Global Market Leader in Mobile Lifting Systems

haacon is the world’s leading and most significant provider of lifting, levelling, manoeuvring and loading systems as well as rope winches. Our offer comprises:

- an extensive product range from one source
- optimal solutions for every application
- worldwide reference projects
- more flexibility due to concentrated experience in engineering
- expanded capacity for future large-scale projects

Product range and services:

- Lifting devices for containers
- Levelling jacks
- Support devices
- Engineering / special construction
- Manoeuvring systems
- Aircraft loading systems
- Electric rope winches

Service:

- ++ Maintenance / servicing
- ++ Installation and mounting
- ++ Risk assessment
- ++ Safety-related tests
- ++ Training programmes

Fig. Title page:
1 Levelling support type 2724, 10 t (22,000 lbs)
2 Heavy duty rollers type 4336, 16 t (35,200 lbs)
3 Lifting system type 2689, 12 t (26,400 lbs)
4 Aircraft loading system 1350 10 t (22,000 lbs)

Fig. right: Aircraft loading system 1350 FR with single-wheel chassis
The requirements of military logistics have changed heavily since the dissolution of the bloc countries at the end of the eighties and the increasing number of terrorist attacks. While earlier there were stationary forces facing each other along stable borders, a new strategic situation has developed, especially for the armed forces of the western industrialized nations and NATO partners. This new situation no longer has a precise territorial front.

Opponents are no longer just regular military units; they could be terrorist groups, paramilitary forces, groups with fanatical backgrounds or groups engaged in spreading weapons of mass destruction. These so-called “asymmetric” conflicts and confrontations, which are predominant today, place new demands on equipment, training and troop logistics. The earlier, more stationary orientation of all NATO partners is giving way to the expansion of highly mobile troops that can be quickly mobilized worldwide. Fast humanitarian catastrophe aid also calls for the same high mobility.

Because of this development, special containers, protected containers, armoured and unarmoured shelters for vehicles with various functions and ground terminals for SatCom connections as a logistic basis for highly mobile units have gained in importance.

Typical mobile solutions for which special haacon lifting systems are required include: field hospitals, decontamination, laundry and cleaning, kitchens, cold-stores, baths and showers, supply containers for electricity, water, gas and climate control, telecommunication and radar, training simulation systems, environment measuring stations, technical service, radar stations, fire department containers, command posts, loading containers into aircraft, vehicle levelling, mobile satellite communication units, starting units for unmanned reconnaissance drones and freight containers.

Special lifting and levelling units and well as manoeuvring and aircraft loading systems are indispensable for handling these tasks.
Lifting devices for containers

Lifting system, type 1889 10 t (22,000 lbs) on a mobile radar container

Lifting system, type 1889 10 t, (22,000 lbs) pivoting, automatic levelling, motor drive 24 V DC

Lifting device, type 1750 5 t (11,000 lbs)

Retractable lifting device, type 1889 10 t (22,000 lbs) load

Lifting device, type 2689 12t (26,400 lbs), retractable version

Lowerable lifting device type 1889 25 t (55,000 lbs), auto-levelling

Remote control for lifting device

http://www.youtube.com/haacongroup
Mobile lifting devices raise and lower containers whenever facilities for moving heavy loads are not available. Heat, cold, stiff breezes and even icy temperatures do not impair haacon’s lifting systems.

A system normally consists of four jacks whereby the bearing load of a single jack equals half of the load capacity of the system as a whole. This ensures a very high level of work safety. The units are designed to be installed / assembled and operated by two people. The following technical characteristics are possible depending on the particular case:

Container weight of up to 25 t (55,000 lbs), lifting height up to 1,750 mm (69 inches) (optional maximum: 2,000 mm = 79 inches), can be rigged to ISO corners and position monitoring.

The innovative automatic position control is a specialty amongst our lifting systems. It allows simultaneous raising and lowering on uneven ground, automatic position detection, automatic horizontal levelling with a precision of +/- 0.1 degrees and safety shutdown if the permissible gradient of 3.5 degrees is exceeded (or higher if planned). Apart from our standard products we provide customer-specific solutions:

- Deviating lifting heights, modified bearing loads, specially adapted fasteners and interlocking systems, special load distribution plates, loading systems for simple and safe transport, customized solutions for specific purposes, assistance and project-related services on customer developments as well as special colour tones and coating materials.

The technological leader provides you with competent employees, flexibility, state-of-the-art technology and global availability. Our products have proven themselves under the most severe conditions worldwide.

We manufacture the majority of components ourselves in modern processing centres. In this way we can ensure quality and respond quickly whenever necessary. We operate our own load test facilities. We subject critical components to a 100 % test - documented quality. We apply our expert knowledge to field tests, test structures and protoypes.

Every product is then subject to a final function test.

Visit us on the Internet at:
www.haacon.com / Lifting systems

Take advantage of the opportunity to call up data sheets, lists of accessories and checklists in PDF format.
Levelling jacks are used on containers and vehicles in order to align them precisely. Larger functional units (e.g. field hospitals, camps etc.) can be formed by connecting individual modules. We manufacture levelling jacks for DIN ISO 1161 corners, with inward-facing protected spindles, push-out levelling jacks, integrated in corners, engaging ISO corners, can handle loads, can be folded, with lifting claw. There are various types of drive: manual with ratchet / key / crank, 24 V DC electrical drive, or 400 V AC, 230 V AC, control accuracy: +/- 0.2 degrees, automatic position detection, automatic horizontal levelling with a precision of +/- 0.2 degrees, safety shutdown if the permissible gradient of 3.5 degrees is exceeded.
Support devices are used for loading and unloading swap bodies and ISO containers, regardless of location and availability of other loading aids. For example: You have an inventory of ISO containers or swap bodies and you have to move them between locations where the containers stay for a certain period of time (e.g., in parts logistics, for moving locations, mobile test facilities).

They transport items with the truck and must load and unload the container. This should be managed without a truck-mounted crane by the truck driver alone or at most with the assistance of a second person.

Typical devices of this product group:
- All detachable lifting devices 1889 for ISO containers
- Support device 3108 / 2942

Support device 3108 / 2942 for air-suspended / leaf spring-suspended vehicles used mostly for temporary support (e.g., for loading and unloading). The container remains at transport height.

A stability of max. wind speed 12 (approx. 73 mph when fully loaded is possible due to the variety of foot designs available.

Motorised autoleveling support device 16 t (35,200 lbs) for functional units

Support device Typ 2942 for ISO containers
Manoeuvring systems

http://www.youtube.com/haacongroup

Heavy duty roller set type 4336 16 t (35.200 lbs) loading capacity

Traversing hoist 1889

Heavy duty roller set type 4336 16 t (35.200 lbs), suitable on reinforced surfaces

Special construction traversing lifting device for final assembly of the accelerator tube for the Large Hadron Collider at CERN

Roller set 1350 FR 10 t (22.000 lbs), mounted on ISO corners, with drawbar

Lifting wheels - manoeuvrable on unreinforced surfaces
Container roller sets are suitable for moving containers on firm ground. The rollers are attached below in the ISO corners, the side openings of the ISO corners stay free for other uses.

A set of container rollers consists of 4 universal rollers with brakes and directional interlocking, tongue and attachment aid, to be attached from below to the ISO corner (DIN ISO 1161 corner fitting). Bearing load up to max. 16 t (35,200 lbs) container.

Traversing hoists help to quickly load for e.g. telephone exchanges, field hospitals and mobile power supply units during emergencies or catastrophes. They can be equipped with a quick connector for various types of containers for quickly loading up to 20 t (44,000 lbs). Traversing hoists can hoist synchronously or alternately both forward and rearward. Without loads they can be easily moved with auxiliary rollers on any chassis.

Lifting wheels are placed between heavy-duty rollers and aircraft loading systems. The lifting wheels can be used for moving containers of up to 12 t (26,400 lbs), even on less paved and less even ground. The lifting wheels are attached to the ISO corners from the side. The container can be manoeuvred very easily as well as be moved by several vehicles. Loading or unloading onto or from a truck is not possible due to the insufficient lifting height. If truck loading is required, please select aircraft loading system 1350.
Aircraft loading systems

http://www.youtube.com/haacongroup

Aircraft loading system 1350 10 t (22,000 lbs) load, double-wheel version

Aircraft loading system 1350 FR 10 t (22,000 lbs) load, single-wheel version

Aircraft loading system 1350, broad gauge attachment for unloading from trucks
Aircraft loading systems are the technological highlight of mobile lifting systems. They comprise demanding units for the moving, flight transport, truck loading, and rolling containers. They are attached using standard ISO corners. Load capacities of up to 10 t (22,000 lbs). The main area of application of lifting, rolling and loading systems is the transport of heavy equipment by aircraft (Hercules C 130, Transall C 160, Globemaster C 17) in military logistics. This is why the units have special features. High-quality lightweight material, a robust build, versatile applications, quick mounting and disassembly, ergonomic for the user (ERGO crank handle). The systems are also suited to the future military Airbus A 400 M.

The lifting, rolling and loading systems are continually produced related to projects, optimally adapted to requirements with automatic brake in case of rope rupture, drawbar and impeller damping as well as a high technical safety standard. Lifting, rolling and loading systems are increasing in importance due to the reorganization of many armed forces into smaller, mobile rapid deployment forces. These units must be able to react quickly and carry the required initial equipment with them. Also available with 24 V DC electrical drive, for connecting to an on-board power supply source.
Electric rope winches / rope tensioning devices
haacon develops and builds **electric rope winches** for highly mobile aerial supports.

The aerial supports are used in mobile communication systems and can be used for e.g. aerials, beam radio stations, direction finders, radar units, cameras. Accessories (rotors, obstruction light, wind gauges)

The users are state and private mobile communications networks, television and radio stations, police, border patrols, emergency management, defence forces (Army, Air Force, Navy). Special features include:

- Need for little space
- Low empty weight
- High mobility on reinforced paths and terrain
- Short assembly and disassembly times with few personnel
- High precision on the mast top even under severe environmental conditions
- High reliability
- Very user friendly and easy to maintain
- Can be used very flexibly
- Highly compatible
- Compliance with military standards
Service - Training international
haacon can carry out legally stipulated tests and all servicing / maintenance work for hoisting gears worldwide.

You can reserve the following seminars for your employees:

- Training for "qualified person" - legal principles
- Training for "qualified person for testing hoisting gears"
- Training for "qualified person for testing containers"
- Training for "qualified person for testing load carrying equipment"
- Training for "qualified person for testing ladders and steps"

According to §§ 3, 5, 6 of the labour protection law as well as §§ 3, 10 of the labour safety directive, companies are obliged to have their work equipment (systems, devices, machines and tools) inspected by a qualified person at regular intervals.

This test includes a safety evaluation of the work equipment as a supplement to the required risk assessment directive that may be carried out by a qualified person (TRBS 1203). In practice this usually occurs in consultation with the manufacturers. In this way we provide you with the opportunity to comply with this legal stipulation including risk assessment with us together.

The requirements for this test are oriented toward workplace conditions; we can determine the precise scope only after an inspection along with you.

We are available to answer any questions you might have:

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