COMPANY PROFILE

Cargo Floor B.V. is the worldwide leading manufacturer and supplier of horizontal loading and unloading systems which are exported all over the world. With more than 30 years of experience, excellent quality and an extremely high level of service, Cargo Floor B.V. is now recognized in the entire industry as the world wide renowned market leader! Cargo Floor B.V. manufactures its products in Coevorden, The Netherlands, under the ISO 9001 quality label. Before delivery, each system is tested extensively for proper functioning, geometry and sealing. This ensures that every Cargo Floor System supplied is easy to install and functions excellently anywhere in the world.

Cargo Floor B.V. has specialised in the following product groups:

- Cargo Floor mobile systems for the truck and trailer industry
- Cargo Floor stationary systems for self-unloading transport/dosing systems in factories (design, advice and implementation)
- CargoMatic “The Logistic Solution”, a dock-to-trailer system for fully automatically loading and unloading packed materials within 90 seconds
- Service and installation
- Trailer rental

Optimizing the logistic process is more important than ever. The CargoMatic system is the solution for this. The CargoMatic system makes it possible to load or unload a 13,600 mm trailer within 90 seconds. Because of this the CargoMatic system is especially suitable for short-distance shuttle transport from A to B.

Development

In close collaboration with technical experts, >30 years of field experience, feedback users, material handling experts and logistic managers, Cargo Floor has developed the most reliable, strongest but still the lightest CargoMatic system.

By using the very latest technology and state of the art components Cargo Floor is known as the most innovative manufacturer and supplier of moving floor systems in the world.

It is obvious that a number of factors are of fundamental importance to achieve a fast return on your investment. The CargoMatic systems fulfil all the important factors to realize this: maximum cargo volume, lowest tare weight of your vehicle, low operational
cost (maintenance free), durability, safety, environmentally friendli-
ness and long lifespan.

Mobile
Inside a trailer, the CargoMatic system takes care of fast and simple unloading. Loading and unloading by means of a forklift truck can be done much more efficiently. Once the load is in the trailer, the CargoMatic system transports the load forwards or backwards fully automatically. Driving inside the trailer is no longer necessary. The mobile systems can simply be connected to all sorts of stationary systems (roller conveyors, chain systems, etc.).

Static
When a static CargoMatic system is used in a factory or distribution centre, loading or unloading will be a completely automatic process, without the need for human or machine intervention. In this set-up, the complete load will be ready to be conveyed into the docked trailer within 90 seconds.

CargoMatic advantages:
- More efficient use of time
- Saving cost on personnel and fleet.
- No damages
- Less manual handling
- Reduced warehouse stocks
- Less warehouse space
- Fast and safe system reducing wasted time
SLAT CONVEYOR

The principle of the CargoMatic system is based on a chain driven slat floor. The aluminium slats together form a completely flat loading floor. This robust floor allows maximum flexibility in the transportation of every and any load, among other: pallets, roller containers, crates, rolls of paper, sheets of cardboard etc.

The extremely stable construction of the aluminium sub-frame forms an integrated unit with the drive unit. The edge profile is fitted with an integrated protection profile, which ensures that the chain cannot be pushed off the plastic guidance. This guarantees the safety of the system and has the additional advantage that it prevents materials from getting between the chains.

The double triplex chain provide transmission, via the headboard of the trailer, to the 8 transport chains. The transport chain runs over high quality plastic guiding, with which the roll of the chains rolls over the guiding. This results in a very low friction resistance and wear is being prevented.
The heavy duty chains run on a high quality, wear-resistant, plastic guidance and are protected against pollution by the patented chain protection caps. Because of these the load will not come into contact with the chain grease.

The aluminium slats are supported in the middle over the entire length of the trailer by a maintenance free plastic guide. Each system is also equipped with 12-fold extra support at the back of the trailer.

**Simple assembly**
The CargoMatic system is available as a package for retro-fitting, and can be fitted on both new and existing trailers. This is mainly done in box trailers and refrigerated trailers, but can also be fitted on sliding tarpaulin trailers. The compact drive is mounted on the outside of the bulkhead and falls within the headboard space, allowing the entire length of the trailer to be used for loads. Because of the low built-in height (140 mm), an optimal interior loading volume can be realised.
This chain version of the CargoMatic system distinguishes itself by her ultimate simplicity.

If you always transport pallets with the same dimensions an alternative for the multifunctional CargoMatic system with slats could be the version with chains only. The CargoMatic chain floor system is equipped with 6 duplex (=12 chains) that support every foot of the pallet.

The stable shaped aluminium profile combines the following features: robust, extremely light and because of her round shapes simply to clean.

The aluminium profiles, which are provided with solid UHDPE plastic chain bearings, are mounted onto the existing floor of the trailer. This assembly method guarantees simple cleaning of the trailer floor, a very reliable system and with which no cold bridges can arise if mounted into a refrigerated trailer.
The assembly height of the CargoMatic system is, just as the CargoMatic slat system, 140 mm. This has as an advantage that the systems are compatible when it comes to the measurements. The CargoMatic chain system is, in contrast to the slat system, a loading/unloading system that can fully revolve without a beginning or an end.

In the area of the head board four end switches are placed detecting pallets independently of each other and switch off the floor at the right moment.
The CargoMatic system is powered by a powerful traction motor, which can be operated by a choice of electrical power sources:

- 400VAC mains voltage
- 24VDC battery voltage, with the possibility of recharging the batteries while driving
- a combination of 400VAC and 24VDC

The silent operation of the system is realised by the use of an electric traction motor combined with plastic components and high quality bearings. The CargoMatic system complies with the strictest noise level specification of <60 dB and as a result can be legally used 24 hours a day (meets the Dutch Order in Council for retail and crafts businesses).

Piek
Every system is standard provided with a control box. Personal and/or product-specific adjustments are freely programmable in the menu-operated display of the PLC.

The CargoMatic system can be fitted with a fully automatic lubrication system, which is controlled by a PLC and which lubricates the chain on more than 18 different points.

**HIGH-TECH**

Optionally, the CargoMatic system can operate on 24VDC battery voltage. The two extra batteries can be charged during driving, allowing for fully autonomous operations. For the combination of 24VDC-400VAC a converter is used.

The compact drive even fits under a cooling aggregate and remains easy to reach.

Compact design of the motorreductor which is mounted outside the body.
The highest logistical efficiency will be achieved by combining the mobile CargoMatic system with static loading/unloading docks.

In this application, a single trailer can shuttle fast and efficiently between various locations.

A complete load can be commissioned without a trailer standing by. One of the possibilities for this is connecting the static CargoMatic system to another internal conveyor system. The solid galvanized rollers between the static and mobile CargoMatic systems ensure a seamless transfer of the load.

This static CargoMatic system is mounted at a frame with standard adjustable legs. Beside this a Guiding portal is mounted right before the load enters the trailer. It is executed extremely stable with 6 steel vertical positioned rolls in order to force protruding load in the right direction.
The PLC of the both CargoMatic systems, static and mobile, communicate with each other and are functioning as "master and slave" this enables a 100% secure operation.

CargoMatic system mounted directly onto the concrete floor with a minimal height of 200 mm. This way the CargoMatic system can simply be installed without any substantial structural modifications. Optionally with pallet guiding and forklift truck protection.
This CargoMatic system is fully integrated into the floor and isn't an obstacle. This flat version is executed with a robust steel slat floor and optionally available in a version which can be driven over by a forklift truck.
Modular coupling to an internal conveyor
Here the CargoMatic system has been coupled to an internal conveyor system, this way the load is fully automatically pre-commissioned on the static CargoMatic system. A forklift truck is unnecessary, logistic automation at its best!

Control gate
A control gate checks, with the help of photo cells, if the load as prepared is not too high or protruded sideways so it can be transported into the trailer without damages.

These static CargoMatic systems are mounted on hydraulic lifting tables and are automatically positioned at the right height of the trailerfloor.

These CargoMatic systems are mounted on sideways movable frames. The trailer will remain in front of the dock and the load can be, without moving the trailer, unloaded (empty bottles) and loaded (filled bottles).
EXTRA SAFETY

To ensure extra load safety this CargoMatic slat has been executed with a rubber cord, which will cause extreme high friction between floor and load. It is especially suitable for the transport of: - plastic pallets, - steel crates eg. This in combination with a reinforced head board will offer an optimal load safety.

Wireless communication

Optionally it is possible to realize a wireless interface to communicate between the mobile and static CargoMatic.

A positioning frame ensures that a trailer is positioned exactly before the static CargoMatic system.
Every product/location has its own specific characteristics. In order to make optimal use of the CargoMatic functionality, various options are available. These include:

- Wireless remote control
- Oil lubrication system
- Running head board
- Heated sensors
- Positioning wheels
- Positioning frame
- Collision protection
- 24VDC drive
- Contour checking gate
- Extra slat support
- CargoMatic sweeper (automatic sweeping system)
- RSM “Remote Service Module”
- Slat with rubber cord
- Steel protection bumper
- Static suitable for driving over it with a fork lift truck
- Mobile suitable for driving over it with a pallet cart

These are some of the options of the CargoMatic system. We are happy to inform you about other possibilities in a personal conversation.
The CargoMatic system has proven its logistic advantage in many contexts, including:

- Beverage industry: pallets, crates, displays
- Paper industry: sheets of cardboard, paper rolls directly on the slat floor
- Food industry: conditioned (cooled and frozen products up to -30°C)
- Automotive: parts, steel crates and bodies
- Packing industry
- Glass industry
- Chemical industry
- Pet food industry
- Big-bags
- Construction materials
- Pharmaceutical industry
- Household electronics
- Furniture industry
- Raw material industry