

# WÖHR COMBILIFT 551

## Specification

General:	<p>Car parking system for independent parking of cars above and aside each other. For dimensions please see data sheet <a href="#">Combilift 551</a> with its dimensions for height, length and width.</p> <p>This car parking system has minimum two parking spaces on the upper level (UL). There is always one parking space less on the entrance level (EL) than on the upper level (UL). This empty space is needed for shifting the EL-parking spaces in order to be able to lower a UL-parking space to the EL. The smallest grid is two for three cars and we recommend not to exceed ten for 19 cars.</p> <p>Depending on the building structure and the number of parking spaces needed several grids can be added to each other.</p>
Design and description:	<p>The Combilift 551 consists of a steel structure, lifting and shifting installations and upper and lower platforms.</p> <p>The upper platforms are mounted on hoisting slides. They are lowered and lifted by hydraulic cylinders, which are located at the rear pillars in the middle of the parking spaces. The upper platforms are mechanically locked in the upper end position and electro-mechanically unlocked before lowering. The front pillars of the steel structure are fixed to the floor on entrance level. The upper platforms are moved along them.</p> <p>On each side of the upper platforms there is a carrying chain which is deviated by chain wheels at the platform ends. In the front the carrying chain is mounted at the pillars, in the rear at the fundamental rail of the pillar.</p> <p>The EL-platforms run on rails and are shifted by a travelling gear motor. The gear motor mounted in the rear cross bar drives the EL-platforms by a chain wheel over a chain mounted on the running rail.</p> <p>The electric power supply is ensured by an energy chain.</p>
Components:	<p>Steel structure consisting of: Two front pillars each in row arrangement, one cross bar each, one rear pillar each with hoisting slide and fundamental rail. The pillars are fixed with chemical anchors to the building structure.</p> <p>UL-platform consisting of: Two side panels, three cross bars, ten driving plates, one bevelled ramp, one buffer, one adjustable front wedge, screws, nuts etc.</p> <p>EL-platform consisting of: Two side panels, two cross bars, seven driving plates, one bevelled ramp, four rollers, one energy chain, one adjustable front wedge, screws, nuts etc. and levelling rails mounted on the bare floor. After embedding the floor pavement the running rail is mounted on it with dowels.</p> <p>Drive UL-platforms consisting of: One hydraulic cylinder, two carrying chains, four chain wheels each.</p> <p>Drive EL-platforms consisting of: One gear motor (0.12 kW), one chain wheel, one chain each</p>
Hydraulic power pack:	<p>The UL-platforms are driven by one hydraulic power pack.</p> <p>The electric motor with pump is mounted rubber-bonded-to-metal. The hydraulic power pack consists of an oil tank with appropriate filling for the entire system, gear pump, electric motor (1.5 kW [3:0 kW for Comfort Type], 230/400 V, 50 Hz), switch box with motor contactor and thermal relay already wired for connection, pressure relief valve and one hydraulic hose reducing the noise transmission to hydraulic pipes.</p>
Safety details:	<p>UL-platform: Slack chain switches monitor the carrying chains concerning slack or break. Mechanical fixing device in the upper end position.</p> <p>Access to the Combilift: Standard version without doors, the entrance area is monitored by light barriers; if the light barrier is interrupted the system's movement is stopped.</p> <p>As an option, doors can be installed in front of the Combilift at additional charge.</p>

- Control: 1) Standard version:  
Operating device with coded key.  
Operation at a central operating device mounted in front of the system, e.g. at columns with coded keys (two keys per parking space) and a start button. All movements of the system are automatic, except the lowering of the upper platforms which can only be lowered with pressed start button. The coded key can only be used for the parking space allocated to it.
- 2) Special equipment – at additional charge –
- a) Sliding doors manually operated:  
Operating device with text display, keypad and key interlock (key is locked until door is completely closed)
  - b) Sliding doors electrically operated:  
Operating device with text display, keypad and key
  - c) Radio remote control (only with electrically operated doors)
  - d) Interface for magnetic card scanner provided by customer (please contact WÖHR)
- Operation at a central operating device mounted in front of the system, e.g. at columns). Start of system control with identical keys\* (two keys per parking space). Selection of parking space via keypad and start button. If doors are being used, all movements of the system are automatic. The user is guided by text display.
- \* for c) Selection of parking space additionally via radio remote control
  - for d) Start of system control with magnetic card
- Note:  
If key-lock of building interlock provided by customer is used, please contact WÖHR!
- Electric wiring: WÖHR provides the wiring starting at the switch cabinet. The switch cabinet must not be installed within the system. The entrance area has to be in sight of the switch cabinet.
- Standards: WÖHR Car Parking Systems are machines according to the Council Guideline governing machinery 2006/42/EC, Annex 1 and EN 14010.
- Corrosion protection: For details please see enclosed information Surface protection 2011, No. 023-0021.
- Provided by customer:
- 1. Electric work and fuses up to the switch cabinet.
  - 2. Acceptance by authorised inspector, if required together with a fitter, if not included in offer.
  - 3. Additional corrosion protection, if required by architect/customer.
  - 4. Railings and safety fences according to EN ISO 13857 concerning the building structure
  - 5. Concrete quality according to the static requirements of the building, but for the dowel fastening we require a concrete quality of min. C20/25.

Enclosure: Surface protection 2011, Nr. C023-0021.

The manufacturer reserves the right to modify or alter above specifications.

OTTO WÖHR GMBH  
Article No. C026-0038  
As in 08.2010