MüT GmbH Mechanische und elektronische Fertigung
Hard- und Softwareentwicklung

# LokLift 2

a space-saving parking system for locomotives
and trains

The LokLift is basically a vertical transfer table with a shunting unit that can be equipped with up to 15 parking levels and is made up of individual, interconnected cars. Each level has 8, 10 or 14 tracks in H0, TT or N gauges, depending on the gauge size, resulting in a storage capacity of up to 120, 150 or 210 trains. An even larger number of trains is possible if two short trains parked one behind the other are parked in each case with the appropriate circuitry.

This model, the LokLift 2, is a consistent further development of the LokLift, which has already been sold for years and can be found in countless versions in a large number of public exhibition layouts or in private layouts. The basic idea of the LokLift is that no model railroader in the world has enough space to realize his plans. The solution realized so far mostly with staging yards comes to an end very quickly, because the space for it is missing and the expenditure of turnouts, turnout drives and track material drives up the costs and takes up an immense space above all with the turnout harps. The LokLift gets around this problem by making use of the space that is usually available at height. For example, 120 parking tracks in H0 gauge "only" require 14 turnouts and their drives when both sides of the track are moved in and out. The space required for this is only a width of 545mm in the desired length when using the LokLift. With the classic staging yard, even when set up in several levels on top of each other, more than 7 - 8m² are required for this.

The picture shows the LokLift 2, equipped with a car that has four levels in length 1200mm. This corresponds to a

storage space of 32 tracks in H0 and of 56 tracks in N on a footprint of just 0.65m² floor space.

## 1. The parking level

In this product, great importance was attached to using the available space as optimally as possible as a parking area, which, however, partly restricts the individual design. Due to the significantly higher payload, four parking levels each are designed as carriages. By combining these trolleys, up to 12 levels can be realized. The interface is a 42-pole contact block which connects the parking level at entry/exit height with the busy detectors and switches the traction current to the track. The number of the parking level is also available here as binary coded information.

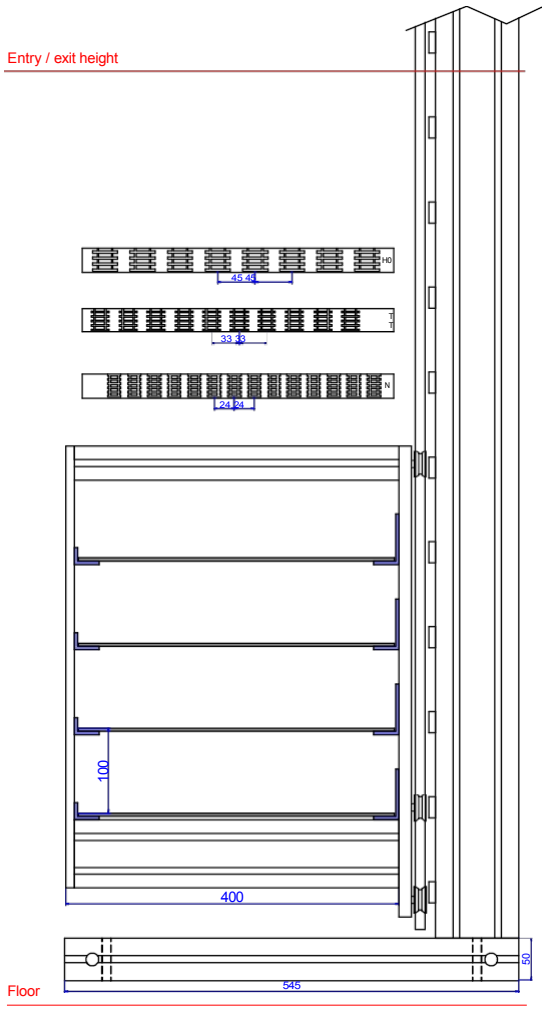
## 2. Drive and positioning

The drive uses a multiply rated DC motor with a three-stage planetary gear. The motor and the lift brake are controlled by electronics built into a compact housing. This is also responsible for switching the traction current on/off by means of a relay on the on/off level. The exact positioning of the levels is carried out to ±0.2mm and is ensured by an optical sensor despite a weight-dependent chain elongation. The position sensor and the contacts for the power supply to the tracks are located in another housing.

## 3. Important dimensions for the LokLift

All data are preliminary, subject to change without notice. All dimensions in millimeters.

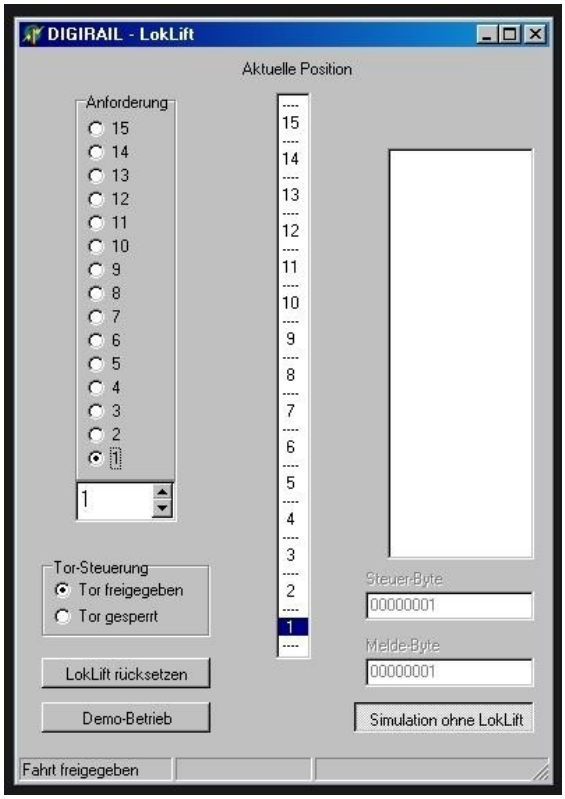
| Size specifications for the LokLift 2 | | | | |
|---|---|---|---|---|
| Parking level length | 1200 | 1700 | 2500 | 3800 |
| Spacing of the vertical bars | 800 | 1300 | 1050 | 1700 |
| Number of vertical bars | 2 | | 3 | 4 |
| possible number of parking levels | maximum 15 | | | |
| Entry / exit height | approx. 1100, ± 50 | | | |
| maximum height above the ground | 2050 | | | |
| Number of tracks per level | N = 14TT = 11H0 = 8 | | | |
| Light distance between levels | 100 | | | |
| Distance from track center to track center | 24 33 45 | | | |
| Weight in kg | from approx. 120kg | | | |
| Depth back to front edge of parking deck | approx. 545 | | | |
| Electrical connection | 230VAC | | | |
| Control via | SELECTRIX, serial via handheld terminal or PC | | | |
| Standard equipment or scope of delivery | Connection for RS232, SX-Bus 5 and 10pin, ext. safety circuit, reset button, track power. The required parking levels have to be ordered separately and are enclosed as kit. Basic unit in disassembled, pre-assembled condition. Track fixing for various track system manufacturers. Emergency stop switch, PC - software for control. | | | |




## 4. Price overview:

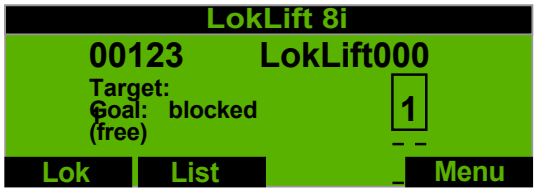
Around 90% of all LokLifts supplied are a special version in terms of height, length, number of levels or level spacing. This makes a general statement about the price in the form of a price list almost impossible. We are happy to implement special requests for you. Please contact us and we will make you an offer. You will find a form for a request at the end of the description of the LokLift.

| **Description** | **Special features** | N | TT | H0 |
|---|---|---|---|---|
| Basic unit for 1200mm with 8 parking levels, level spacing 100, total height 2050. | Number of tracks per level | 14 | 10 | 8 |
| Basic unit for 1700mm with 8 parking levels, level spacing 100, total height 2050. | Parallel track distance | 24mm | 33mm | 45mm |
| Basic unit for 2500mm with 8 parking levels, level spacing 100, total height 2050. | Free, available connection contacts | 37 | | |
| Basic unit for 2500mm with 8 parking levels, level spacing 100, total height 2050. | | | | |
| Basic unit for 3800mm with 8 parking levels, level spacing 100, total height 2050. | | | | |




This is the interface of the PC software included in the scope of delivery, with which you can control the LokLift via the serial interface. Select the level to be approached by mouse click and the control will bring your trains into the entry or exit position. The movement of the LokLift is displayed in the field "current position" as a moving bar.

If you operate the LokLift via multi control 2004 or the HC10 (see figure below), you will find this operating interface on the respective display. Via the numeric keypad you enter the level to be approached and the LokLift will prepare your train or pick it up. And if you don't want to use the PC or one of the other digital systems, you can use our LokLift Controller, see picture below, for control. It can be used in parallel to a control software or without using a computer for pure analog operation.





For manual operation, there is the LokLift Controller for 15 levels. It is controlled in the same way as a familiar elevator.

The TrainController (from Freiwald) also controls the LokLift without any problems.

For a non-binding inquiry and the preparation of an offer, please tell us your desired data (length, height and levels). Please use the form on the last page of the description of the LokLift.

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