

# **IDEALIFT H2W1**

IDEALIFT allows drivers to park their cars independently

**DATA** SHEET



EXPAND YOUR PARKING CAPACITY



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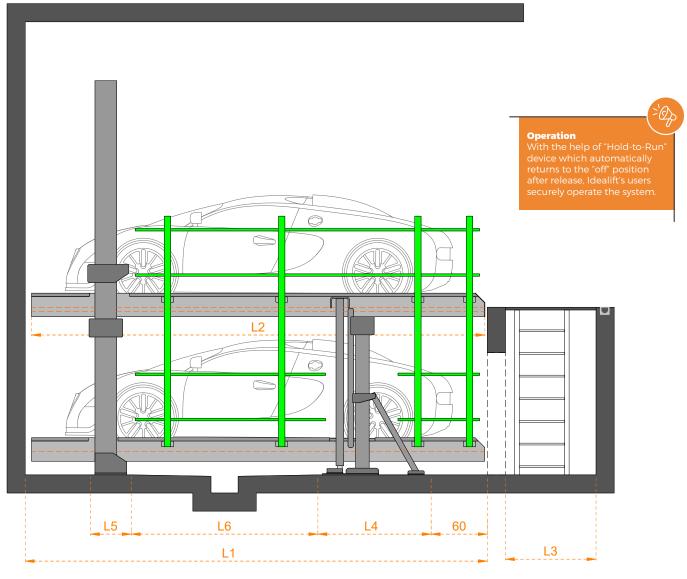
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# GENERAL DESCRIPTION

- Idealift H2W1 is an independent pit parking system for an indoor application and it allows 2 vehicles to be parked on top of each other in respect to its types in a parking space that merely allows 1 vehicle under normal conditions.
- Idealift platforms moves vertically.
- The height, width and length of the platform can be customized according to the customer's request. (see "Length, Height and Width Details", page 3,5 and 6).
- The lifting capacity of the platforms can be customized according to the customer's request. (see "Loads and Construction Details", page 8).

- The operating key is installed in front of the columns or on the outside.
- Hot-dip galvanization is applied to the main construction.
- All dimensions are minimum and tolerance for dimensions +3/-0 cm.

- LENGTH DETAILS



#### All dimensions are given in cm.

Maximum vehicle length dimensions can be like the following table. In case of shorter and longer versions, please consult Sanpark.

#### **IDEA LENGTH DIMENSIONS**

| Maximum Vehicle<br>Length | Platform Length<br><b>(L2)</b> | Required<br>Space <b>(L1)</b> | Gradient Free<br>Space <b>(L4)</b> | Gradient Free<br>Space <b>(L5)</b> | Column<br>Position <b>(L6)</b> |
|---------------------------|--------------------------------|-------------------------------|------------------------------------|------------------------------------|--------------------------------|
| 490 cm                    | 500 cm                         | 510 cm                        | 125 cm                             | 45 cm                              | 205 cm                         |
| 500 cm                    | 510 cm                         | 520 cm                        | 125 cm                             | 45 cm                              | 215 cm                         |
| 510 cm                    | 520 cm                         | 530 cm                        | 125 cm                             | 45 cm                              | 225 cm                         |

Gradient free space (L4 and L5) indicates a space where shall be no gradient or slope.

The position of the (L5) is determined by the position of the column position (L6).

It is not necessary to create a maintenance shaft but we recommend building it for a convenient access to the pit level in times of failure. Maintenance shaft length **(L3)** shall be at least 100 cm.

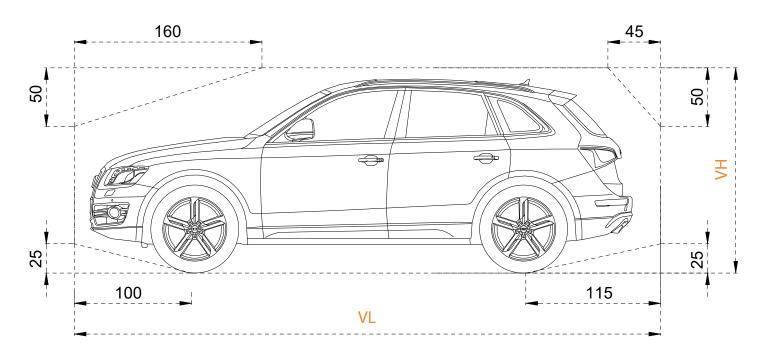
# Independent Parking

All parking spaces and vehicles in the system can be used without blocking one another.

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# VEHICLE DETAILS, CLEARANCE & DIMENSIONS



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| Vehicle Length (VL) | see "Length Details", page 3                     | _  |
|---------------------|--|--|
| Vehicle Height (VH) | see "Height Details", page 5                     | The overall vehicle height including                           |
| Vehicle Width       | see "Width Details", page 6                      | roof luggage rails and antenna mounts must not exceed the max. |
| Vehicle Weight      | see "Loads and Construction<br>Details ", page 8 | vehicle height dimensions specified                            |
| Wheel Load          | 500 KG / 650 KG / 750 KG                         | -  |
| Vehicle Types       | Saloon, Estate, SUV, Van                         | -  |

The following car heights shared as a guide to help you to select the platform distance and construction dimensions;

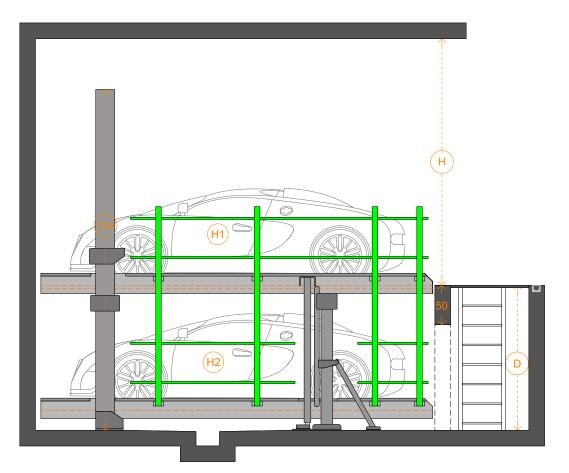
|                     | ·      |
|---------------------|--------|
| Volkswagen Golf     | 149 cm |
| Volkswagen Tiguan   | 167 cm |
| Volkswagen T-Roc    | 160 cm |
| Volkswagen T-Cross  | 159 cm |
| Volkswagen Passat   | 152 cm |
| Dacia Sandero       | 150 cm |
| Dacia Duster        | 170 cm |
| Renault Clio        | 145 cm |
| Renault Captur      | 158 cm |
| Fiat/Abarth 500     | 150 cm |
| Fiat Panda          | 156 cm |
|                     | T      |
| Tesla Model 3       | 145 cm |
| Tesla Model X       | 169 cm |
| Ford Kuga           | 169 cm |
| Ford Puma           | 156 cm |
| Mercedes A-Class    | 146 cm |
| Mercedes G-Class    | 198 cm |
| Mini Hatch          | 145 cm |
| Hyundai Kona        | 156 cm |
| Opel/Vauxhall Corsa | 149 cm |
| Volvo XC40          | 166 cm |
| Skoda Octavia       | 147 cm |
| Hyundai Tucson      | 167 cm |

| Peugeot 208            | 146 cm |
|------------------------|--------|
| Peugeot 2008           | 155 cm |
| Peugeot 3008           | 163 cm |
| Toyota Corolla         | 144 cm |
| Toyota Yaris           | 151 cm |
| Toyota RAV4            | 169 cm |
| Toyota Camry           | 145 cm |
| Citroen C3             | 161 cm |
| Porsche Macan          | 163 cm |
| Porsche Cayenne        | 168 cm |
| BMW 3-Series           | 143 cm |
| BMW iX                 | 170 cm |
| BMW X5                 | 175 cm |
| Volvo XC 90            | 178 cm |
| Land Rover Discovery   | 189 cm |
| Land Rover Range Sport | 180 cm |

All vehicle heights may vary due to the wide range of models and manufacturing year.

 $\rightarrow$  HEIGHT DETAILS

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- The table below indicates vehicle heights (H1-H2) and their corresponding operation height (H). Various versions are available upon request so please contact to have technical support if it is necessary.
- We recommend that the dimension of (H2) is more than average human height!
- While the height of the lower-level vehicle (H2) is between 150 cm and 180 cm, Idea column height (CH) is 435 cm.
  While the height of the lower-level vehicle (H2) is between 185 cm and 200 cm, Idea column height (CH) is 475 cm.
  While the height of the lower-level vehicle (H2) is 205 cm, Idea column height (CH) is 485 cm.
- Maintenance shaft beam is supposed to be minimum 50 cm.

|             |     | Upper-Level Vehicle Height (H1) |     |     |     |     |     |     |     |     |     |     |     |           |
|-------------|-----|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
|             |     | 150                             | 155 | 160 | 165 | 170 | 175 | 180 | 185 | 190 | 195 | 200 | 205 |           |
|             | 150 | 315                             | 320 | 325 | 330 | 335 | 340 | 345 | 350 | 355 | 360 | 365 | 370 |           |
| 2           | 155 | 320                             | 325 | 330 | 335 | 340 | 345 | 350 | 355 | 360 | 365 | 370 | 375 | _         |
| (H2)        | 160 | 325                             | 330 | 335 | 340 | 345 | 350 | 355 | 360 | 365 | 370 | 375 | 380 | (H)       |
| Height      | 165 | 330                             | 335 | 340 | 345 | 350 | 355 | 360 | 365 | 370 | 375 | 380 | 385 | Height    |
|             | 170 | 335                             | 340 | 345 | 350 | 355 | 360 | 365 | 370 | 375 | 380 | 385 | 390 |           |
| Vehicle     | 175 | 340                             | 345 | 350 | 355 | 360 | 365 | 370 | 375 | 380 | 385 | 390 | 395 | Clearance |
|             | 180 | 345                             | 350 | 355 | 360 | 365 | 370 | 375 | 380 | 385 | 390 | 395 | 400 | eara      |
| evel        | 185 | 350                             | 355 | 360 | 365 | 370 | 375 | 380 | 385 | 390 | 395 | 400 | 405 |           |
| ir-Le       | 190 | 355                             | 360 | 365 | 370 | 375 | 380 | 385 | 390 | 395 | 400 | 405 | 410 | lire      |
| Lower-Level | 195 | 360                             | 365 | 370 | 375 | 380 | 385 | 390 | 395 | 400 | 405 | 410 | 415 | Required  |
|             | 200 | 365                             | 370 | 375 | 380 | 385 | 390 | 395 | 400 | 405 | 410 | 415 | 420 |           |
|             | 205 | 370                             | 375 | 380 | 385 | 390 | 395 | 400 | 405 | 410 | 415 | 420 | 425 |           |

#### All dimensions are given in cm.

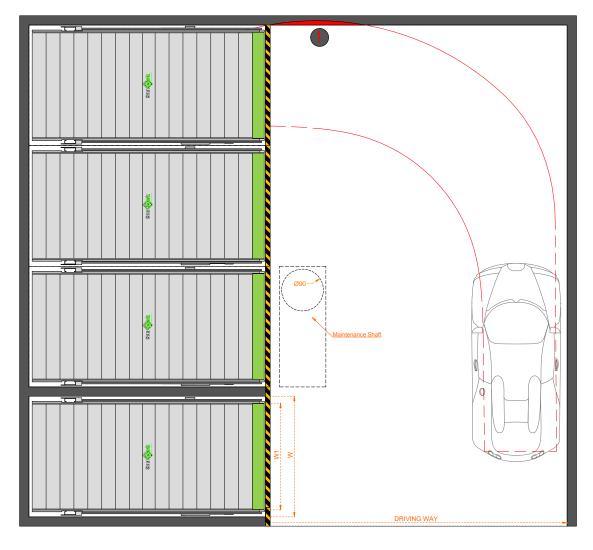
The following table shows required pit depth for specific vehicle height in the pit (H2).

#### IDEA H2W1 PIT DIMENSIONS

| Car Height (H1) | 150 cm | 155 cm | 160 cm | 165 cm | 170 cm | 175 cm | 180 cm | 185 cm | 190 cm | 195 cm | 200 cm | 205 cm |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Pit Depth (D)   | 185 cm | 190 cm | 195 cm | 200 cm | 205 cm | 200 cm | 215 cm | 220 cm | 225 cm | 230 cm | 235 cm | 240 cm |







The following figures demonstrate the required width for parking areas and their correspondence to clear platform width.

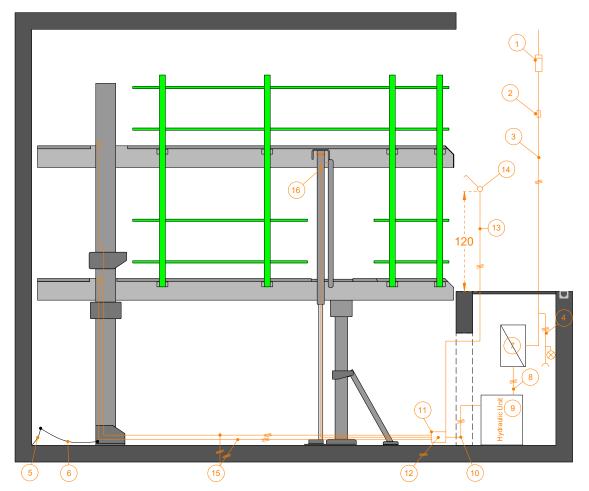
| IDEA MONO PLATFORM WIDTH |        |        |        |        |  |  |  |  |
|--------------------------|--------|--------|--------|--------|--|--|--|--|
| equired Width (W)        | 250 cm | 260 cm | 270 cm | 280 cm |  |  |  |  |
| lear Platform Width (W1) | 220 cm | 230 cm | 240 cm | 250 cm |  |  |  |  |

Reducing parking width lowers parking comfort according to the vehicle width, vehicle type, and individual driving style.

- We recommend 250 centimeters platform width for convenient parking.
- While setting driving lane width, please check local regulations.
- While planning Idea next to a wall, it is significant to take into consideration that turning the vehicle in one maneuver may cause a crash so please take advice from Sanpark in a such situation, shown in the illustration above.
- While setting driving lane width, please check local regulations. It can be a minimum of 500 cm, but we advise 650 cm driving lane width so that drivers can park their vehicles conveniently without additional maneuvering.

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During installation, it is required to appropriately connect electrical components with the wiring diagram supplied by the manufacturer in accordance with local regulations.

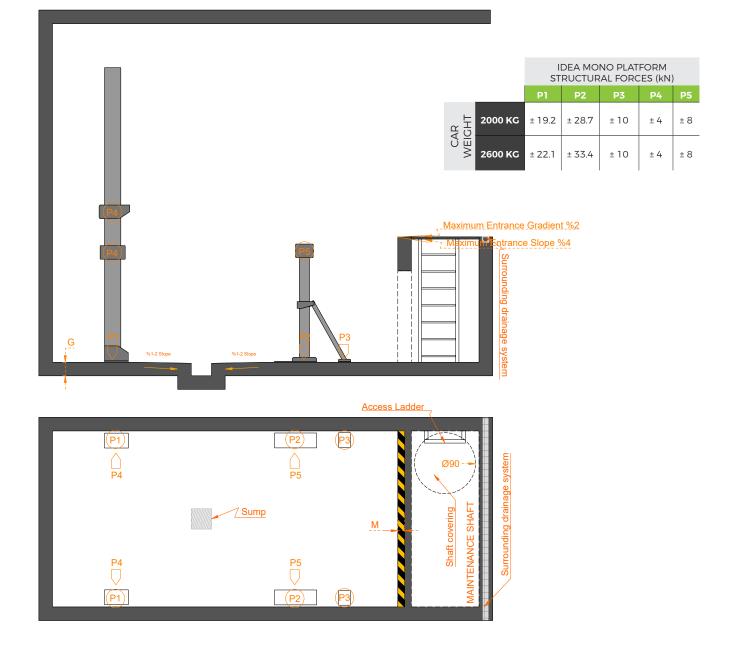
| ELECTRICAL DETAILS (In the customer responsibility) |            |  |   |                |  |  |  |
|---|------------|--|---|----------------|--|--|--|
| NUMBER  | QUANTITY   | DEFINITION   | POSITION  | FREQUENCY      |  |  |  |
| 1   | 1          | Electricity meter  | in the supply cable   |                |  |  |  |
| 2   | 1          | 3x Safety fuse 3x 40 A (Trip Characteristic C)   | in the supply cable   | 1x per unit    |  |  |  |
| 3   | 1          | Supply cable 5x4 mm <sup>2</sup> (3 PH+N+PE) with marked wires and protective earth              | supply cables to the main switch                            | 1 x per unit   |  |  |  |
| 4   | 1          | Separate supply cable 230 V with lighting and socket   | from the electricity<br>meter in the main-<br>tenance shaft |                |  |  |  |
| 5   | 1          | Equipotential bonding in accordance with DIN EN 60204 from foundation earth connection to system |   | 1 x per system |  |  |  |
| 6   | Every 10 m | Foundation earth connection  | corner or middle of pit floor                               |                |  |  |  |

| ELECTRIC | ELECTRICAL DETAILS (In Sanpark responsibility)   |  |  |  |  |
|----------|--|--|--|--|--|
| NUMBER   | DEFINITION   |  |  |  |  |
| 7        | Switch cabinet with lockable master switch   |  |  |  |  |
| 8        | Supply cable 5x4 mm <sup>2</sup> (3 PH+N+PE) with marked wires and protective earth      |  |  |  |  |
| 9        | Hydraulic unit 5.5 kW, three-phase current 220/380 V 50 Hz                               |  |  |  |  |
| 10       | Control cable 4x4 mm <sup>2</sup> with marked wires and protective earth                 |  |  |  |  |
| 11       | Branch connector   |  |  |  |  |
| 12       | Control cable 5x4 mm²lead-out to the system  |  |  |  |  |
| 13       | Control cable 3x0.75 mm² with marked wires and protective earth                          |  |  |  |  |
| 14       | Operating device with emergency stop   |  |  |  |  |
| 15       | Control cable 2x0.75 mm <sup>2</sup> with marked wires and protective earth for switches |  |  |  |  |
| 16       | 3 x 1.5 mm <sup>2</sup> control cable for the cylinder valve lead                        |  |  |  |  |

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# ------ LOADS AND CONSTRUCTION DETAILS



- The systems are anchored into the ground. The drill hole depth in the floor plate is approx. 14 cm, in the walls approx. 10 cm. If the precise figures are required, please consult Sanpark.
- Concrete quality according to the static requirements of the building. However, we require a slab thickness (G) minimum of 20 cm and a concrete quality of min. C20/25 to anchor the system.
- According to DIN EN 14010, the floor has to be marked with 10 cm wide yellow-black stripes (M) to point out the dangerous area. The marking must comply with ISO 3864.
- Hydraulic unit is placed in the maintenance shaft. The access to pit shaft, the access ladder and maintenance shaft hatch have to be performed by the customer. The safety precautions to the access pit have to be conducted by the customer.

- Door between the maintenance shaft and the Idea's pit is to be installed by the customer.
- Dimensions for the drainage channel with grating in the pit are 10 x 2 cm with sump 50 x 50 x 50 cm. The drainage channel must be connected to the sewerage system or the water must be drained away by a pump provided by the customer. For sump pump's dimensions, please consult its manufacturer.
- Any water proofing work shall be carried by the customer.
- Maximum entrance gradient (%2) and slope (%4) details are specified in the illustration above. Improper layout causes extreme difficulties and Sanpark does not accept any responsibilities.

# TECHNICAL INFORMATION



#### Installation

IdeaLift requires crane and forklift for installation. It is under customer's responsibility to provide these vehicles.

The heaviest part is 160 kg so please consult local companies to hire proper crane and forklift. Please request a consultation for more detail about IdeaLift.

### Hydraulic Unit

Up to 3 IdeaLift can be grouped as one so they can share the common hydraulic unit to reduce the overall price. In such a case, each group of systems cannot be operated separately. A separate power unit is recommended to reduce dependency. Please request a consultation for planning the project.



#### Temperature

Majortrio is designed to operate between  $-15^{\circ}$  and  $+40^{\circ}$ C at atmospheric humidity of 50 percent. If the local temperature is different from the above, please consult Sanpark.

#### **Conformity Test**

All our systems comply with EC machinery directive 2006/42/EC and TS/EN 14010:2009 +A1:2009.



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#### **Building application documents**

All our systems generally require local approval. Please observe local regulations.



#### Maintenance

Regular maintenance by qualified personnel can be provided by an Annual Service Contract.

#### **Care and Corrosion Protection**

Due to the corrosion danger, apart from regular maintenance, all our galvanized equipment and platforms must be regularly cleaned up salt water, dirt, leak, any chemical substance, and sand. The garage and pits must be always ventilated well.



#### Railings

If passageways are directly next to the systems, railings have to be provided according to TS EN ISO 13857 by the client according to local requirements, height min. 200 cm.



#### **Fire Safety**

All fire safety requirement(s) and all possible mandatory item(s) and equipment(s) must comply with local regulations and must be provided by the customer.



#### **Noise Protection**

In compliance with DIN 4109-1 Noise protection: Maximum sound pressure level in living and sleeping areas 30 dB (A).

User noise like accessing the platform, the slamming of vehicle doors, the vehicle's engine, and brake noise are not subject to the requirements.

In order to provide 30 dB (A) in rooms the following conditions are required;

Additional Sanpark noise protection package according to quote.

Insulation figure of the construction of min R'w= 57 dB (in the customer's responsibility)

Walls that are close to the parking systems must be done as a single wall and deflection resistant with min. m'= 300 kg/m2 (in the customer's responsibility)

The solid ceiling above the parking systems with min. m'= 400 kg/m2 (in the customer's responsibility)

At differing constructional conditions, additional soundabsorbing methods are in the customer's responsibility.

- 2 Steel columns with base plates.
- 2 Mechanical Locking devices 2 Platforms
- 1 Hydraulic cylinder
- Anchors, screws, connectors, bolts, etc. 1 Mechanical synchronization system.

#### **Platform Components**

Platform profiles Side beams Adjustable positioning aid Platform base sections Chamfered ramp Screws, nuts, washers, spacers, etc.

#### **Hydraulic System Components** Hydraulic cylinders Solenoid valve

Safety valve Screwed joints High-pressure hoses Attachments

### **Electrical System Components**

Emergency stop Electrohydraulic lock Electro mechanic lock Distributor board Junction box 1 Master key for each IDEA .

# Hydraulic Unit Component

Hydraulic power unit Hydraulic oil reservoir Oil filling Internal gear Pump Pump holder Coupling 3 phase AC motor (5.5 kW, 380 V, 50 Hz) Contactor Pressure relief valve Hydraulic hoses

# **SERVICES TO BE PROVIDED BY THE CUSTOMER**

#### Warning Marking

According to DIN EN 14010, the floor has to be marked with 10 cm wide yellow-black stipes to indicate the operation area by the purchaser to point out the dangerous area.

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|-----|------------|--|
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#### **Barriers**

In accordance with DIN EN 13857, barriers may be required in case of passageways in front of, behind, or next to the systems.



## **Parking Space Numbering**

Numbering the parking spaces.

# Lighting

It is in the customer's responsibility to check local regulations regarding the illumination of parking spaces.



#### **Conduits and Wall Openings**

Any conduit and wall opening work belongs to the customer, yet Sanpark can assist during the planning phase in such cases. Please consult Sanpark if necessary.

#### **Supply Cable to Master Switch**

The customer must run the supply cable to the master switch during assembly.

# **Earth Foundation**

The customer must earth the steel structure with a foundation earth connection and lay equipotential bonding according to local regulations.



#### Drainage

For environmental protection, we advise applying coating the pit floor. Oil and/or fuel separators should be installed in accordance with local regulations. To drain large quantities of water from the yard, the customer must install a water collection channel around the system.

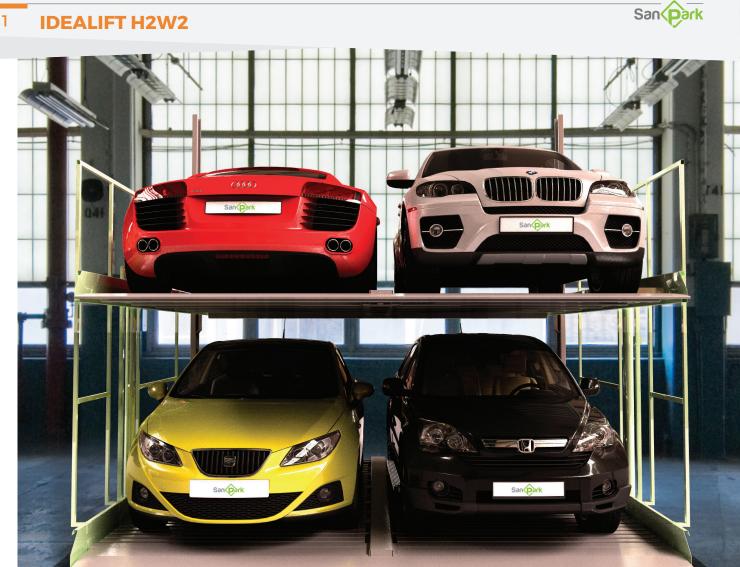






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|---|--|--------------------------------|---|
| 1 am  |  |                                | AUSTRIA   |
|   |  |                                | STERPRÜFBESCHEINIGUNG   |
|   |  |                                | nenrichtlinie 2006/42/EG unter der Nummer 2737  |
|   |  | Be                             | scheinigung Nr.: 21-MD-TEC-063-TAT-2021-033   |
| ₩   | Antragsteller  | :                              | ŞANMAK MAKİNE SANAYİ VE TİC, A.Ş.<br>Çalı Sanayi Bölgesi Çalı Mh 6. Sk. N:8 Nilüfer / Bursa   |
| 다.<br><br>+-  | Hersteller   | ;                              | ŞANMAK MAKİNE SANAYİ VE TİC. A.Ş.<br>Çalı Sanayi Bölgesi Çalı Mh 6. Sk. N:8 Nilüfer / Bursa   |
| 臣   | Design des Produkts  | :                              | Mehrschichtiger, elektrohydraulischer mechanischer Parklift   |
| ا شهادة   ٩٢  | Typ/Modell   | :                              | # IDEALIFT H2W1, IDEALIFT H2W2, IDEALIFT H3W1, IDEALIFT H3W2 #<br># IDEALOW H2W1, IDEALOW H2W2, IDEALOW H3W1, IDEALOW H3W2 #<br># MJORLIFT, MJORTRIO, OFTLIFT, ROBUST-SILMO #<br># SUBLIFT H1W1, SUBLIFT H1W1, SUBLIFT H1W2, SUBLIFT H2W1,<br># SUBLIFT H2W2, SUBLIFT H3W2, SUBLIFT H3W2, #   |
| ФИКА  | Warenzeichen / Marke   | :                              | SANPARK   |
| серти   | Norm(en)/<br>Angewandte Regelwerke:  | :                              | 2006/42/EG Maschinenrichtlinie<br>EN ISO 12100:2010<br>EN 14010:2003+A1:2009  |
| FICADO  | ausgestellt. Die in Anhang IV<br>grundlegenden Gesundheits- u  | √ au<br>und                    | j auf Kundenwunsch gemäß Maschinenrichtlinie 2006/42/EG Artikel 12 3.b<br>digeführten Geräte entsprechen der harmonisierten Norm und Anhang I den<br>Sicherheitsanforderungen der Richlinie. Sie bezieht sich nur auf das jeweilige<br>rlagen, die zur Einsichtnahme vorgelegt werden.  |
| E L   | Technische Datei Nr  | :                              | 21-MD-TEC-063/TF-01   |
| U.S.  | MIT <sup>1</sup> Dokument Nr   |                                | MD-2737-2100004   |
| -   | Assessor-ID-Nr.  |                                | TU-MD-001 *   |
| AT  | Datum/Ort der Begutachtung   | :                              | 01.10.2021  |
| 2<br>   | Ausstellungsdatum  | :                              | 09.11.2021  |
| ertifikat   certificate   certificat   certificado   ceptuoukat   उं <mark>)</mark> ५के   सिम्रै   शुक्ति | Ablaufdatum  | :                              | 08.11.2021<br>08.11.2025<br>TUX AUSTRIA TURK<br>Geneming von<br>All Genand GzygReRN<br>Austria  |
| CERTIF  | 2737 Konformitätserk<br>angebracht wer   | kläru<br>rden                  | der notwendigen technischen Dokumentation sowie der<br>ng kann die erforderliche CE-Kennzeichnung auf dem Produkt<br>Weitere relevante Richtlinien sind zu berücksichtigen.   |
| ZERTIFIKAT  | den Antragsteller / Hersteller of<br>Konformitätsbewertung des TÜ<br>Regelwerke/Normen sowie der Mai<br>teilweise oder gänzliche Wiede | oder<br>UV<br>ateria<br>erholi | der notwendigen technischen Ockumentation sowie der<br>nach and eine erforderliche CE-Kennzeichnung auf dem Produkt<br>Wettere relevante Richtlinien sind zu berücksichtigen.<br>Auf Antrastellte auf Grundlage der Eigebnisse der Profungen durch<br>einem nachkannten Labor und der im Profuencht angeführten<br>AUSTRIA TURK augestellt. Anterungen der angewandten<br>jung der Pröfungen erforderlich machen, um die Güttigkeit der<br>ont and therefore this associated certificate to remain valid. |
|   | <sup>1</sup> Ministerium für Industrie und Technolo  | ogie                           | ur est D  |
|   |  |                                | TÜV AUSTRIA TURK<br>Vervieflatīgung nur m. Genehnigung des TÜV AUSTRIA TURK<br>Überwahungslitigkeiten wurden auch dem QU-System des TÜV<br>Austration Tit mar automature  |





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IDEALIFT allows drivers to park their cars independently

**DATA** SHEET



EXPAND YOUR PARKING CAPACITY



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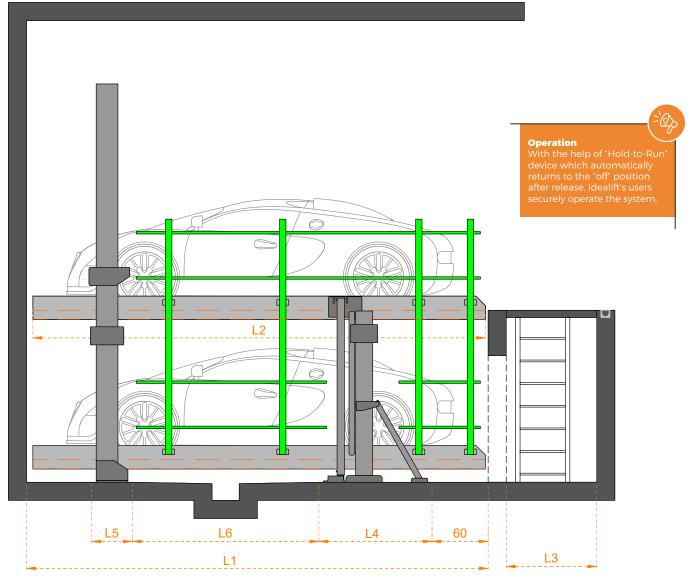
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# → GENERAL DESCRIPTION +

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- Idealift platforms moves vertically.
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- The lifting capacity of the platforms can be customized according to the customer's request. (see "Loads and Construction Details", page 8).

- The operating key is installed in front of the columns or on the outside.
- Hot-dip galvanization is applied to the main construction.
- All dimensions are minimum and tolerance for dimensions +3/-0 cm.

→ LENGTH DETAILS



#### All dimensions are given in cm.

Maximum vehicle length dimensions can be like the following table. In case of shorter and longer versions, please consult Sanpark.

#### **IDEA LENGTH DIMENSIONS**

| Maximum Vehicle<br>Length | Platform Length<br><b>(L2)</b> | Required<br>Space <b>(L1)</b> | Gradient Free<br>Space <b>(L4)</b> | Gradient Free<br>Space <b>(L5)</b> | Column<br>Position <b>(L6)</b> |
|---------------------------|--------------------------------|-------------------------------|------------------------------------|------------------------------------|--------------------------------|
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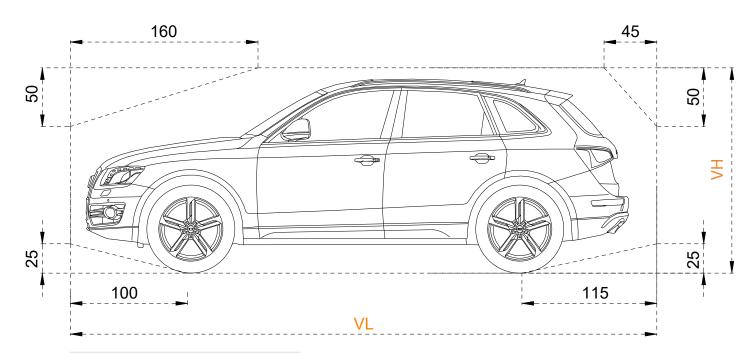
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Sanpark



# → VEHICLE DETAILS, CLEARANCE & DIMENSIONS



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| Vehicle Length (VL) | see "Length Details", page 3                     |   |
|---------------------|--|---|
| Vehicle Height (VH) | see "Height Details", page 5                     | The overall vehicle he                      |
| Vehicle Width       | see "Width Details", page 6                      | roof luggage rails an<br>mounts must not ex |
| Vehicle Weight      | see "Loads and Construction<br>Details ", page 8 | vehicle height dimer                        |
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| Vehicle Types       | Saloon, Estate, SUV, Van                         |   |

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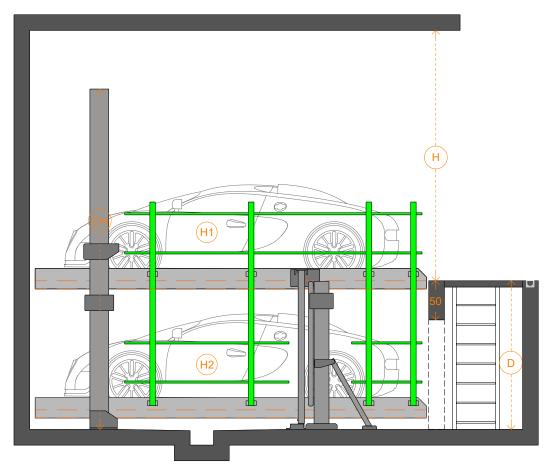
| Volkswagen Golf     | 149 cm |
|---------------------|--------|
| Volkswagen Tiguan   | 167 cm |
| Volkswagen T-Roc    | 160 cm |
| Volkswagen T-Cross  | 159 cm |
| Volkswagen Passat   | 152 cm |
| Dacia Sandero       | 150 cm |
| Dacia Duster        | 170 cm |
| Renault Clio        | 145 cm |
| Renault Captur      | 158 cm |
| Fiat/Abarth 500     | 150 cm |
| Fiat Panda          | 156 cm |
|                     |        |
| Tesla Model 3       | 145 cm |
| Tesla Model X       | 169 cm |
| Ford Kuga           | 169 cm |
| Ford Puma           | 156 cm |
| Mercedes A-Class    | 146 cm |
| Mercedes G-Class    | 198 cm |
| Mini Hatch          | 145 cm |
| Hyundai Kona        | 156 cm |
| Opel/Vauxhall Corsa | 149 cm |
| Volvo XC40          | 166 cm |
| Skoda Octavia       | 147 cm |
| Hyundai Tucson      | 167 cm |

| r                      |        |
|------------------------|--------|
| Peugeot 208            | 146 cm |
| Peugeot 2008           | 155 cm |
| Peugeot 3008           | 163 cm |
| Toyota Corolla         | 144 cm |
| Toyota Yaris           | 151 cm |
| Toyota RAV4            | 169 cm |
| Toyota Camry           | 145 cm |
| Citroen C3             | 161 cm |
| Porsche Macan          | 163 cm |
| Porsche Cayenne        | 168 cm |
| BMW 3-Series           | 143 cm |
| BMW iX                 | 170 cm |
| BMW X5                 | 175 cm |
| Volvo XC 90            | 178 cm |
| Land Rover Discovery   | 189 cm |
| Land Rover Range Sport | 180 cm |

All vehicle heights may vary due to the wide range of models and manufacturing year.

id antenna iceed the max. nsions specified





- The table below indicates vehicle heights (H1-H2) and their corresponding operation height (H). Various versions are available upon request so please contact to have technical support if it is necessary.
- We recommend that the dimension of (H2) is more than average human height!
- While the height of the lower-level vehicle (H2) is between 150 cm and 175 cm, Idea column height (CH) is 440 cm.
  While the height of the lower-level vehicle (H2) is between 180 cm and 200 cm, Idea column height (CH) is 50 cm.
  While the height of the lower-level vehicle (H2) is 205 cm, Idea column height (CH) is 520 cm.
- Maintenance shaft beam is supposed to be minimum 50 cm.

|             |     | Upper-Level Vehicle Height (H1) |     |     |     |     |     |     |     |     |     |     |     |                   |
|-------------|-----|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------------|
|             |     | 150                             | 155 | 160 | 165 | 170 | 175 | 180 | 185 | 190 | 195 | 200 | 205 |                   |
|             | 150 | 320                             | 325 | 330 | 335 | 340 | 345 | 350 | 355 | 360 | 365 | 370 | 375 |                   |
| 2           | 155 | 325                             | 330 | 335 | 340 | 345 | 350 | 355 | 360 | 365 | 370 | 375 | 380 | _                 |
| (H2)        | 160 | 330                             | 335 | 340 | 345 | 350 | 355 | 360 | 365 | 370 | 375 | 380 | 385 | E                 |
| Height      | 165 | 335                             | 340 | 345 | 350 | 355 | 360 | 365 | 370 | 375 | 380 | 385 | 390 | Height <b>(H)</b> |
|             | 170 | 340                             | 345 | 350 | 355 | 360 | 365 | 370 | 375 | 380 | 385 | 390 | 395 |                   |
| Vehicle     | 175 | 345                             | 350 | 355 | 360 | 365 | 370 | 375 | 380 | 385 | 390 | 395 | 400 | Clearance         |
| Veh         | 180 | 350                             | 355 | 360 | 365 | 370 | 375 | 380 | 385 | 390 | 395 | 400 | 405 | ear               |
| evel        | 185 | 355                             | 360 | 365 | 370 | 375 | 380 | 385 | 390 | 395 | 400 | 405 | 410 |                   |
| er-Le       | 190 | 360                             | 365 | 370 | 375 | 380 | 385 | 390 | 395 | 400 | 405 | 410 | 415 | uire              |
| Lower-Level | 195 | 365                             | 370 | 375 | 380 | 385 | 390 | 395 | 400 | 405 | 410 | 415 | 420 | Required          |
| 1           | 200 | 370                             | 375 | 380 | 385 | 390 | 395 | 400 | 405 | 410 | 415 | 420 | 425 |                   |
|             | 205 | 375                             | 380 | 385 | 390 | 395 | 400 | 405 | 410 | 415 | 420 | 425 | 430 |                   |

All dimensions are given in cm.

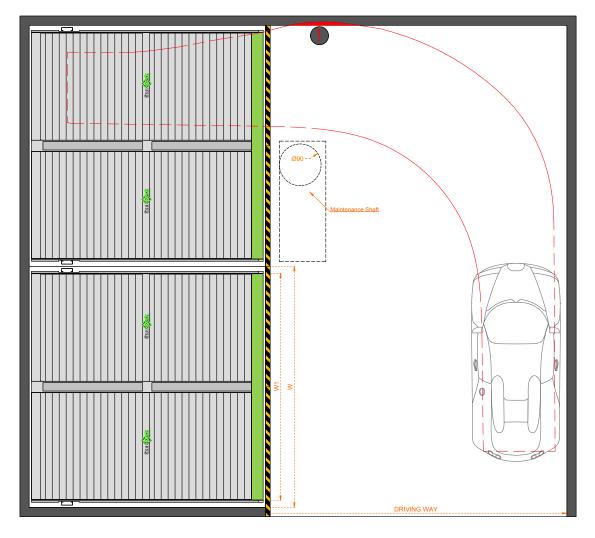
The following table shows required pit depth for specific vehicle height in the pit (H2).

#### IDEA H2W2 PIT DIMENSIONS

| Car Height (H1) | 150 cm | 155 cm | 160 cm | 165 cm | 170 cm | 175 cm | 180 cm | 185 cm | 190 cm | 195 cm | 200 cm | 205 cm |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Pit Depth (D)   | 190 cm | 195 cm | 200 cm | 205 cm | 210 cm | 215 cm | 220 cm | 225 cm | 230 cm | 235 cm | 240 cm | 245 cm |

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The following figures demonstrate the required width for parking areas and their correspondence to clear platform width.

| IDEA DUO PLATFORM WIDTH |        |        |        |        |  |  |  |  |
|-------------------------|--------|--------|--------|--------|--|--|--|--|
| equired Width (W)       | 490 cm | 500 cm | 520 cm | 530 cm |  |  |  |  |
| ear Platform Width (W1) | 460 cm | 470 cm | 490 cm | 500 cm |  |  |  |  |

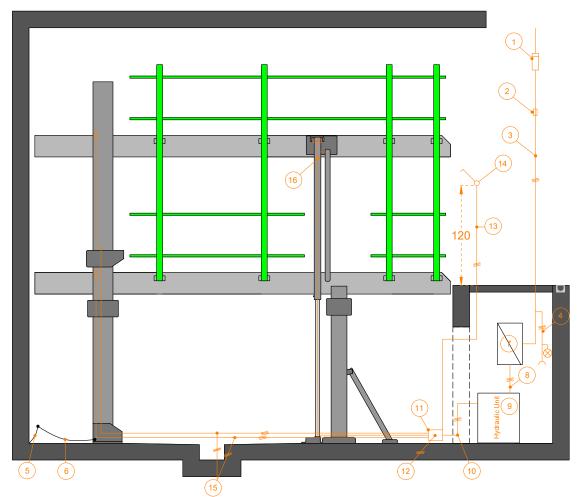
Reducing parking width lowers parking comfort according to the vehicle width, vehicle type, and individual driving style.

- We recommend 490 centimeters platform width for convenient parking.
- While setting driving lane width, please check local regulations.
- While planning Idea next to a wall, it is significant to take into consideration that turning the vehicle in one maneuver may cause a crash so please take advice from Sanpark in a such situation, shown in the illustration above.
- While setting driving lane width, please check local regulations. It can be a minimum of 500 cm, but we advise 650 cm driving lane width so that drivers can park their vehicles conveniently without additional maneuvering.

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# - ELECTRICITY INSTALLATION DIAGRAM



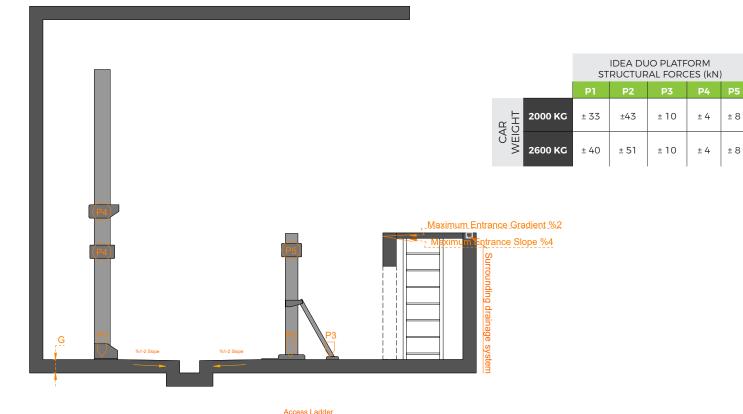
During installation, it is required to appropriately connect electrical components with the wiring diagram supplied by the manufacturer in accordance with local regulations.

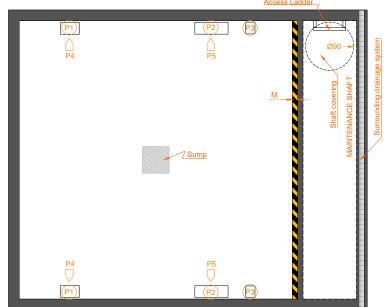
| ELECTRIC | ELECTRICAL DETAILS (In the customer responsibility) |  |   |                |  |  |  |  |
|----------|---|--|---|----------------|--|--|--|--|
| NUMBER   | QUANTITY  | DEFINITION   | POSITION  | FREQUENCY      |  |  |  |  |
| 1        | 1   | Electricity meter  | in the supply cable   |                |  |  |  |  |
| 2        | 1   | 3x Safety fuse 3x 40 A (Trip Characteristic C)   | in the supply cable   | 1x per unit    |  |  |  |  |
| 3        | 1   | Supply cable 5x4 mm² (3 PH+N+PE) with marked wires and protective earth                          | supply cables to the main switch                            | 1 x per unit   |  |  |  |  |
| 4        | 1   | Separate supply cable 230 V with lighting and socket   | from the electricity<br>meter in the main-<br>tenance shaft |                |  |  |  |  |
| 5        | 1   | Equipotential bonding in accordance with DIN EN 60204 from foundation earth connection to system |   | 1 x per system |  |  |  |  |
| 6        | Every 10 m  | Foundation earth connection  | corner or middle of pit floor                               |                |  |  |  |  |

| ELECTRIC | ELECTRICAL DETAILS (In Sanpark responsibility)   |  |  |  |  |  |
|----------|--|--|--|--|--|--|
| NUMBER   | DEFINITION   |  |  |  |  |  |
| 7        | Switch cabinet with lockable master switch   |  |  |  |  |  |
| 8        | Supply cable 5x4 mm² (3 PH+N+PE) with marked wires and protective earth                  |  |  |  |  |  |
| 9        | Hydraulic unit 7.5 kW, three-phase current 220/380 V 50 Hz                               |  |  |  |  |  |
| 10       | Control cable 4x4 mm <sup>2</sup> with marked wires and protective earth                 |  |  |  |  |  |
| 11       | Branch connector   |  |  |  |  |  |
| 12       | Control cable 5x4 mm²lead-out to the system  |  |  |  |  |  |
| 13       | Control cable 3x0.75 mm² with marked wires and protective earth                          |  |  |  |  |  |
| 14       | Operating device with emergency stop   |  |  |  |  |  |
| 15       | Control cable 2x0.75 mm <sup>2</sup> with marked wires and protective earth for switches |  |  |  |  |  |
| 16       | 3 x 1.5 mm² control cable for the cylinder valve lead                                    |  |  |  |  |  |

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# - LOADS AND CONSTRUCTION DETAILS





- The systems are anchored into the ground. The drill hole depth in the floor plate is approx. 14 cm, in the walls approx. 10 cm. If the precise figures are required, please consult Sanpark.
- Concrete quality according to the static requirements of the building. However, we require a slab thickness
   (G) minimum of 20 cm and a concrete quality of min. C20/25 to anchor the system.
- According to DIN EN 14010, the floor has to be marked with 10 cm wide yellow-black stripes (M) to point out the dangerous area. The marking must comply with ISO 3864.
- Hydraulic unit is placed in the maintenance shaft. The access to pit shaft, the access ladder and maintenance shaft hatch have to be performed by the customer. The safety precautions to the access pit have to be conducted by the customer.
- Door between the maintenance shaft and the Idea's pit is to be installed by the customer.
- Dimensions for the drainage channel with grating in the pit are 10 x 2 cm with sump 50 x 50 x 50 cm. The drainage channel must be connected to the sewerage system or the water must be drained away by a pump provided by the customer. For sump pump's dimensions, please consult its manufacturer.
- Any water proofing work shall be carried by the customer.
- Maximum entrance gradient (%2) and slope (%4) details are specified in the illustration above. Improper layout causes extreme difficulties and Sanpark does not accept any responsibilities.

# TECHNICAL INFORMATION



#### Installation

IdeaLift requires crane and forklift for installation. It is under customer's responsibility to provide these vehicles.

The heaviest part is 220 kg so please consult local companies to hire proper crane and forklift. Please request a consultation for more detail about IdeaLift.

### Hydraulic Unit

Up to 3 IdeaLift can be grouped as one so they can share the common hydraulic unit to reduce the overall price. In such a case, each group of systems cannot be operated separately. A separate power unit is recommended to reduce dependency. Please request a consultation for planning the project.



#### Temperature

Majortrio is designed to operate between  $-15^{\circ}$  and  $+40^{\circ}$ C at atmospheric humidity of 50 percent. If the local temperature is different from the above, please consult Sanpark.

#### **Conformity Test**

All our systems comply with EC machinery directive 2006/42/EC and TS/EN 14010:2009 +A1:2009.



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#### **Building application documents**

All our systems generally require local approval. Please observe local regulations.



#### Maintenance

Regular maintenance by qualified personnel can be provided by an Annual Service Contract.

#### **Care and Corrosion Protection**

Due to the corrosion danger, apart from regular maintenance, all our galvanized equipment and platforms must be regularly cleaned up salt water, dirt, leak, any chemical substance, and sand. The garage and pits must be always ventilated well.



#### Railings

If passageways are directly next to the systems, railings have to be provided according to TS EN ISO 13857 by the client according to local requirements, height min. 200 cm.



#### **Fire Safety**

All fire safety requirement(s) and all possible mandatory item(s) and equipment(s) must comply with local regulations and must be provided by the customer.



#### **Noise Protection**

In compliance with DIN 4109-1 Noise protection: Maximum sound pressure level in living and sleeping areas 30 dB (A).

User noise like accessing the platform, the slamming of vehicle doors, the vehicle's engine, and brake noise are not subject to the requirements.

In order to provide 30 dB (A) in rooms the following conditions are required;

Additional Sanpark noise protection package according to quote.

Insulation figure of the construction of min R'w= 57 dB (in the customer's responsibility)

Walls that are close to the parking systems must be done as a single wall and deflection resistant with min. m'= 300 kg/m2 (in the customer's responsibility)

The solid ceiling above the parking systems with min. m'= 400 kg/m2 (in the customer's responsibility)

At differing constructional conditions, additional soundabsorbing methods are in the customer's responsibility.

- 2 Steel columns with base plates.
- 2 Mechanical Locking devices 2 Platforms
- 1 Hydraulic cylinder
- Anchors, screws, connectors, bolts, etc. 1 Mechanical synchronization system.

### **Platform Components**

Platform profiles Side beams Adjustable positioning aid Platform base sections Chamfered ramp Screws, nuts, washers, spacers, etc.

#### **Hydraulic System Components** Hydraulic cylinders Solenoid valve

Safety valve Screwed joints High-pressure hoses Attachments

#### **Electrical System Components**

Emergency stop Electrohydraulic lock Electro mechanic lock Distributor board Junction box 3 Master key for each IDEA .

# Hydraulic Unit Component

Hydraulic power unit Hydraulic oil reservoir Oil filling Internal gear Pump Pump holder Coupling 3 phase AC motor (7.5 kW, 380 V, 50 Hz) Contactor Pressure relief valve Hydraulic hoses

# **SERVICES TO BE PROVIDED BY THE CUSTOMER**

#### Warning Marking

According to DIN EN 14010, the floor has to be marked with 10 cm wide yellow-black stipes to indicate the operation area by the purchaser to point out the dangerous area.

| ٦ ` | S) |  |
|-----|----|--|

#### **Barriers**

In accordance with DIN EN 13857, barriers may be required in case of passageways in front of, behind, or next to the systems.



## **Parking Space Numbering**

Numbering the parking spaces.

# Lighting

It is in the customer's responsibility to check local regulations regarding the illumination of parking spaces.



#### **Conduits and Wall Openings**

Any conduit and wall opening work belongs to the customer, yet Sanpark can assist during the planning phase in such cases. Please consult Sanpark if necessary.

#### **Supply Cable to Master Switch**

The customer must run the supply cable to the master switch during assembly.

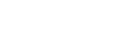
# **Earth Foundation**

The customer must earth the steel structure with a foundation earth connection and lay equipotential bonding according to local regulations.



#### Drainage

For environmental protection, we advise applying coating the pit floor. Oil and/or fuel separators should be installed in accordance with local regulations. To drain large quantities of water from the yard, the customer must install a water collection channel around the system.





# ------ CERTIFICATES ⊢



