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

Waste transfer plant (lxw) 45,000 x 2,500 mm.
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
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
“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
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’**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating possibilities</td>
<td>E/B/A</td>
</tr>
<tr>
<td>Cylinder bore (mm)</td>
<td>100</td>
</tr>
<tr>
<td>Piston rod diameter (mm)</td>
<td>50</td>
</tr>
<tr>
<td>Stroke (mm)</td>
<td>200</td>
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<tr>
<td>Oil volume per cycle (ltr)</td>
<td>16.5</td>
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<tr>
<td>Working pressure (bar)</td>
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<tr>
<td>Max. pressure (bar)</td>
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<tr>
<td>Max. oil flow</td>
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<td>Pressure filter (μm)</td>
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<tr>
<td>Speed at advised oil flow (m/min)</td>
<td>1.3</td>
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<tr>
<td>Speed at max oil flow (m/min)</td>
<td>1.6</td>
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<tr>
<td>Theoretical unloading time trailer (13.6m (min))</td>
<td>10</td>
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<tr>
<td>Max. loading capacity (ton)</td>
<td>80</td>
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<tr>
<td>Advised pump capacity (2-line system)</td>
<td>Flow (ltr./min)</td>
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<tr>
<td></td>
<td>Pressure (bar)</td>
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<tr>
<td></td>
<td>Pressure piping diameter (mm)</td>
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<tr>
<td></td>
<td>Return piping diameter (mm)</td>
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<tr>
<td>Oil tank filling min. (ltr)</td>
<td>100</td>
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<tr>
<td>Max. oil temperature (°C)</td>
<td>70</td>
</tr>
<tr>
<td>Oil type mineral or biological (HEES)</td>
<td>ISO VG 32</td>
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</table>


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  CF3LP-2 HD
*(Powerspeed)

<table>
<thead>
<tr>
<th>Cylinder bore (mm)</th>
<th>100</th>
<th>125</th>
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<tbody>
<tr>
<td>Piston rod diameter (mm)</td>
<td>45 (HD)*</td>
<td>60</td>
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<tr>
<td>Stroke (mm)</td>
<td>200</td>
<td>150</td>
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<tr>
<td>Oil volume per cycle (ltr)</td>
<td>8,45</td>
<td>9,77</td>
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<tr>
<td>Working pressure (bar)</td>
<td>170</td>
<td>125</td>
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<tr>
<td>Speed (m/min)</td>
<td>0-3,1 (0-4,7)*</td>
<td>0-2,6</td>
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<tr>
<td>Max. loading capacity (ton)</td>
<td>40</td>
<td>35</td>
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<td>Max. oil temperature (°C)</td>
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<td>70</td>
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<tr>
<td>Oil type</td>
<td>ISO VG 32</td>
<td>ISO VG 32</td>
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</table>

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"

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ISO 9001 - 2008
Certified company

Worldwide Service Network