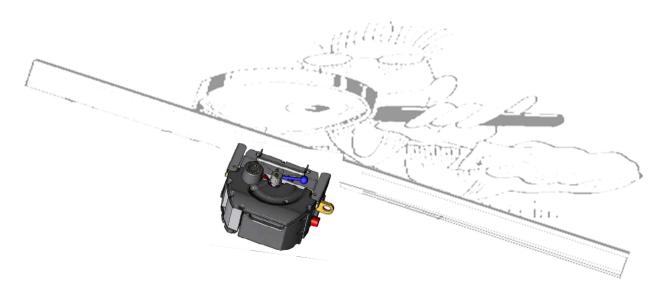




Welcome to our Training Course Using and Checking HACA Clifters







About our Company **HACA-LEITERN**

(Lorenz Hasenbach GmbH u. Co. KG)

Corporate form: Business Partnership

family owned

Directors: Mrs **H. Hassler**

Mr Dipl.-Ing. K. Alm

Industry: Ladder manufacturer

Certified acc. to: DIN-ISO 9001-2015

Head office: Bad Camberg i/Ts.

Dieselstraße 12

Founding year: 1888

Agencies: 12 warehouses

and specialist dealers

Internetseite:

eite: <u>www.haca.com</u> hallo@haca.com

Tel.

Email:

(0 64 34) 25-0

Fax (0 64 34) 25-500

Standards activities since 1937

- Steps and ladders

- Portable fire ladders

- Stationary ladders

- Emergency ladders

- Climbing protection

Company philosophy:

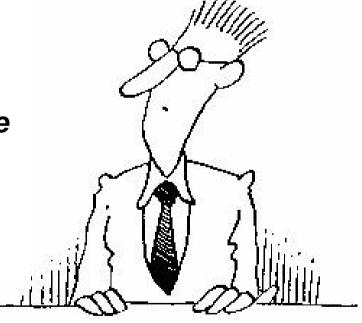
We are partners in matters of safety!





Round of Introductions

- First name
- Surname
- Occupation
- Field of activity
- Expectations of this course
- Hobby

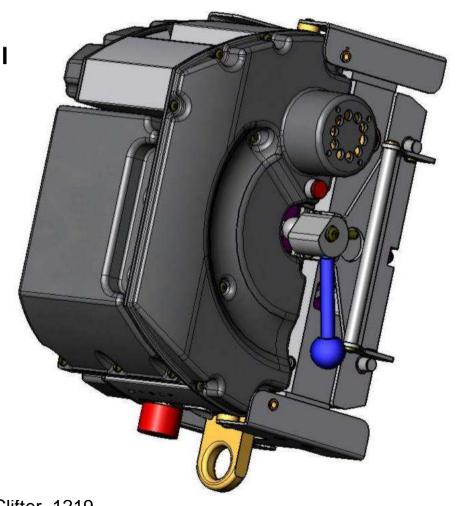






Possible fields of application:

- Climbing methods with HACA fall protection
- Wind energy plants
- Pylons
- Chimneys
- Bridges
- Towers
- Silos
- Buildings

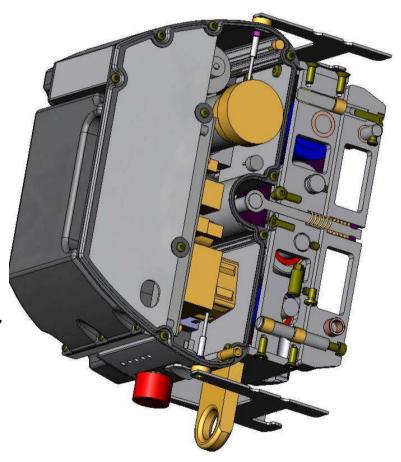






Technical Data:

- Tractive output [1] 50kg [2] 70 kg
- Climb rate 400m (per battery charge)
- Velocity 30m/min
- Automatic speed adjustment to the climbing speed of the climber
- High-capacity Li-lon battery
- Automatic shutoff at obstacles
- Automatic holding brake when [1] 50kg or
 [2] 70kg respectively is exceeded
- Weight kg 8,6 kg



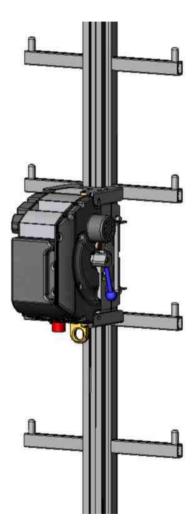




Characteristics:

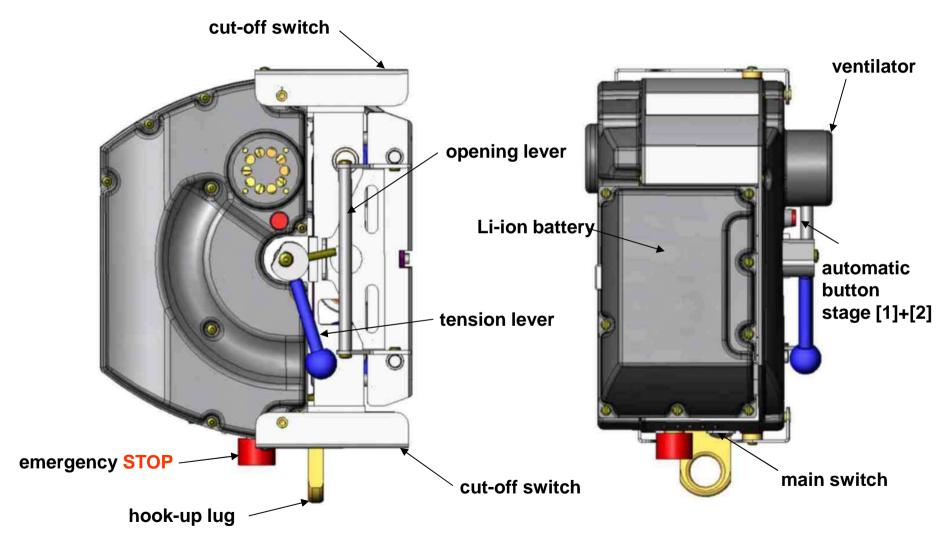
- Easy to maintain
- Versatile
- Battery can be exchanged and charged on the move
- Allows ergonomic climbing
- Automatic solo journeys possible, both upward and downward
- Emergency STOP on all switches and buttons when in operation
- The climbing aid switches off after 5 seconds standstill
- Is tested with Haca fall arresters 0529.7400, 7430
 and 7450 and is integrated in the fall arrester certificate

! Transporting loads is strictly forbidden!













Starting up:

wear gloves

- wear head protection



wear PPE



It is forbidden to transport materials with the Clifter!





Clifters may only be used on clean rails (oil, ice etc.).

! End stops ! Must be checked before using a Clifter – have they been fitted correctly?!







A visual check must be carried out before use

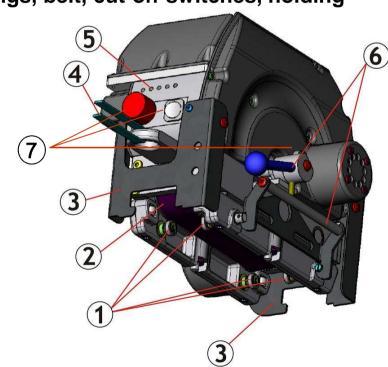


Visual check carried out as follows in accordance with operating instructions:

Check the safe condition of ball bearings, belt, cut-off switches, holding

rope and tension lever.

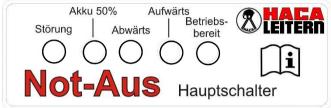
- 1 Ball bearing
- (2) Belt
- (3) Cut-off switches
- (4) Holding rope
- **5** LED display
- 6 Tension lever
- (7) Switches and buttons







Operating Mode Display



Not-Aus Hauptsch					er = Flashing = Off
Störung	Akku 50 9	% Abwärts	Aufwärts	Betriebs- bereit	= Constant
rot	rot	O gelb	() gelb	() grün	
	\bigcirc	\bigcirc	\bigcirc		Device ready for operation -> battery charged 50 - 100 %
\bigcirc		\bigcirc	\bigcirc		Device ready for operation -> battery charged < 50 %
		\bigcirc			If battery charge < 25 % the display flashes. At this point
					an upward journey of appr. 30 m is still possible
					Upward journey (yellow LED flashes at stage 2)
					Downward journey (downward climb)
	\bigcirc				Solo trip (downward without climber)
	\bigcirc	\bigcirc			Upper cut-out switch is activated (yellow LED flashes)
	\bigcirc		\bigcirc		Lower cut-out switch is activated (yellow LED flashes)
	\bigcirc	\bigcirc	\bigcirc		Overload! Activate cut-out switch and re-start using direction button
\bigcirc	\bigcirc				Shut-off flaps must be operated
					Switch off and restart







Mounting onto the Rail

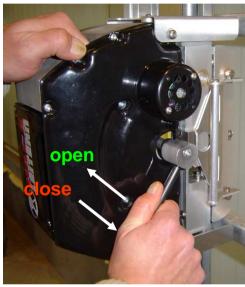
- 1. Position the main switch to Off
- 2. To open the tension lever [1] turn upwards.
- 3. Turn the release lever [2] to the right to open and mount the clifter onto the rail in breast height. (This can only be done between two rungs.)
- 4. Turn release lever [2] to the left to close.
- 5. Close tension lever [1] by turning downwards.

Check: [3] Bolt must be positioned above the release lever.

- 6. The climber must check that the Clifter is properly mounted to the rail!
- 7. Ball bearings must be set correctly on the rail! [4]

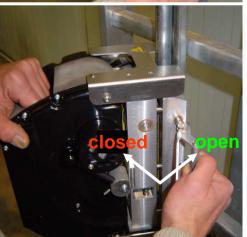
Pic 1

Pic 2



Pic 3







Pic 4

HACA LEITERN

11

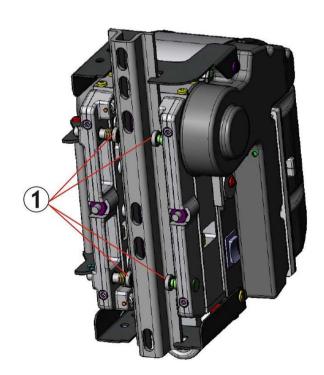


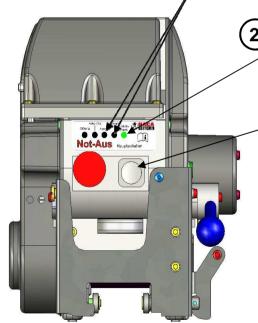


yellow LED (3) flashing

After mounting, check that it fits properly

- 1. After mounting the rail, check that the ball bearings are set on the rail properly. (1)
- 2. After switching on the main switch, the green LED (2) appears and the yellow LEDs (3) flash.
- 3. After actuating the shut-off flaps, only the green LED (2) lights up and the Clifter is ready for operation.





LED lights green showing ready for operation

Main switch





max. 30m/min

Climbing Upward

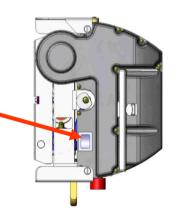
To climb upward the Clifter is to be set to upwards mode. The minimum weight of climber incl. Equipment must be more (+15 kg) than the max. traction power 50 kg (minimum weight of climber 65 kg); Traction power 70 kg (minimum weight of climber 85 kg). The maximum weight of the climber is limited by the ladder itself at.

Press buttom upward for 3 sec.

Lamp lights upwards (50kg)

Lamp flashes upwards (70kg)

! Attention! Only starts off after letting go of the button.





The Clifter stops after pressing any button. If the main switch or the emergency stop are activated, the device has to be restarted. If overloaded the clifter automatically switches to disturbance and has to be reactivated. To do this, press the cut-off switch and the direction button for the desired direction for 3 seconds.





Downward Journey for Downward Climb

The Clifter is to be mounted onto the HACA rail.

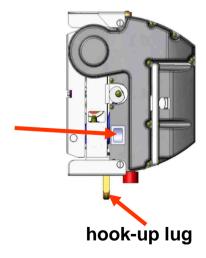
The climber must secure himself with his personal protective equipment (PPE) against falling.

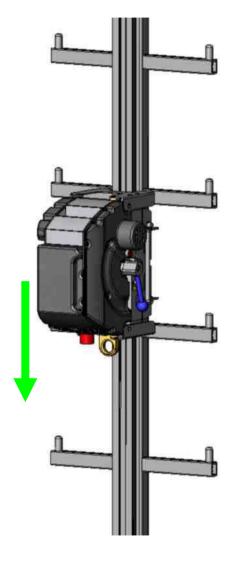
The lanyard is to be fixed to the hook-up lug on the Clifter and either to the stomach or breast eyelet on the harness.

Press button downward for 2 sec. Lamp lights up downwards and Clifter moves appr. 15 mm dowards.

! Attention! The clifter does not drive off it has to be pulled down by the climber nach unten gezogen werden.

By doing so pressure is taken off the body.





Clifter_1219





Downward Journey without Climber

The Clifter is to be mounted onto the HACA rail.

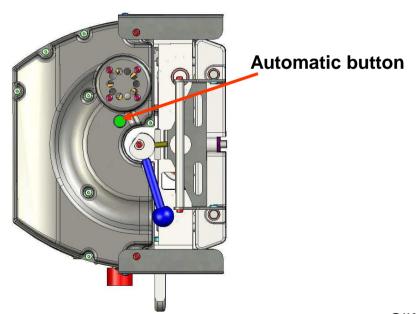
Be sure that there are no obstructions or persons on the ladder or on the rail.

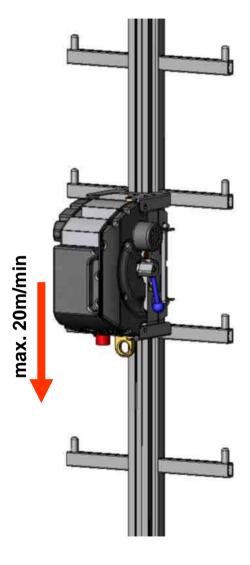
Switch the main swith to on and operate the shut-off flaps.

Press downward button and automatic

button at the same time for 3 sec. Once released, the Clifter travels downwards.

Maximum velocity 20m/min.





HACA LEITERN

Clifter_1219





Upward Journey without Climber

The Clifter is to be mounted onto the HACA rail.

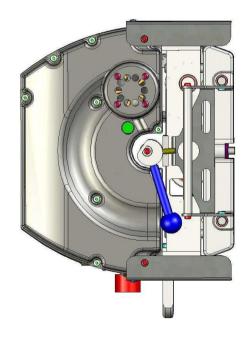
Be sure that there are no obstructions or persons on the ladder or on the rail.

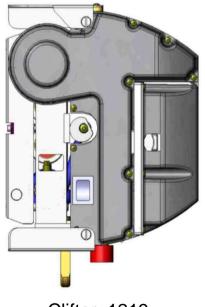
Switch main switch to on and operate the shut-off flaps.

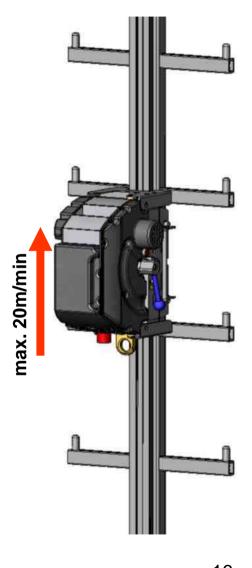
Press upward button and automatic

button at the same time for 3 sec. Once released the Clifter travels upwards.

Maximum velocity 20m/min.







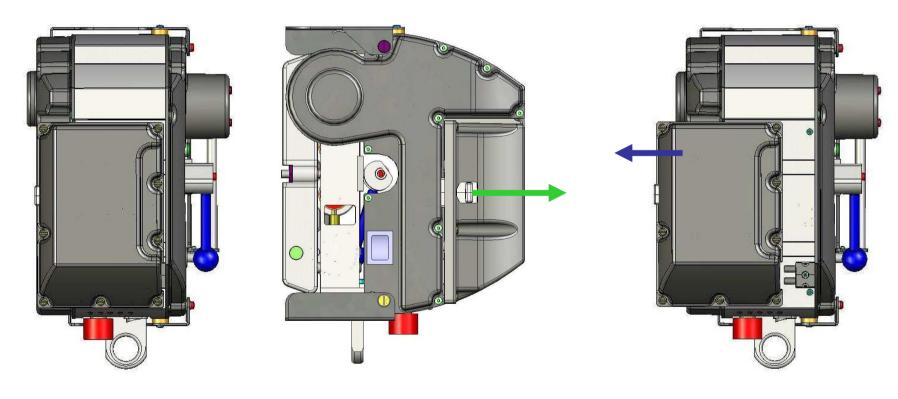
Clifter_1219





Changing the Battery (removal)

Push the unlocking mechanism forwards Unload the battery to the left







Changing the battery (installation)

locking device latches automatically!

