



INDUSTRIAL 'MOVING FLOOR' TECHNOLOGY





COMPANY PROFILE

Cargo Floor B.V. is the leading European supplier of horizontal loading and unloading systems which are exported all over the world.

With more than 25 years experience, excellent quality and an extremely high level of service, Cargo Floor B.V. is now recognised in the entire industry as **world-renowned market leader!**

Cargo Floor B.V. manufactures its products in Coevorden, The Netherlands, under the **ISO 9001-2008 quality label** (certified by Lloyds). Before delivery, each system is tested extensively for proper functioning, geometry and sealing.

This ensures that every Cargo Floor 'moving floor' System 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



STATIONARY

The ultimate Cargo Floor moving floor transport-/dosing system

Apart from installation in trucks and trailers, the Cargo Floor system is excellently suited as a transport system for the transportation of large quantities of automatically dosed bulk materials in industrial processes. The system is used mainly as a reception bunker for bulk materials, which are then automatically transported to the factory for further processing. In addition, the manufactured materials are often stored in storage bunkers from where they are automatically transported onward for further processing or for filling trailers.

The system has been implemented in many applications, among others: paper, wood-fibre, recycling, composting, chicken manure, plastic and potting compost industries. Also the system is used as a feed bunker in the chicken feathers, pig bristles, blood meal processing industries, as a domestic waste transshipment and as a feeder for shredders, presses and incineration furnaces.



RECYCLING



CARGO FLOOR'S "MAGIC" WORKING PRINCIPLE

The Cargo Floor 'moving floor' System is a multi-functional, horizontal loading and unloading system for the fast and efficient transport of almost any product. The system is ideal for unloading a wide variety of bulk products, which typically are loaded from above and unloaded horizontally from the rear by the Cargo Floor 'moving floor' System. It can also be used to load and unload packed materials.

Floor structure

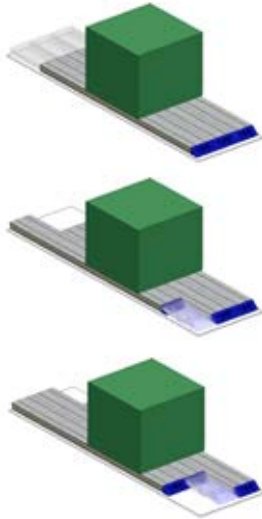
The Cargo Floor 'moving floor' System is composed of floor profiles installed lengthwise, parallel to each other. The Cargo Floor drive system moves the floor profiles back and forth within the power stroke of the three hydraulic cylinders. The cylinders are driven by mechanical or hydraulic systems (no electronics). The floor profiles are made primarily from aluminium, but they can also be supplied in steel or another material. The density between the floor profiles is ensured by a high-quality plastic sealing profile; Semi Leak Proof floors and even 100% Leak Proof solutions are available.

The Cargo Floor moving floor principle:

Step 1: three hydraulic cylinders move the entire floor as a whole in the selected direction, thereby transporting the cargo

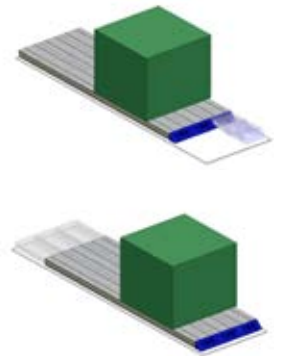
Step 2: one hydraulic cylinder pushes one group of floor profiles (= 1/3 floor section) back underneath the cargo, while 2/3 of the floor section remains still, the cargo will hardly move as a result

Step 3: one hydraulic cylinder pushes one group of floor profiles (= 1/3 floor section) underneath the cargo, while 2/3 of the floor section remains still, the cargo will hardly move as a result



Step 4: one hydraulic cylinder pushes the third and last group of floor profiles (= 1/3 floor section) underneath the cargo, while 2/3 of the floor section remains still, the cargo will hardly move as a result

Step 1 is repeated again. The frequency and thus the speed at which these steps are repeated depend on the output of the hydraulic pump. The available power at which the cargo can be moved depends on the available pressure of the hydraulic pump. The Cargo Floor 'moving floor' System is designed for a maximum payload of 40 tonnes.



The principle works in two directions, in other words the Cargo Floor 'moving floor' System can be used to LOAD and UNLOAD.





RECYCLING SORTING FACILITY



STORAGE TRANSPORT DOSAGE



BI-DIRECTIONAL TRANSPORTATION

Automated feeding solutions: SAFE, SIMPLE, RELIABLE and can be driven over



ALTERNATIVE FUEL

Large volumes, high tonnages, 24 hours continuously, no limits



VERTICAL SCRAPER



'TURN KEY' SOLUTIONS

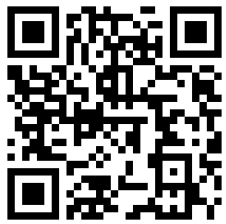
• Design • Engineering • Implementation • Realization • Training



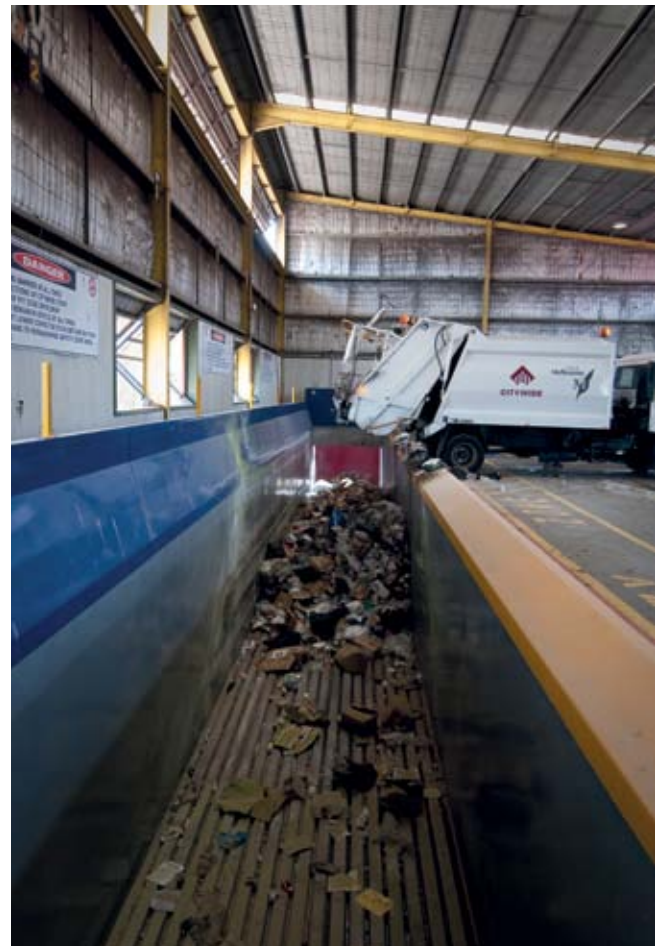
INTERMODAL



WASTE TRANSFER



WASTE
MANAGEMENT



"STEP-DECK" TRANSFER BUNKER



CERAMIC
PISTON ROD



"DE-LOADER" 100% LEAK-PROOF



CUSTOM MADE

- Easy link to external command actuators for example: sensors, timers, etc.
- Easy connection to other receiving systems such as: chain plate conveyors, belt conveyors, screw conveyors, etc.
- Fully supported sub-floor structure, capable of handling lorry and shovel traffic
- Selection of various types of systems, modified according to the product to be transported
- Floor profile material, selection from: steel, hardox, aluminium and other materials
- Tailor made solutions for every application (also 100% Leak Proof)
- Very easy, fast installation
- Almost unlimited floor capacity (1-500t.)
- Solid plastic guidance for the floor profiles over the entire length
- Transport speed can be precisely controlled from 0-2.5 mtr./min.
- Precise product dosing
- High operating reliability due to excellent, maintenance-free design



EASY INSTALLATION

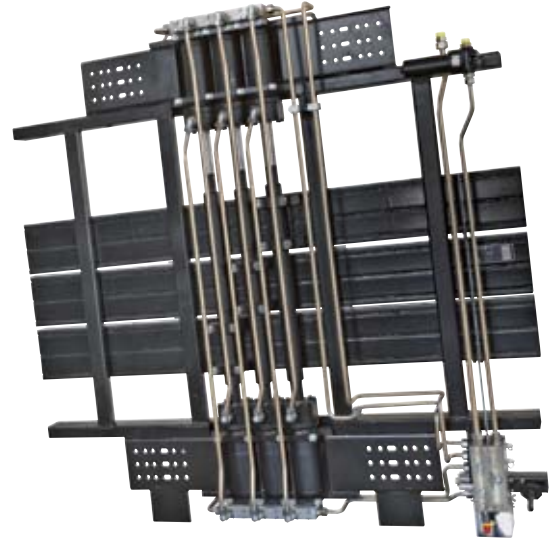
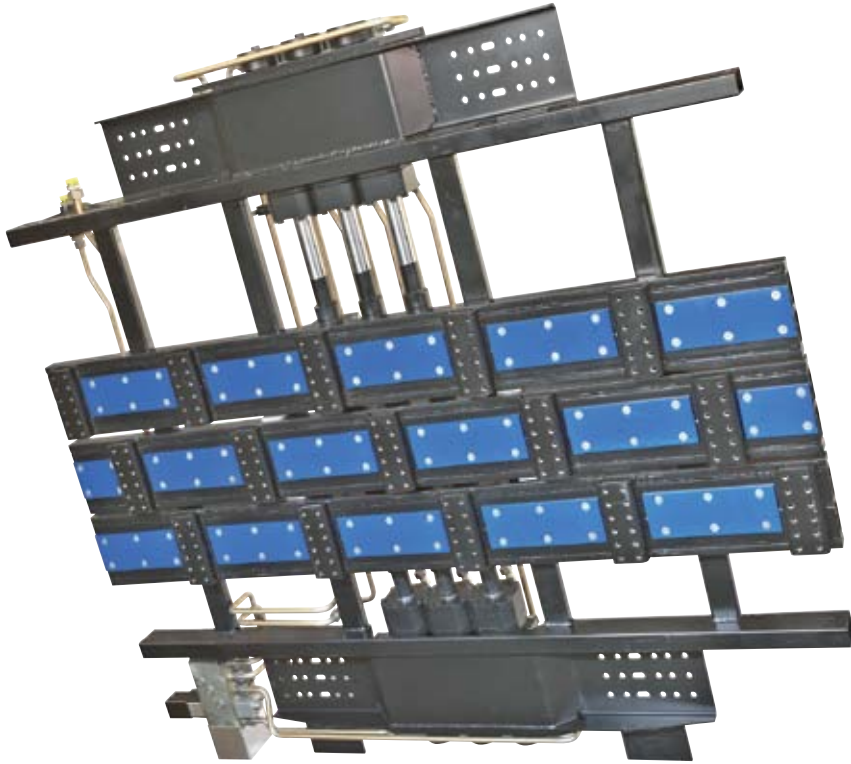
Implementation in new and existing facilities



(lxw) 45.000 x 3.000 mm.

CF800 HD 80T 'HEAVY DUTY'

This extremely strong Cargo Floor 'moving floor' System is designed for the toughest applications in the market, using six cylinders that are interconnected by a massive piston rod. The Heavy Duty Cargo Floor 'moving floor' System has a net payload capacity of 80 T.





TECHNICAL SPECIFICATIONS

CF800 HD 80T 'HEAVY DUTY'

Operating possibilities	E/B/A
Cylinder bore (mm)	100
Piston rod diameter (mm)	50
Stroke (mm)	200
Oil volume per cycle (ltr)	16,5
Working pressure (bar)	170
Max. pressure (bar)	225
Max. oil flow	130
Pressure filter (µm)	10
Speed at advised oil flow (m/min)	1,3
Speed at max oil flow (m/min)	1,6
Theoretical unloading time trailer 13.6m (min)	10
Max. loading capacity (ton)	80
Advised pump capacity (2-line system)	
Flow (ltr./min)	110
Pressure (bar)	250
Pressure piping diameter (mm)	20/2
Return piping diameter (mm)	25/2,5
Oil tank filling min. (ltr)	100
Max. oil temperature (°C)	70
Oil type mineral or biological (HEES)	ISO VG 32

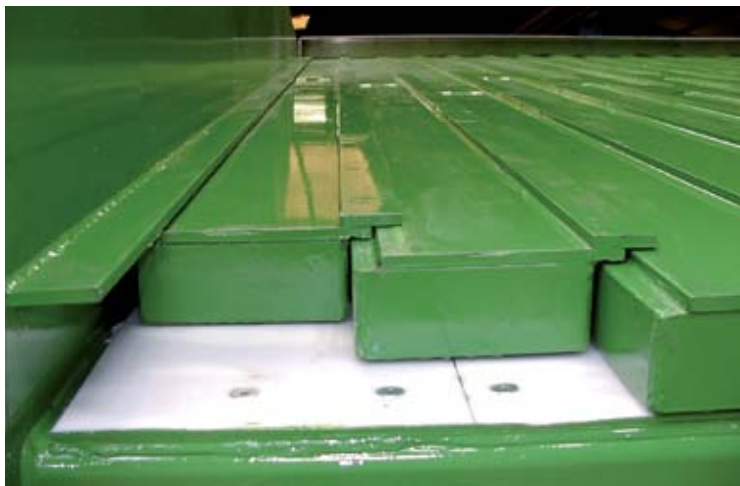
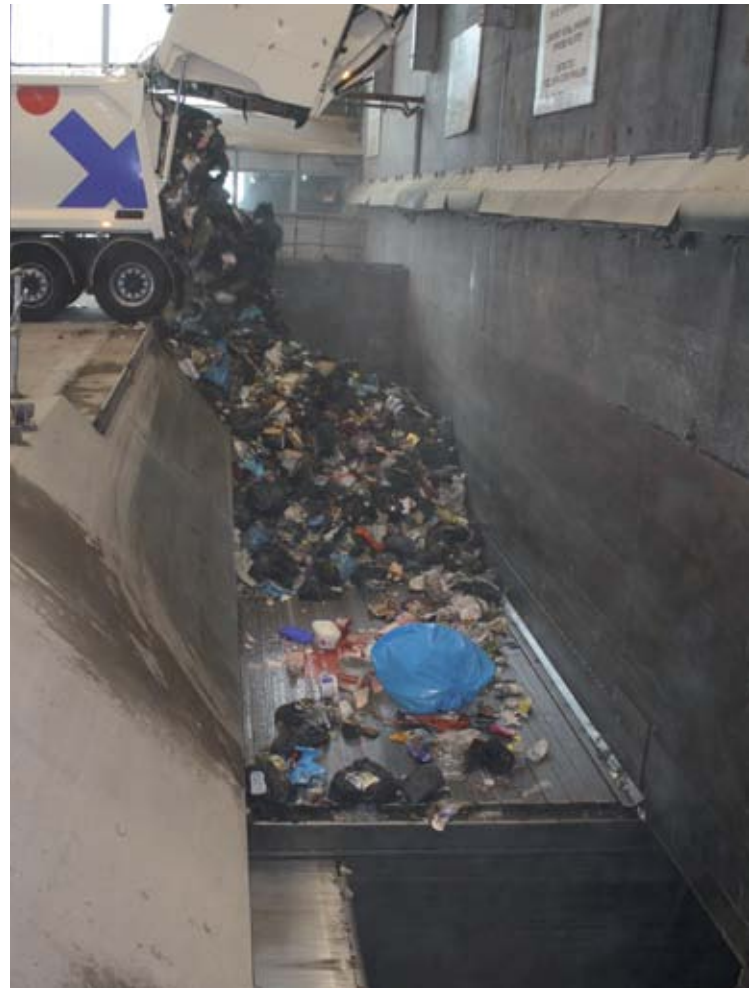
FULLY AUTOMATED SOLUTIONS



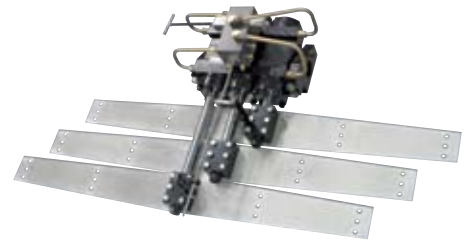
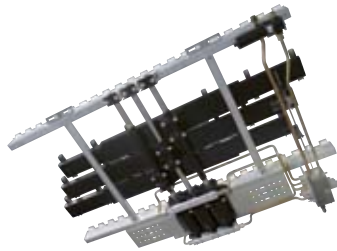
"HEAVY DUTY" STEEL PROFILES

Extreme high impact and wear resistant:

- Pressure seal by steel overlap (no plastic seal)
- Also in 100% Leak Proof
- High wear resistance
- Also in Hardox or equivalent
- High Impact resistance
- High temperature resistance
- Smooth surface, easy cleaning (no rest material)



TECHNICAL SPECIFICATIONS



CF500 SL-2 HD

*(Powerspeed)

Cylinder bore (mm)	100
Piston rod diameter (mm)	45 (HD)*
Stroke (mm)	200
Oil volume per cycle (ltr)	8,45
Working pressure (bar)	170
Speed (m/min)	0-3,1 (0-4,7)*
Max. loading capacity (ton)	40
Max. oil temperature (°C)	70
Oil type mineral or biological (HEES)	ISO VG 32

CF3LP-2 HD

Cylinder bore (mm)	125
Piston rod diameter (mm)	60
Stroke (mm)	150
Oil volume per cycle (ltr)	9,77
Working pressure (bar)	125
Speed (m/min)	0-2,6
Max. loading capacity (ton)	35
Max. oil temperature (°C)	70
Oil type mineral or biological (HEES)	ISO VG 32

OTHER SYSTEMS WITH A LARGER CAPACITY ARE ALSO AVAILABLE.

- CF500 SL-2 HD 40 Ton
- CF800 HD 80 Ton
- CF3LP-2 HD 35 Ton
- CF1000 100 Ton
- CF Heavy Duty (cyl./profile) >200 Ton
- Tandem (master/slave)
- Triple (master/2xslave) etc.

FLOOR WIDTH:

Standard floor width 2.500 mm.
Different widths are also available
(for example 800 mm, 3.000 mm. etc.)

FLOOR LENGTH:

Standard floor length: 13.500 mm.
Different lengths are also available
(for example 3.000 mm., 45.000 mm. etc.)

FLOOR PROFILE, materials:

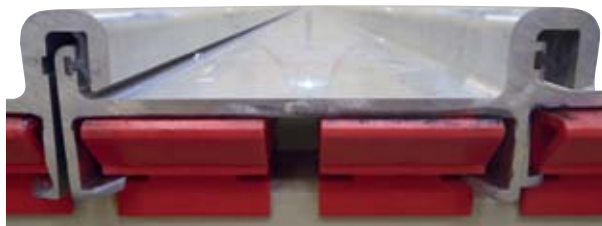
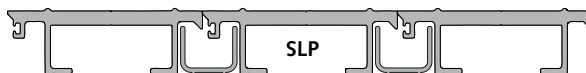
- Aluminium
- Steel (Hardox/Stainless steel)
- Composite
- Or a combination of these materials

FLOOR GUIDANCE AND SUPPORT:

- Plastic bearings
- Plastic bearing block
- Solid plastic bearing
- All bearings are maintenance free

SEAL:

- High-grade plastic seal (Nobraforte)
- Pressure sealing
- 100% Leak Proof
- Overlap



Steel "C-shape"



'Turn key' installation



'In house' computer animated training



CARGO FLOOR®

HORIZONTAL LOADING-/UNLOADINGSYSTEM

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SERVICE NETWORK**