as possible from the helicopter, in particular they shall not remain underneath the helicopter.

The main rotor downwash may lead to rope noosing causing potentially the ropes entangling with the tail rotor when not properly secured.

In the above-mentioned cases, the load capacity and/or the components functionality may be severely compromised leading to potential malfunction and/or failure during use.

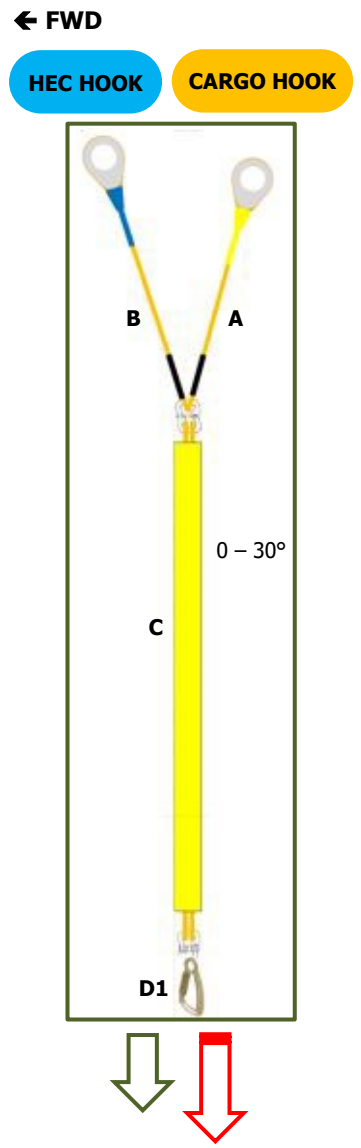
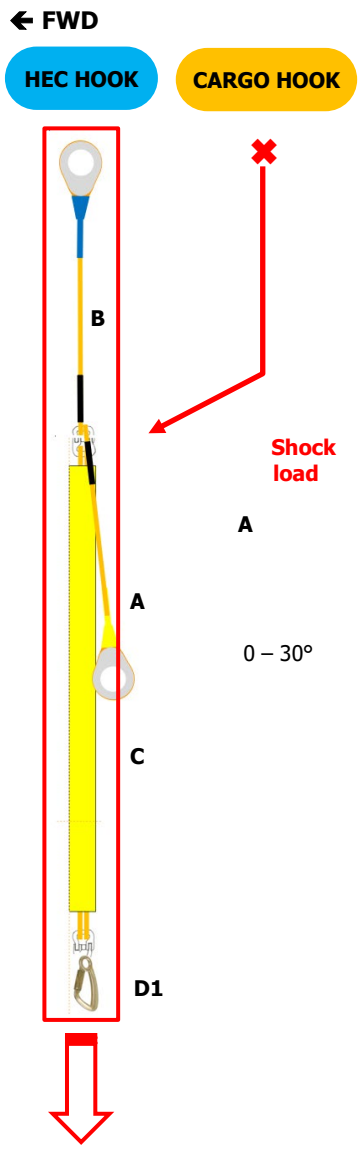
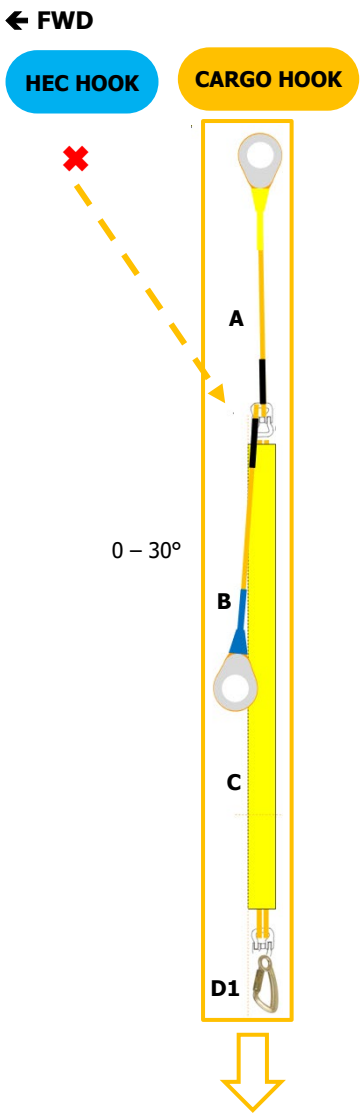
This list is incomplete. Therefore, avoid similar situations that deviate from the appropriate use.

For more information, please check AWA part 2 and 3 (Ref. [5] to [6]) or www.air-work.swiss, Documents.



Helicopter with skids: Depositing of rope on take-off or landing area (symbolic illustration of a BELL 429, free picture from the web).

7. Modes of operation (symbolic illustration)

7.1 Standard operation procedure and 7.2 Fall/slack rope (side view)	7.3 Inadvertent opening procedure (side view)	7.4 Commanded release operation (side view)
In operation, the main rope **A,** the backup rope **B** and the shock absorber **C** lift the HEC-load, max. 500 kg. The load can vary between **A** and **B. C** is always under load (A or B potentially fully). In case of a drop of the HEC mass or a pickup of the HEC mass with a slack rope, **A**, **B** and **C** will be operative, whereas the damper rope **C** (polyamide) absorbs the shock load.	In case of an inadvertent opening of the **CARGO HOOK**, the backup leg **B** with **HEC HOOK** will operate active as safety backup system. The same applies vice versa. The damper rope **C** (polyamide) absorbs the shock load.	In case of a planned release, the pilot could open the **HEC HOOK,** the backup leg **A** with **CARGO HOOK** will operate active as safety backup system. The same applies vice versa. The damper rope **C** (polyamide) absorbs the shock load.
		
Angle in all directions allowable 30°		

Avoid sharp bends, knots or overtorquing of the rope.

8. Post-flight actions

8.1 End of operation

It's strictly forbidden to release the Y-Rope from more than 2 meters above ground:
- **danger of severe injury of persons on ground**
- **unrecoverable damage of the HEC equipment**

At the end of the flight operation, an instructed person shall help the pilot to deposit the rope on the ground. Usually, the rope is deposited in a forward direction, within the pilot's field of vision.

In case the pilot is obliged to deposit the rope without the help of an instructed person, make sure that the landing site is big enough (or sufficiently sloping in rearward direction) to avoid the rope getting caught under the helicopter skids, wheels, tail rotor).

9. Inspection and maintenance instruction

9.1 In-Service inspections

The equipment shall be inspected by the operator for damage, unusual wear or other defects before every usage. In case of doubts, the manufacturer shall be contacted before further use.

9.2 Scheduled inspections/maintenance

The equipment must be inspected at least once per year by the manufacturer or by an authorized responsible person of the operator.

9.3 Unscheduled inspections/maintenance

The equipment must be inspected for damage, unusual wear or other defects after the following incidents:
- the equipment has been
  - subjected to shock loads
  - dropped from heights exceeding 2 meters above ground
  - subjected to excessive loading
  - subjected to any other unclear incident

In such cases the manufacturer has to be contacted and the equipment needs to be inspected and released to service by the manufacturer before further usage.

9.4 Lifetime, cycle & event driven limitations

All life limitations of the HEC_5_H125 system are published in the instructions for continued airworthiness, Ref. [9]. These limitations distinguish limitations related to:

- Lifetime of the components (calendar years)
- Flight cycles (damper rope only)
- Event driven limitations

9.5 Modifications

The HEC_5_H125 system is a component and appliance in accordance with [1] EASA CS-27.865(a), (c)(2) with [2] AMC no 2 to CS-27.865 (complex PCDS) and [8] AirOps Annex VIII, SPO.SPEC.HEC.105(a)+(b).

Modifications to the components and appliances, conversion with other components, and changes to the intended purpose are strictly prohibited.

9.6 Discard criteria

If damage, wear and tear or other defects are found during checks by the operator, the device must be declared unusable and discarded based on the check results.
Observe the following application and maintenance instructions (AWA):

For more information, please check AWA part 2 and 3 (Ref. [5] and [6]) or www.air-work.swiss, Documents.

If in doubt, contact the manufacturer. Please also note the appeal at the end of these instructions.

9.7 Correct care and storage

- All structural components must be checked visually to make sure they are clean and that there is no damage.
- Dirty metal components (slinging rings, double-stud fittings and carabiners) can be cleaned with a damp cloth, mechanical components are then lubricated with WD40.
- If straps, ropes, nets, etc. become dirty, let them dry before cleaning.
- In the event of strong pollution with soil, after drying remove the dirt from straps, ropes, nets, etc. with a soft brush and let them dry once again.
- Remove the remaining dirt with a vacuum cleaner.
- Check all components, straps, ropes, nets, etc. for damages or alterations, especially around the seams.

Better than chemicals: vacuum cleaner and soft brush; for small parts: toothbrush and cloth




Also check AWA instructions, part 2, MRO steel.

The following tools and/or substances must NOT be used for cleaning:

- **Heat > 20°C (hairdryer, lighter, Bunsen burner, radiator, tumble dryer, radiant heater, etc.)**

- **Chemical cleaners such as detergents, curd soap**

- **Caustic or corrosive substances such as stain removers**

- **Volatile substances/hydrocarbons such as ethyl alcohol, fuel, gun oil (only exception: WD40 for the lubrication of mechanical components, where necessary)**

- **Tools such as screw drivers, files, knives, etc.**

- **Compressed air or water pressure as occurring when using nozzles, high pressure cleaners, etc.**

The manufacturer must be notified of all damages. Also see "Appeal" at point 13 of these AWA instructions.

If you have any doubts or questions, please contact the producer or the supplier.

AWA LAM-MRO_T2 and T3 (Ref. [2] and [3]
Annex A2 Lifting accessories/slinging equipment at their original condition (visual inspection)
Annex A3 Abrasion, wear or alterations belonging to category M (Maintenance)

10. Possible inappropriate uses

(Ways of using the HEC_5_H125 that are inappropriate and for which it is not designed)

Any use that is not in conformity with the regulations (inappropriate use) of the fixed rope system or its individual components can lead to evident or hidden damages to the same and, therefore, compromise its safety characteristics. In the event of inappropriate use, the producer disclaims all responsibility.

Several examples of inappropriate uses:

RESTRICTION: NO TRANSPORT OF GOODS (NHEC).
The rope's maximum service load and its type of construction are NOT designed for goods.

Be careful to avoid other possible risks

The following actions or omissions can lead to dangerous situations and must therefore be avoided at all costs or supervised by a guide or other qualified person:

Please check AWA part 1, chapter 2.2 – 2.4 (Ref. [7]) or www.air-work.swiss, Documents.

Residual risk
To avoid obvious and undetectable internal damages, the HEC_5_H125 rope system must be handled and stored with appropriate attention and according to the instructions stated in this document.

11. Manufacturer

AirWork & Heliseilerei GmbH (A&H)

A&H Equipment

Bahnhofweg 1, CH-6405 Immensee

FON +41 41 420 49 64

E-Mail: office@air-work.swiss, Internet: www.air-work.swiss

ISO 9001:2015, SWISO Register no 11298658

EASA Part 21 G POA, CH.21.G.0022

NATO NCAGE SAC17

11.1 Conditions for product use

This product has been manufactured in compliance with EASA Part 21 G POA.
These instructions (AWA) are an integral part of this product and must be compiled in the users or a generally accepted common language. However, only the original German version is legally binding. In absence of valid instructions for use and maintenance (AWA) or without adequate training prior to use of the product, the latter cannot be considered safe.
Gaining a good knowledge of the present AWA, including all its subparts, must be part of user training carried out by the producer, its authorised representative (qualified person) and the person responsible for training in the users company.

In the case of lending, demonstration, display, sale, discount trading or user training, these instructions for use and maintenance (AWA) must be enclosed/attached.

Picture credits:
AirWork & Heliseilerei GmbH (A&H), Boost Human External Cargo Systems and AeroFEM ® © 2023 - 2025.

Question to the persons responsible for training and work materials
Have you been trained with this application and maintenance manuals?
Have you read and understood the information?

12. References

(always refers to the last issue > www.air-work.swiss/Documents)

Ref [1]	EASA certification specification	CS-27, Amdt. 10
Ref [2]	AMC no 2 and 3 to CS 27.865, Amdt. 10	
Ref [3]	Flight Manual Supplement (Boost)	FMS-B1310-EASA-NC (Boost)
Ref [4]	Flight Manual Supplement (AeroFEM)	AEF-0819-FMS-0005
Ref [5]	Instruction for inspection and maintenance, steel parts (www.air-work.swiss)	AWA_LAM-MRO-ST_T2
Ref [6]	Instruction for inspection and maintenance, textile parts (www.air-work.swiss)	AWA_LAM-MRO-TE_T3
Ref [7]	Instruction for inspection and maintenance, definitions (www.air-work.swiss)	AWA_LAM-ALLG_T1
Ref [8]	AirOps Annex VIII, SPO.SPEC.HEC.105(a)+(b)	
Ref [9]	Instructions for continued airworthiness	AEF-0819-ICA-0007
Ref [10]	Instruction for inspection and maintenance, HUB (www.air-work.swiss)	AWA HEC_6_HUB

Abbreviations

- EPA -	European Parts Approval
AWA	Instruction for inspection and maintenance (German: Anwendungs- und Wartungsanleitung)
BT	Fixed rope (in German: Bergetau)
EN	European Norm; in present case harmonized in accordance with R (EU) 2016/425)
DCHS	Double Cargo Hook System
HEC	Human External Cargo
SCH	Secondary Cargo Hook
s	simple
c	complex
PCDS	Personnel Carrying Device System
PCH	Primary Cargo Hook

13. Appeal

If you have questions, if a component is damaged, seems to have changed or might be damaged, whenever you have any observations or suggestions to make, please take a photograph and send it to us via email at office@air-work.swiss (preferably) or via WhatsApp to +41 79 477 54 13.

In 90% of all cases we can answer immediately, thus saving you time and postal charges. Having an image will help us greatly and, together with your short description of the problem, it can usually be identified very quickly.