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Staircase chair-lift HIRO 160.

Track run is inside of the staircase



Staircase chair-lift HIRO 180.

Track run is on the outside of the staircase



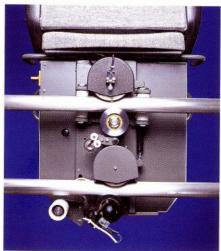
Unbeatable competence through years of experience in lift construction.

Tailor made and for all occasions, product program.





Dimensions of the HIRO 180, track tube diameter 4.45cm, track space 22.5 cm



The track and the traction unit

# Inside run

Apart from the possibility of joining more than two floors together, there are more advantages:

- Shorter travel way
- Park possibility of the chair both in the upper and lower positions
- Space saver
- On twisted staircases, improved access Inside run is in blue Outside run is in red



The rotation chair

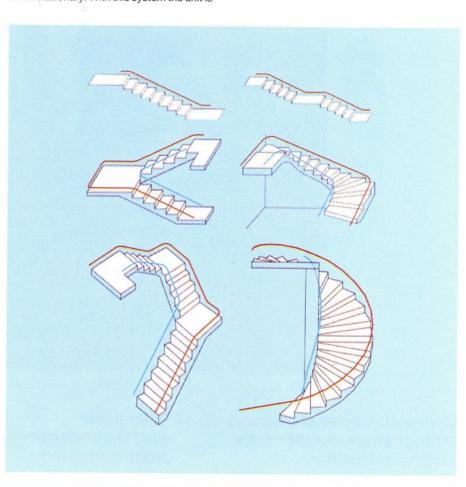
The track of the HIRO 160, 170 and 180 are consists of mainly two smooth tensile tubes. They allow tight, space saving corners, thus an inside led track is possible. This makes it possible for two floors to be joined together without a brake in the track. The track supports can be mounted, both on the steps as well as on the wall. There is no part of the track that needs to be greased (no dirt).

The drive-gear (Euro-Patent No. 0525141) is a friction drive. Via a spring, mounted on the transport unit, a force is produced, which through leverage, drive casters and guide casters applies grip to the tensile steel track. The safe and secure movement of the transport unit is achieved via casters working in pairs, which due to their form enclose the track. Situated between motor and gear unit, is a worm drive gear, which holds the unit when stationary. With this system the unit is



When not required the unit can be folded

able to pass through curves, varying pitch/grades and still the unit keeps its level position. The horizontal drive of the platform on the straight stretches and in the corners is achieved without problems through a third track. The safe, quiet, smooth ride is due to our high quality, vulcanized polyurethane coated drive and guide casters.





The HIRO 180 mounted on a wooden open staircase.



The HIRO 160 mounted on wooden staircase with a PVC floor.

The HIRO 180 mounted on a closed wooden staircase



The HIRO 180 External All our chairlifts can be installed outside. The corrosion protection is dependent on the model/type, material is either tensile steel or has been zinc bathed. The electrical system is protected against moisture.



The folding track (Extras) is used for situations where a door is present and may not be blocked. In the neutral position, the track ends flush with the first step. For the downward ride, the track is lowered, complete with passenger for easy access. For the upwards trip, the track is folded back automatically into its normal position, thus leaving the corridor clear.





Incline lifts for straight and spiral staircases as complete units, purpose designed for installation on finished stairways in both public and private buildings.

# Suitable operation areas

For both internal and external use in the following: private house/flat, administration buildings, hospitals, schools to name but a few.

### Health and safety inspection

The following requirements have been met: EEC design type test, machine regulations, elevator regulation, guidelines for lifts for the handicapped VdTÜV, as well as general administration instructive.

# Description

### Scope of delivery

A complete lift unit, including assembly.

#### Track

It consists of two joined guide and support tubes, of which there course has been (CAD) computer calculated. After which the data is passed onto our CNC bending machine, with out any mistake, and with a millimeter precision, it forms the track (CIM- computer integrated manufacturing).

### **Drive system**

The drive unit is a traction unit, whereby guide and load casters are driven with the unit along the track. Between casters and track there is no play. Prior to the drive unit is a worm drive gear, which holds the unit when not in motion.

#### Safety-gear

Independent of the drive unit is a caster that is electronically controlled. Connected to the caster is a speed reduction unit, which is always checking the speed of the lift. By excessive speed it then activates the safety break and brings the lift to a halt.

# **Travel Speed**

The unit speed on the straight is 0.1 m/sec. On internal units:

Strong but a smooth and controlled speed reduction before a curve and or a stop position, for curves it is possible to adjust the speed (curve speed), at the stop position the unit speed is reduced to nil. A smooth acceleration is achieved after curves and from the stop position up to normal speed. The gentle ride is achieved with the Siemens developed processor control, which is a load independent four-point control. When a barrier is opened, the system is programmed to stop.

#### Construction

For the folded lift an external control unit can be made, to call the lift to a stop position. Owing to the size of the unit and mastering of corners, it is ideal also for open-staircases. It is possible, at the top stop position to stop the lift at the last step. At the bottom stop position it is possible to start at a pitch of 65°. Thus the space requirement in the start position is reduced. Emergency release: if the brakes need bleeding, it is possible to retrieve the lift with a hand-wheel.

#### Control Unit

The system is based on the dead-man principle, thus when any switch/button is released the system stops. The unit has to have the key in position before it can be operated. Via the external control (remote control), it is possible to both send and call the lift to a parking position. Internal control: up, down, stop, key. External control: up, down, key (radio remote control).

# Payload

125 kg

### Drive unit technical data

Power consumption: 230 V AC, 50 Hz, 0.25-0.75 kW

#### **Dimensions**

Width of the folded chair: 395 mm including the track

### Inspection

The inspection is periodically from manufacture qualified personal.

### Repair and Spares

All parts can be changed, diagnose machine.

## Assembly

## **Building preparation**

230 V socket

# Installation

Manufacture installation team.

# Assembly type

Additional installation or improvement to existing units is possible.

### Procurement modes

# **Delivery range**

Inside Germany, Europe and World wide

## **Delivery Time**

On request

### Distribution

Direct order with the manufacture (in land)

### Transportation

Factory fleet, Transport Company

### After sales service

Factory after sales service, contract partners

### **Technical Consultant**

Help with planning, drawings and neutral invitation to bid.

### **Purchase conditions**

#### Price

Price formation depending on quotation

#### Price condition

Included in the price is the following: free delivery to the site, installation, healthy and safety inspection, unless otherwise agreed.

# Contract and guarantee conditions

Meets the conditions disclosed in the manufactures contract conditions.











