### Products MECANUM SCENERY WAGON



**MEC**|Standard

MEC | Plus

**MEC**|Large

**MEC**|Large|*PROJECT* 













## MEC Standard Mecanum Scenery Wagon

MEC   Standard Basic Module Master	
Dimension	1,0 x 1,0 x 0,2 m without covering plate
Total height with covering plate	0,224 m
Maximum payload	1,0 t
Drag load / Pushing load maximum	1,5 t
Dead weight	approx. 100 kg
Coupling capability (master-slave)	max. 8 units
Axis shifting	yes
Combination with Ventum-S system frames	yes
Combination with Ventum-S system insertion trolley passive	yes
CAN bus/PROFINET interface	no

### MEC | Standard Basic Module Master



### Where does it come from?

The **MEC** | Standard has its origin in the industry, where it exists in a very similar configuration in hard continuous use.

### Since when has the MEC | Standard been used on stage?

Some adaptations in hardware and software turned the successful industrial product into THE "Swiss Army Knife" for driving movements on stage. Since its introduction in 2017, the **MEC**|Standard has been continuously optimized and adapted to the conditions on stage and in event technology.

### For whom is the MEC | Standard the right product?

The **MEC** | Standard is the workhorse of the family. Tough, easy to use, optimized again and again over the years, and ideally equipped for all tasks that arise in daily operation. It already has all the essential functions, such as coupling several basic modules, shifting the center of rotation, the option of axis separation, and much more.

It is also very important for the flexible usage that the **MEC** | Standard as well as the **MEC** | Plus are part of our platform construction kit. By using our system frames as well as the corresponding passive insertion carriages, you can reconfigure your driving surfaces lego-like in different dimensions again and again.

If you prefer a highly flexible, solid, easy-to-operate and cost-conscious variant and do not need any communication with external devices/sensors, this is the right choice for you.



### MEC|Plus Mecanum Scenery Wagon

MEC Plus Basic Module Master	
Dimension	1,0 x 1,0 x 0,2 m without covering plate
Total height with covering plate	0,224 m
Maximum payload	1,0 t
Drag load / Pushing load maximum	1,5 t
Dead weight	approx. 100 kg
Coupling capability (master-slave)	max. 8 units
Axis shifting	yes
Combination with Ventum-S system frames	yes
Combination with Ventum-S system insertion trolley passive	yes
CAN bus/PROFINET interface	yes / optional





### Where does it come from?

The **MEC**|Plus is based on the MEC|Standard. Motors, wheels, axles, gearbox, enclosure frame as well as the external dimensions and permissible loads are identical to those of the MEC|Standard.

Just like the **MEC**|Standard, the **MEC**|Plus is used in industry in a very similar configuration in tough 24/7 continuous operation.

### What is the difference to the MEC | Standard?

In contrast to the **MEC** | Standard, the **MEC** | Plus offers the possibility to communicate with its external world via an additional on-board computer and by means of the integrated CAN bus interface (expandable to PROFINET). It can receive and process signals via this interface, issue commands or be programmed via the interface (e.g. for autonomous driving). It can communicate with a wide variety of sensors and respond to the signals it receives. In contrast to the **MEC** | Standard, the basic settings are not made by means of a wired parameterization unit, but by means of a WLAN-capable computer, a tablet or a cell phone. This applies, for example, to shifting the center of rotation, changing the acceleration ramps or the necessary settings for an axis separation.

In contrast to the **MEC**|Standard, the possibilities for error detection/troubleshooting via a remote connection with one of our technicians are considerably extended.

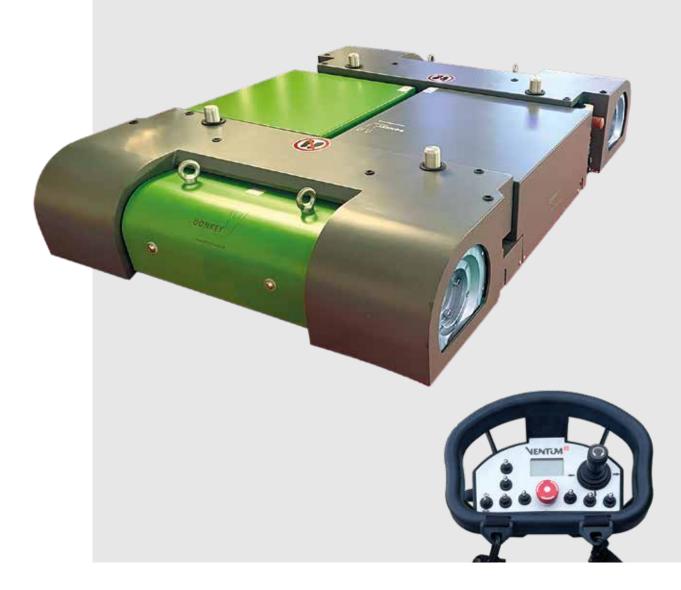
### For whom is the MEC | Plus the right product?

The **MEC**|Plus is the first choice for all those who, in addition to the extensive features already offered by the **MEC**|Standard, want to use the extended possibilities of the **MEC**|Plus. The CAN bus interface opens up completely new horizons and application variants.

Anyone who places particular value on future-proofing, maximum possibilities and flexibility has come to the right place.

### Since when has the MEC | Plus been used on stage?

The **MEC** | Plus was presented to the public for the first time in 2023 at Prolight + Sound in Frankfurt. Prior to that, two prototypes were successfully used for testing in 2022 at the Residenztheater in Munich, where they are still in use today.



### MEC|Large Mecanum Scenery Wagon

### MEC | Large Basic Module Master

Dimension	1,2 x 1,6 x 0,33 m
Maximum payload	2,7 t
Towing load / Pushing load maximum	9,0 t
Dead weight	approx. 550 kg
Coupling capability (master-slave)	max. 8 units
Axis shifting	no
Combination with Ventum-S system frames	no
Combination with Ventum-S system insertion trolley passive	no
CAN bus/PROFINET interface	yes / optional

Mounting surface load handling adapter

### Where does it come from?

Der **MEC** | Large The **MEC** | Large, like its smaller brothers, has also been developed for industrial applications and has been used successfully there for several years. It is always used in industry where the loads that arise can no longer be moved with the smaller Mecanum variants.

By making appropriate adjustments to the software, the **MEC**|Large has also become a product that is optimally suited for stage operation.

### For whom is the MEC | Large the right product?

The **MEC** | Large is always the right choice when the loads to be moved can no longer be handled effectively with the "little brothers" **MEC** | Standard and **MEC** | Plus.

It is suitable, for example, for really large stage sets or as a drive for rear or side stage wagons. There is the possibility of interlocking with the structure to be moved by means of extendable lifting pins. Thus, the **MEC**|Large can be used in several constructions in the same time.

The **MEC**|Large has the same interface as the **MEC**|Plus and also the possibility of coupling several **MEC** modules into one travel unit.

Do you regularly have to move large and heavy stage sets or are you looking for an unprecedented flexible drive for your rear or side stage wagon? Then the **MEC** | Large is your first choice.



## **MEC**|Large|*PROJECT*

Mecanum Scenery Wagon

<b>MEC</b>  Large  <i>PROJECT</i> Basic Module Master	
Dimension	project specific
Total height	0,33 m
Maximum payload	project specific
Towing load / Pushing load maximum	project specific
Coupling capability (master-slave)	project specific
Axis shifting	project specific
Combination with Ventum-S system frames	no
Combination with Ventum-S system insertion trolley passive	no
CAN bus/PROFINET interface	yes / optional

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### Where does it come from?

The MEC | Large | PROJECT was designed as a modular kit for industry. It can be used to implement special projects with, for example, more than 2 axles, more than 4 wheels, or with wheels at freely selectable positions.

In the theater world, the MEC | Large | PROJECT kit passed its first test at the Munich State Opera. There, the MEC | Large components were installed in a project-specific arrangement to move an impressive stage set easily and precisely.

### For whom is the MEC | Large | *PROJECT* the right product?

If you have a special project that simply does not allow the integration of a **MEC** | Large, but you need the power and driving precision of the **MEC** | Large, then you should take a closer look at the **MEC** | Large | *PROJECT* modular system.

### Are you unsure which MEC variant is right for you?

Call us or send us an e-mail. We will go through your requirements point by point with you and will be happy to support you in the decision-making process.

You can reach us at 0151/16551820 or at info@ventum-s.com.

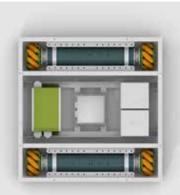
# This is how **MEC**|Standard and **MEC**|Plus work in the Ventum-S modular system

Both, the **MEC**|Standard and the **MEC**|Plus are part of our VENTUM-S modular system.

By incorporating our system frames with the associated passive turtle insertion carriages, you can create different driving platforms which can be adapted to your specific requirements.

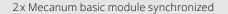
This means that platforms with dimensions of  $1 \times 1$  m consisting of a single MEC module can be created up to platform sizes of, for example,  $12 \times 18$  m with 8 MEC modules.

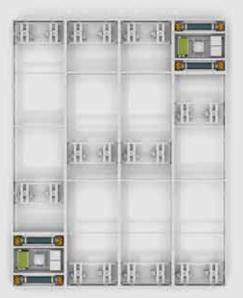
Since both, the **MEC** | Standard and the **MEC** | Plus allow you to offset the axes, you can also move and rotate constructions that are very long and narrow in a optimally way.



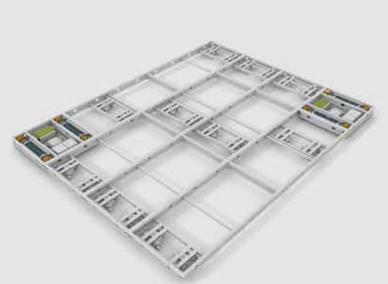
Mecanum basic module 1 x 1 m







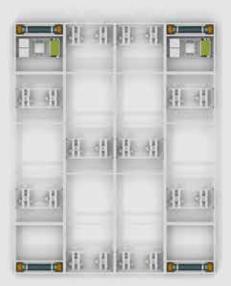
2x Mecanum basic module synchronized: 5 x 4 m



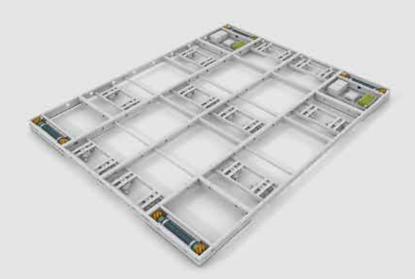




1x basic module with axle disengagement: 5 x 1 m



2x basic module with axle disengagement: 5 x 4 m





Papiermühlengasse 12 – 14 · 01159 Dresden Telefon: +49 351-49 40 359 · Fax: +49 351-49 01 993 info@ventum-s.com · www.ventum-s.com