

**Available for sale:**

**“State of the Art” brand new double side extended “Rack Ready” OB Trailer**  
**Ready for roll out**

Ready for technical implementation  
Prepared for up to 24 camera chains  
Space for up to 24 operational positions

Air condition system -Daikin - working for up to 50 degree Celsius outside temperature  
Upgraded programmable Logic control system for:  
Auto balanced function  
Monitoring for the Power System

All ladders and handrails are made part of the coach  
so that there is no space requirement for those on the tender vehicle

Setup duration from ROAD to PRODUCTION mode or  
vice versa is less than 10 minutes

Weight of the Rack Ready OB Trailer: 24 tons

Full technical implementation can be offered on request

The shown Monitors on the pictures are not included -on request



## **Technical Specifications of the OB Trailer:**

### **Short facts:**

Brand new double side extended OB Trailer prepared for up to 24 camera chains in  
The OB Trailer is prepared for up to 24 operational positions and three operational areas

### **Available in:**

The brand new double side extended OB Trailer is now available for roll out.

### **Technical implementation – ready to broadcast – on request:**

We can also offer the full technical implementation including technical planning, cabling, technical implementation, briefing of the crew, etc... – ready to broadcast – on request

### **Saddle:**

Low liner chassis with 5<sup>th</sup> wheel height of 850 mm and full flat top finish at 1060 mm

### **3 Axles:**

The trailer has 3 axles and the axle closest to the king pin has auto lift function to provide smaller turning radius when making turns.

### **Tyres:**

6x Michelin, model X2+ Energy 445/45R 19.5 M+S

### **Suspension and brake system:**

All suspension and brake system are Krone original systems with no modification. Even the original tail light is re-used on the coach. All systems are according to the European traffic rules

### **Weight of the Trailer:**

24 tons – the total weight of the trailer with all technical furniture and racks inside is 24 tons

### **Maximum loaded weight of the Trailer:**

36 tons for road permit

Estimated weight within setup with 24 x 4K/HD Cameras, 512x512 router, 120 input Video Mixer, Large audio console with 32 faders (Lawo 56, Studer Vista 5/6, Calrec Artemis), 3 EVS XT4 Servers all necessary glue, monitors, patch bays, cables, connectors and UPS is within 3 tons.

This expected system loaded weight should be around 27 – 28 Tons with a lot of spare to the maximum load limit.

### **Power System:**

The power system is built under European IEC power standards - IEC 60364-7-717 compliant power system.

### **Technical Data Coach building:**

The coach is a double expanding type with left side opening a 10 meter long section for 90 cm and right side opening 12 meter long section for 130 cm. The right side expansion has open air walking platforms on both ends with 6 meters in the middle belonging to the main production area.

**Working space – Audio Gallery – Video production gallery – Video control + glue equipment gallery up to 24 working positions:**

**Audio Gallery:**

Audio gallery: 2x working positions

**Video production gallery:**

Video Production gallery front row – including video production and director:

8x working positions

Slow motion 2<sup>nd</sup> row 4x working positions

Slowmotion 3<sup>rd</sup> row 4x working positions

**Videoproduction gallery in total 16 working positions:**

**Camera control & engineering area:**

Camera control & engineering area: 6x working positions

**Power system – according to the IEC - European Health and Safety power regulation rules:**

The main connector is 125 Ampere CEE – 3 phase

The vehicles estimated maximum power budget is around 40 kVA.

To provide additional tolerance everything is designed to accommodate 50 kVA total loads

There are 2x125A CEE Norm power input connectors in total to provide main & backup power to the OB Fully compliant with IEC 60364-7-717 safety regulation.

**Lighting system - controllable via App:**

The lighting system is based on 24 Volts DC operation throughout the vehicle. All lighting fixtures are selected as LED units working with 24 Volts. The main power control section of the lighting system provides power from the batteries when no external power.

When external power is connected it automatically cuts off the battery line and switches to AC/DC adaptors. 4 sets of Omron 24 Volt, 500 Watt AC/DC adaptors are utilized to provide 24 Volt power to the lighting system. All LED fixtures that are dedicated to operational areas are dimmer controlled.

All general purpose fixtures are on-off controlled. There are working lights inside cabinets, under tables and behind the racks to provide easy utilization when it is necessary to access these areas.

The OB Trailer has fully integrated ambient lighting to create desired color scheme. On top of that, the lighting system will be integrated with automation system thus each individual light will be able to be turned on and of both from switches on the walls as well as through the automation system. So if someone forgets to turn off some lights the engineer in charge can give all lights off command from his / her smart phone.

**Air Condition System – prepared for up to more than 50 degrees outside temperature:**

The AC system is from DAIKIN Multisplit Series and consists of 4 sets of AC system providing cooling and heating throughout the vehicle. There are 2 x 9 KW (30K BTU) units dedicated to air conditioning operational areas. Each of these two sets are connected to 2 x 5 KW Air Handling Units inside.

There are 2 x 5 KW (18K BTU) units dedicated to air conditioning the main equipment racks. Each of these units are connected to single 5 KW Air Handling Units inside. The AHUs do suction from the top of the racks and provide cold air through flex shafts from the bottom of the racks. There is also a drainage system to drain the condensed water that will accumulate in the AHU when they are in cooling mode.

The operational areas air dispersion is through the grill system on the ceiling. The dispersion system is designed to provide no noise relaxed air flow that will gently flow down. The AC works until an outside temperature of more than 50 degrees celsius.

#### Hydraulic system:

All vehicle stabilization and expansion actions are done through a hydraulic system. The hydraulic system consists of three main components; the core consisting of oil tank, valves and pump, the pistons and the control system.

The hydraulics system is designed to work in three modes, automated, manual with power and manual with no power.

The automated mode can be used either by the touch screen at the TP or through the cables hand control. In the event of automation system failure then the pump can be turned on manually from this cabinet and all pistons can be controlled by the levers on the combo valves. In the event of battery and power failure then the hand pump can be used in combination with the combo valves to prepare the vehicle for production or for road mode.

The stabilizing jacks are each 10 ton capable providing 40 tons of uplift capability. So even when fully equipped and with full operational staff there is no risk of jacks losing height. All pistons have maintenance flaps that allows easy access to all for any maintenance and repair activities.

#### Upgraded Programmable Control & Monitoring Logic system for:

Auto balanced function when parking the vehicle

Monitoring for the Power System

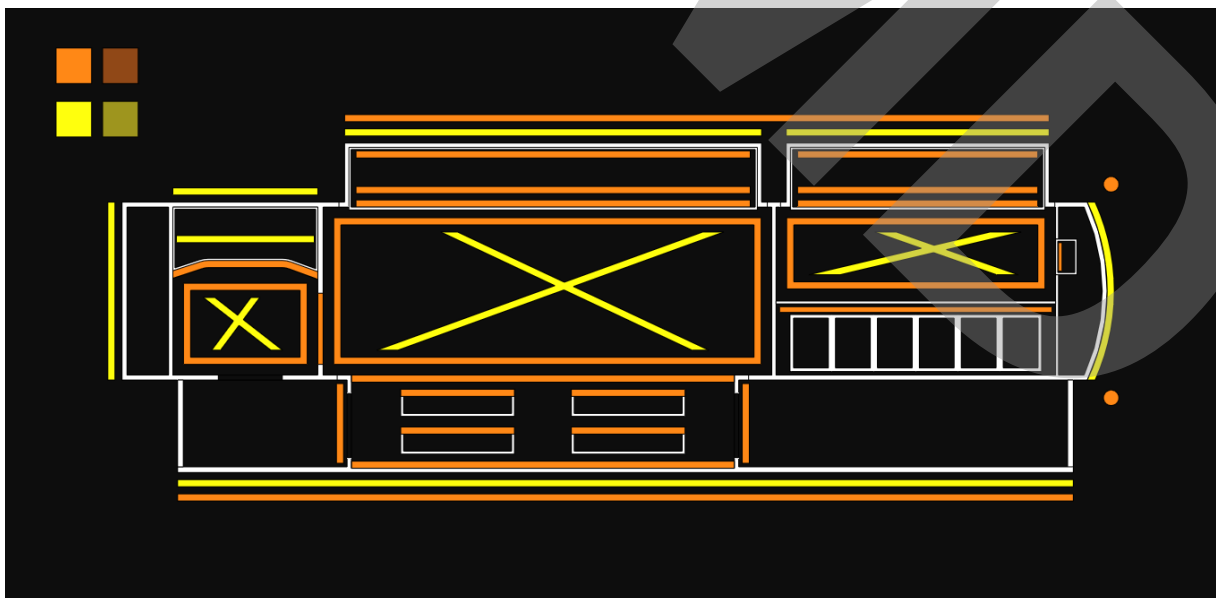
Closing/Opening of the extension fully automatic

Monitoring of the power system

Light control external and internal

Accesspoint inside the vehicle to use the system for authorized

A PLC control and monitoring system has been implemented in the vehicle. This system integrates into hydraulic system, lighting system and power analyzers. Through these integrations we provide automated functions such as auto balance, auto expand and auto close for the hydraulics, individual light fixture on / off and global off functions for the lighting, voltage and current level control and temperature control with set alarms for the power systems.



Lighting layout on the PLC Touch Screen

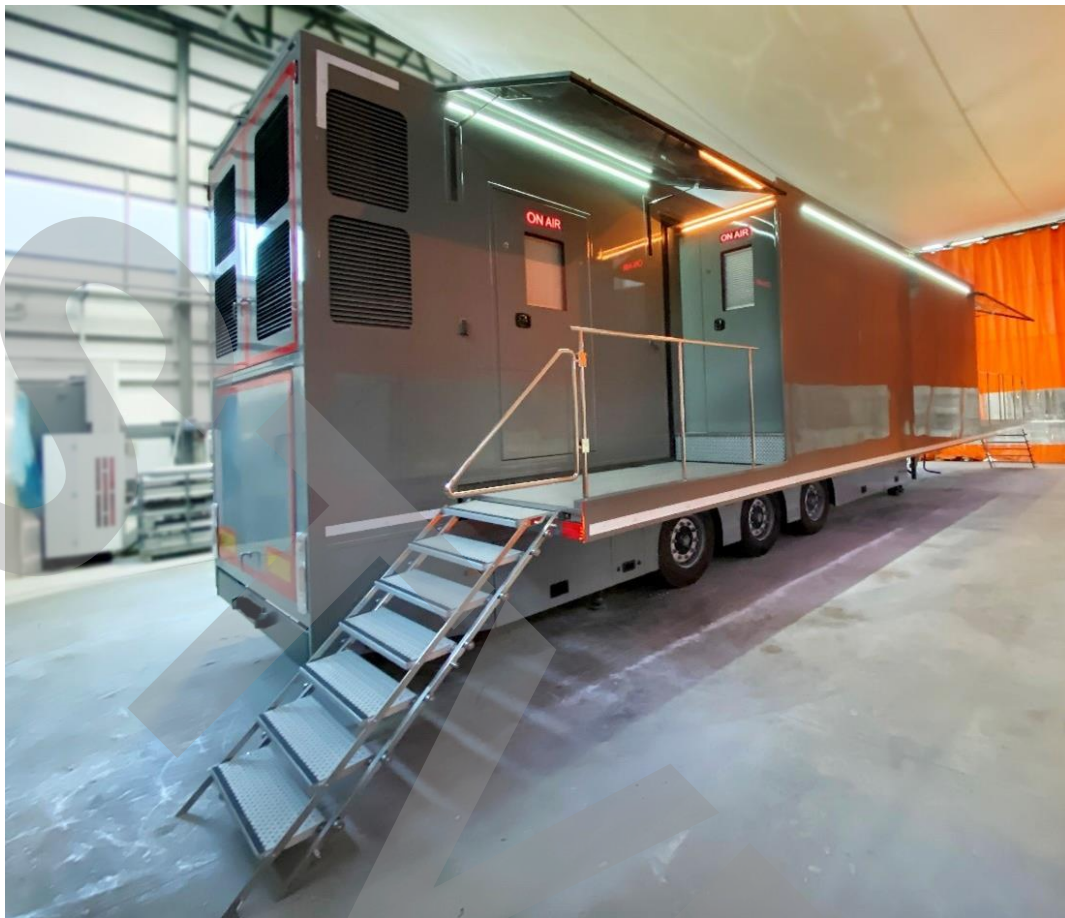


**Pictures of the “State of the Art” brand new double side extended rack ready OB Trailer:**





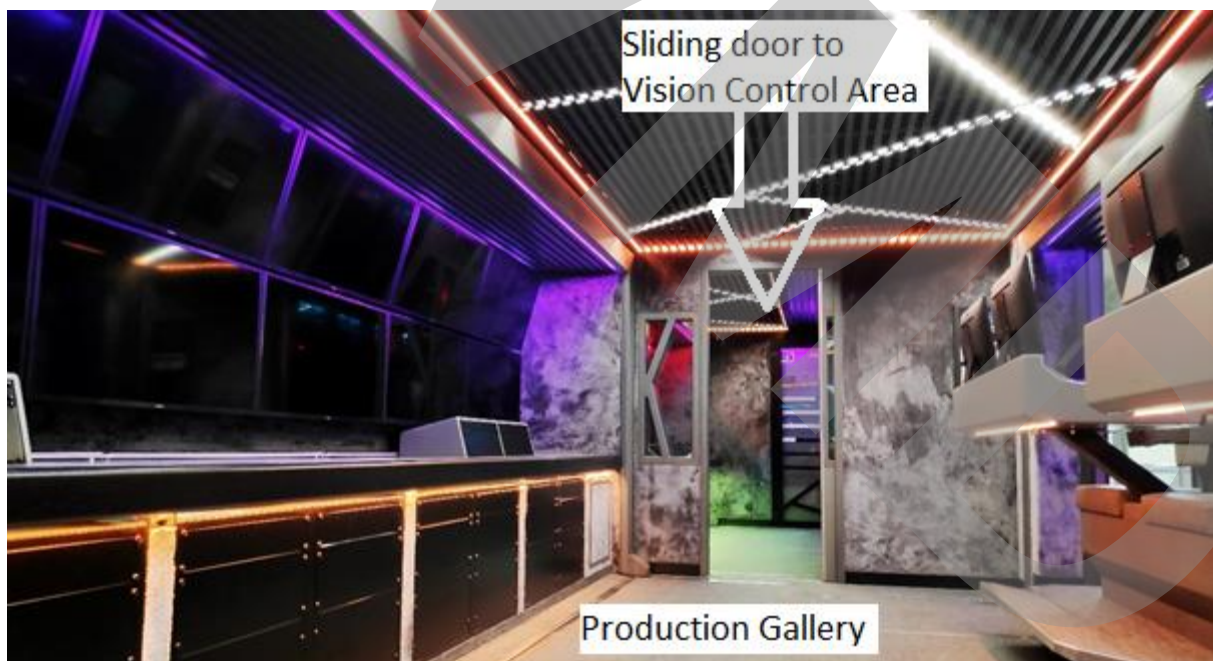
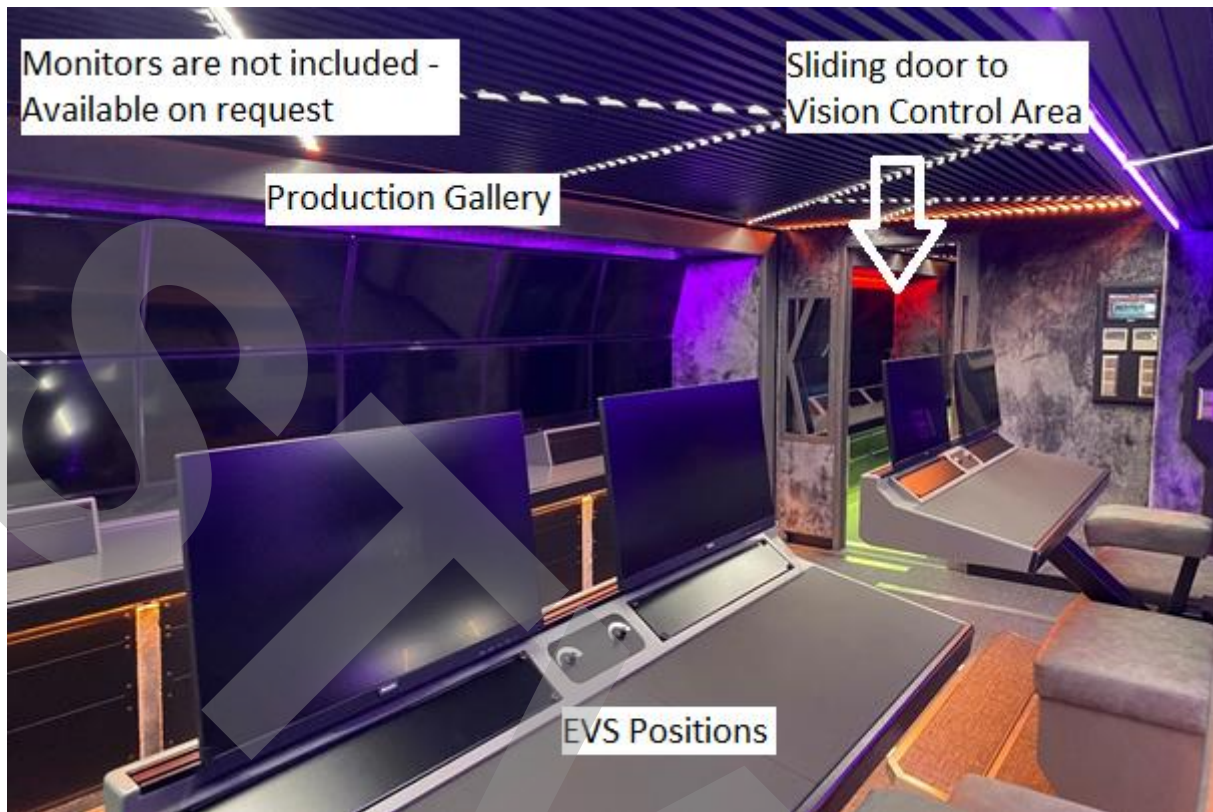


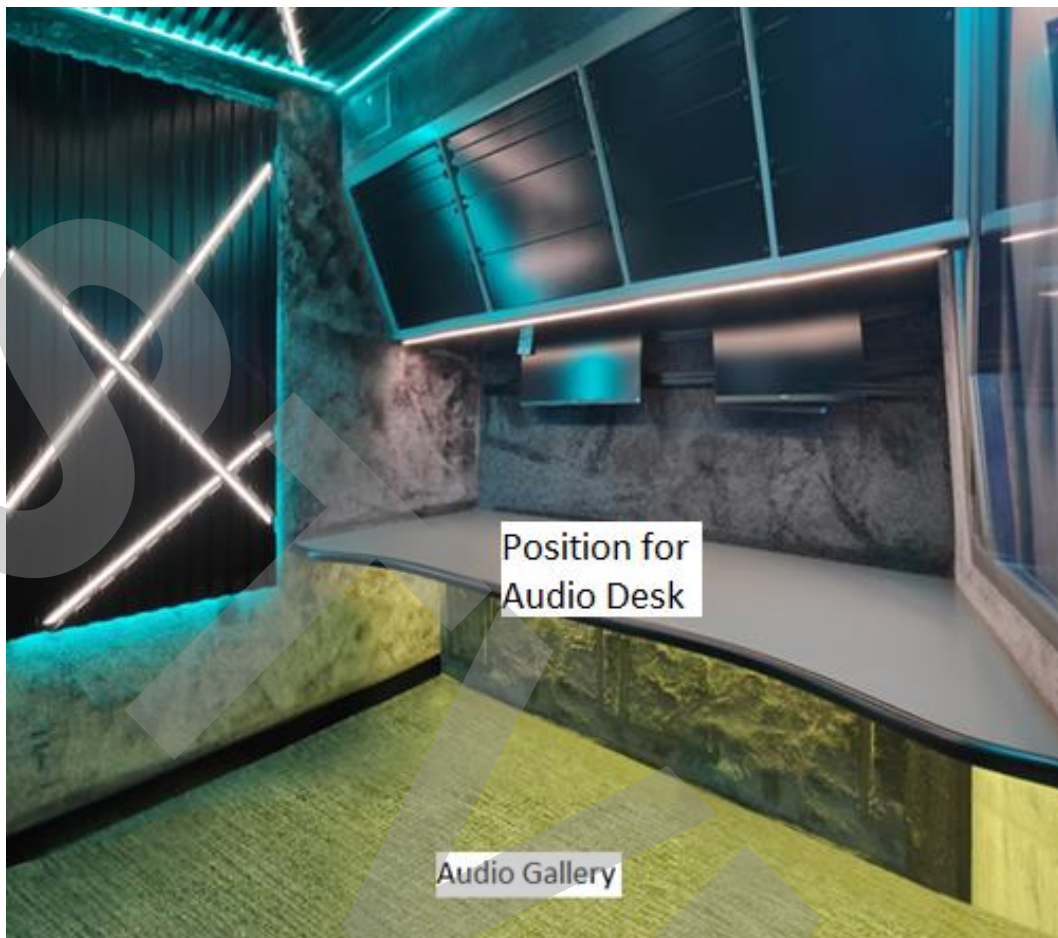


## Pictures of the OB Trailer inside:

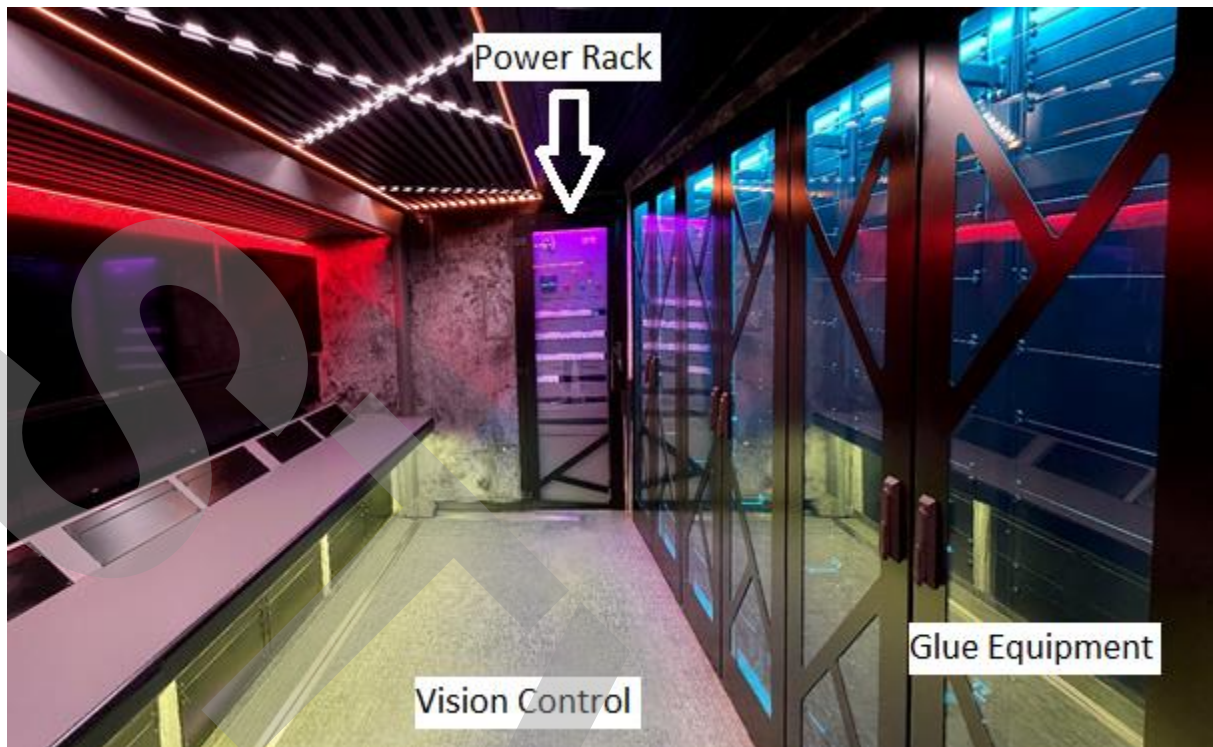














## **OB Trailer manufacturing process:**

### **Main coach parts:**

All coach parts up to semi-trailer chassis top level are from steel with anti corrosion treatment.

All hinges are full length stainless steel hinges. All doors and cabinet doors are Aluminium with Aluminium honeycomb panel inside for added rigidity and durability.

All coach parts above chassis top level are a composite structure with Aluminium square tubes for the frame, 5000 series 2 mm thick Aluminium sheet metal for outside, non flammable XPS hard foam for filling, and 9 mm birch plywood for inside.

The Aluminium sheet metal is bended at the edges to provide better joint with the next plate. All joints are sealed with flexible silicone based gasket.

The roof composite has single piece fiberglass instead of the Aluminium as used in the side walls. This is to improve waterproofing and to ensure longevity of the roof. There are only two access hatches on the roof and these are for the two AC units cooling the racks. All other AC units are accessible from the inside of the OB Trailer.

The furniture inside is from lightweight boat/yacht grade plywood with wood layering. The colour scheme is dependent on the end user.

The paint process includes base primer specific for Aluminium and two component acrylic automotive grade flexible paint for the finish. The colour scheme is dependent on the end user.

All racks (system room, audio room and under table areas) have direct access doors on the coach body. The TP area has one set of 24 U 60 cm deep rack with enough space next to it for dual row motorized cable drums or for other purposes as the end user might require.

### **Operational Focus:**

This OB Trailer has been designed and built for heavy sports production that will require a large number of cameras and a lot of slow motion playback during the production.

As such production will require both huge numbers of operational positions as well as huge space for equipment; special care has been given during the design stage to maximize both.

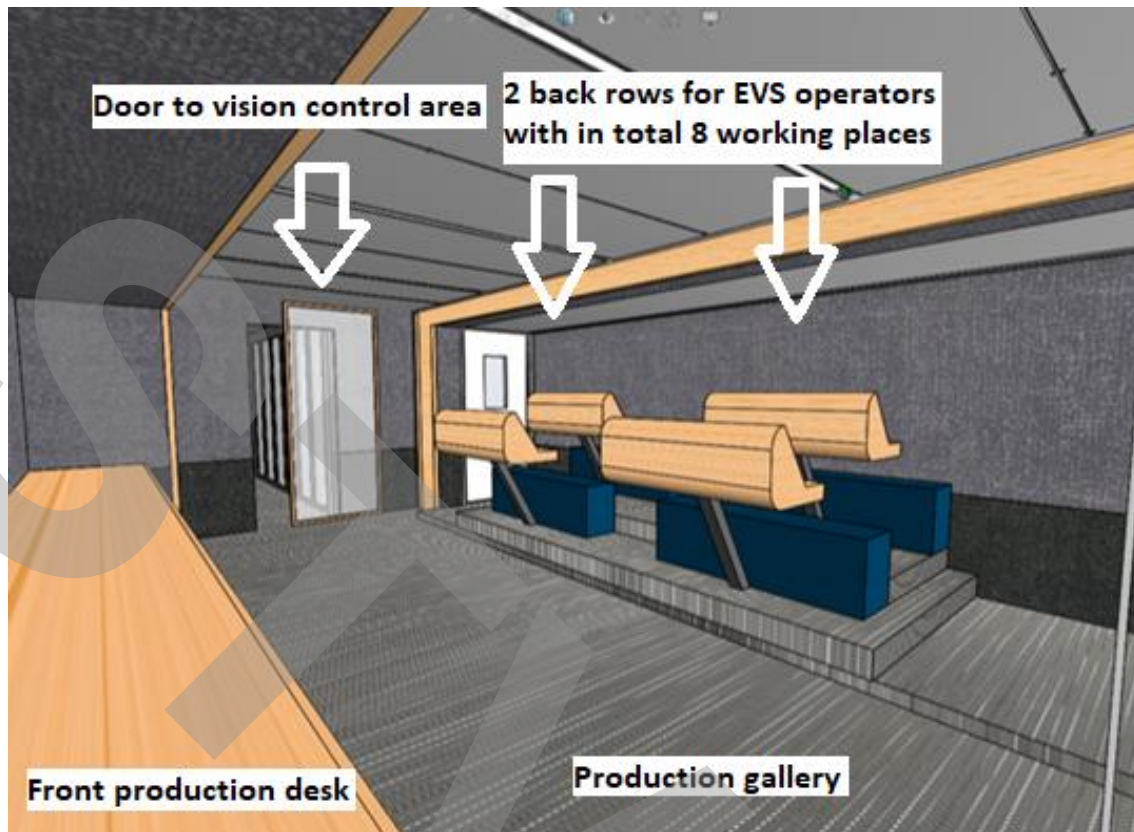
The OB Trailer expands on both sides and provides three operational areas. From left to right these are; Audio Production Room, Video Production Room and Camera Control & Engineering Room. In maximum occupancy a total of 24 operational positions are available, 2 in Audio Production Room, 16 in Video Production Room and 6 in Camera Control & Engineering Room.

The coach design also focuses on a short preparation time for the OB Trailer to switch between road and production modes. All ladders and handrails are made part of the coach so that there is no space requirement for those on the tender vehicle. Everything folds and stays in place, not requiring operational teams to move heavy items.

Typical duration from ROAD to PRODUCTION mode or vice versa is less than 10 minutes.

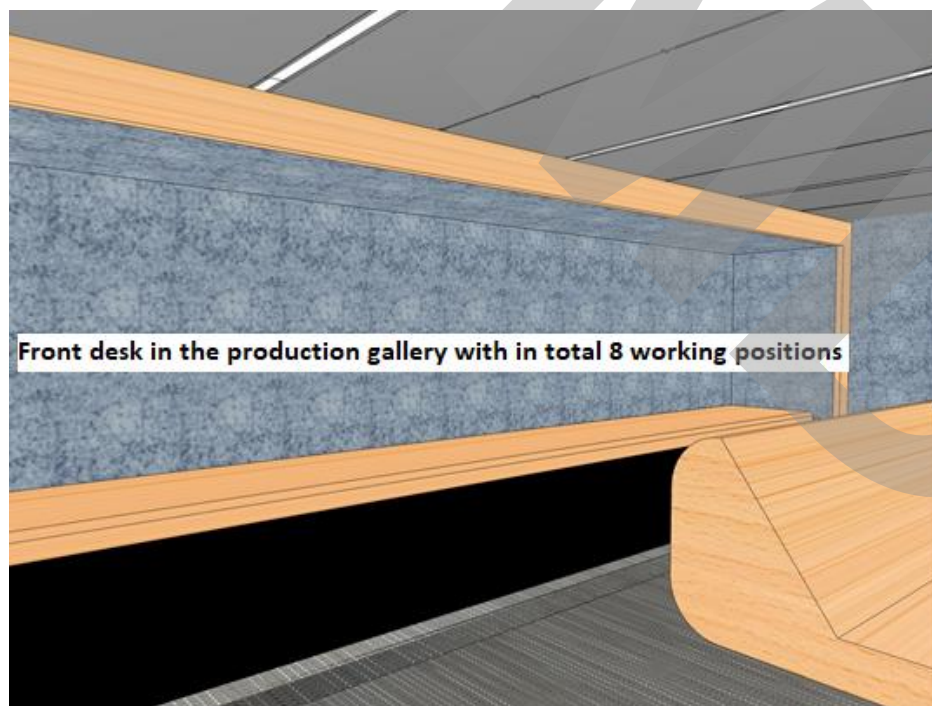
### **Production gallery:**

The production room has two sections, front production desk and 2 back rows for slow motion operators. Each back row has two independent desks with a 80cm gap in between. This allows all operators to easily get in and out of their seats.



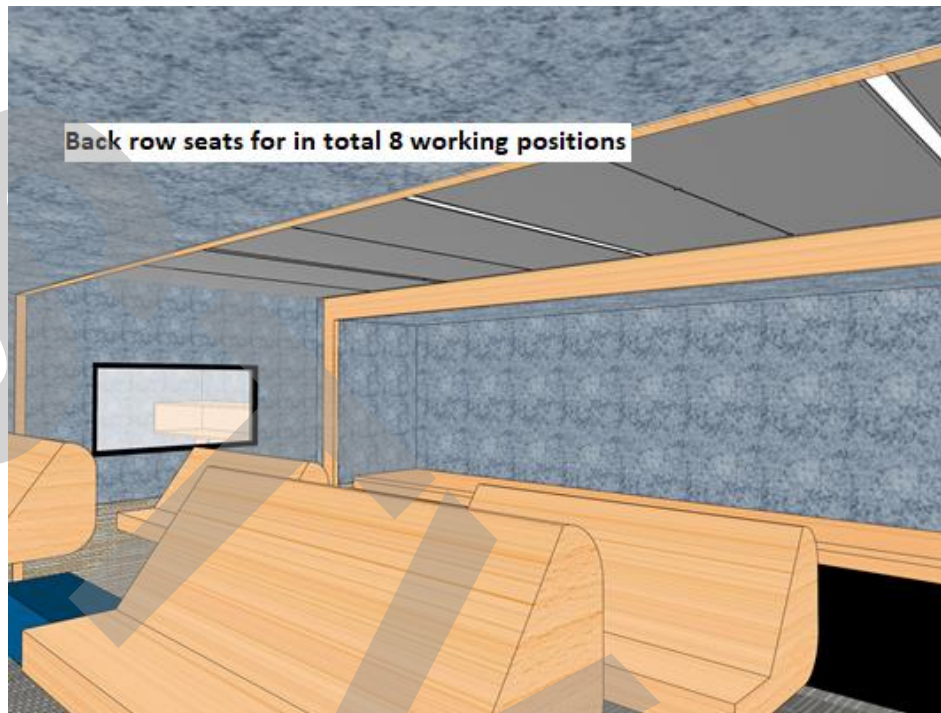
**Front Desk – Video production area:**

The front desk provides operational position for 8 people. It also has 8x 4RU angled rack shelves on the desk as well as 8x 12 RU 60 cm deep racks under the table. The table itself slides out 60 cm's to provide more distance to the monitor wall.



Back Row, the seats on this area have storage space. The seat cushions are hinged and supported by gas springs to keep them open when storage space needs to be accessed.

There is operational space for 4 people in the front row and for 4 people in the back row.  
These seats have raised platforms to provide over the heads view of the main monitoring wall.



#### Camera Control and Engineering area:

This room hosts the main desk for Camera Control and Engineering, Equipment racks and Main Power Distribution Panel.

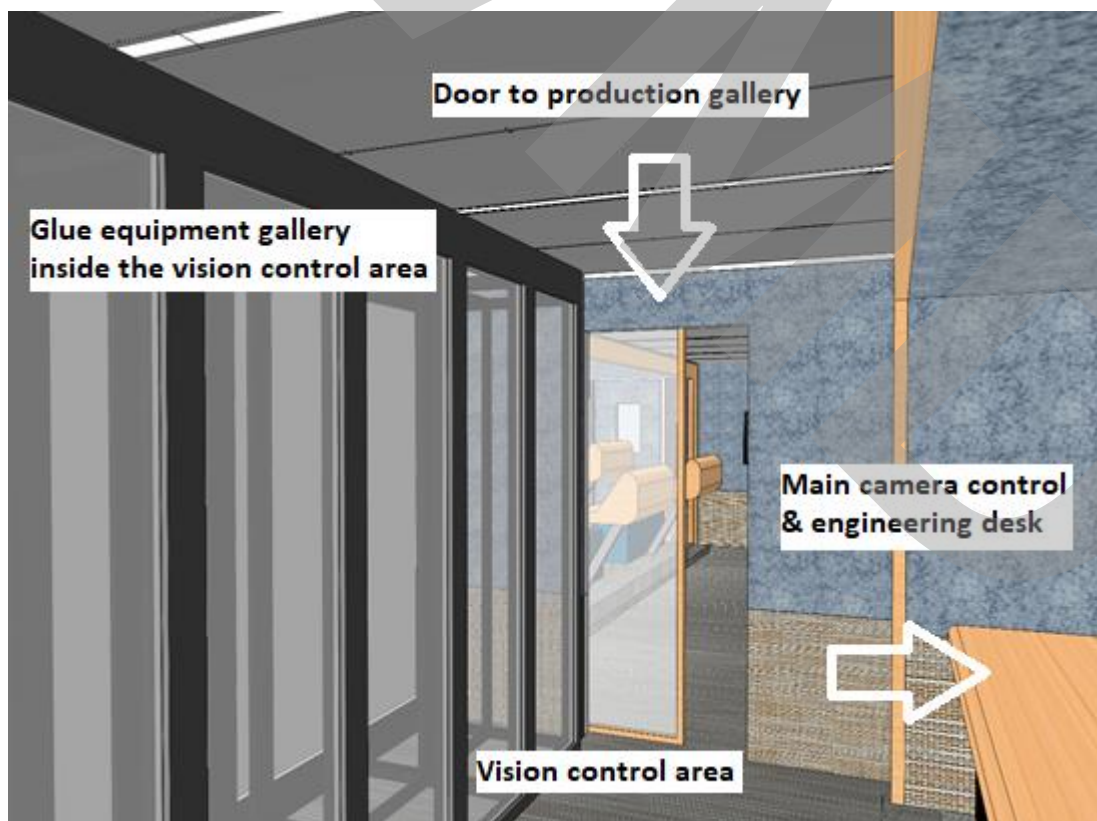
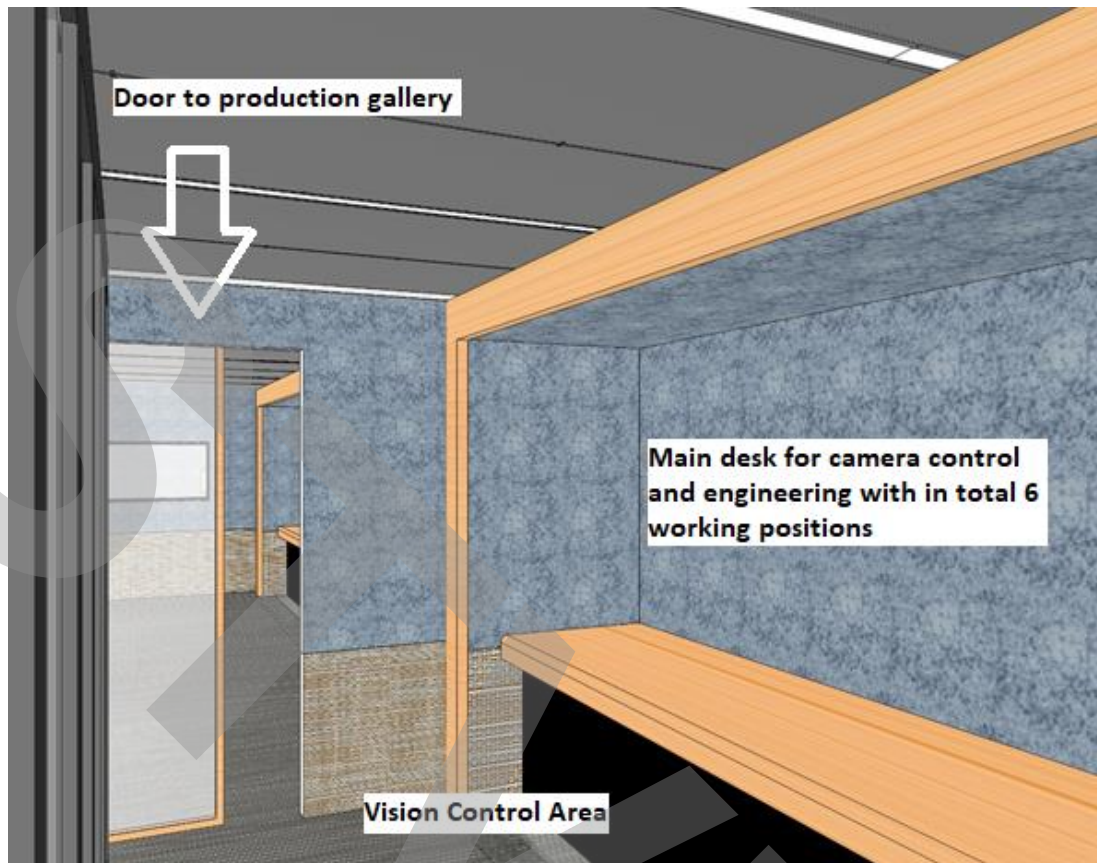
The main desk provides operational position for 6 people. There are 6x 4RU angled mini rack on top of the desk corresponding the each 6 operational seats. Also there are 6x 12RU racks with each 60 cm depth to provide additional equipment space under this table.

Under table racks, dimmer control for operational lights and Temperature Measurement and Alarm System for Isolation Transformer.

There are 6 Main Equipment Racks at the right flank of the same rooms. These are 80 cm deep and 45 RU high. Effective usable space after the AC tunnel at the bottom is 42RU per rack. Racks have each dedicated dual power lines coming from the Main Power Distribution panel.

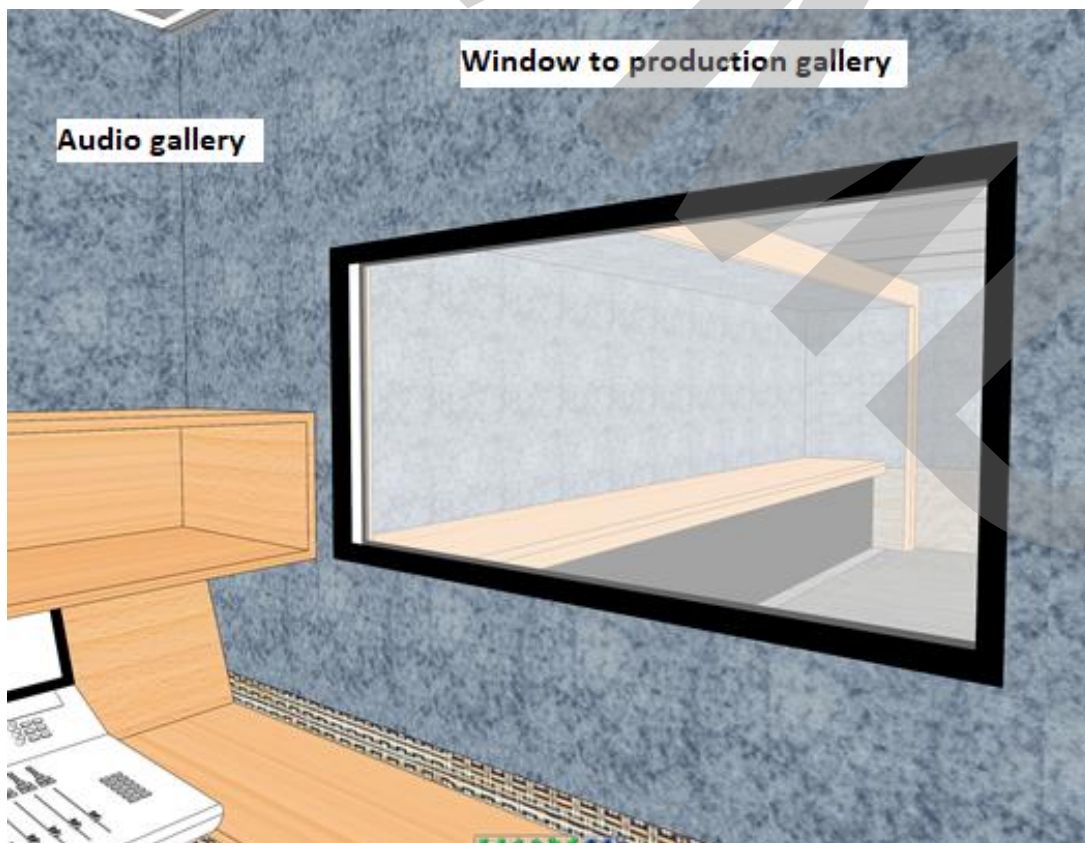
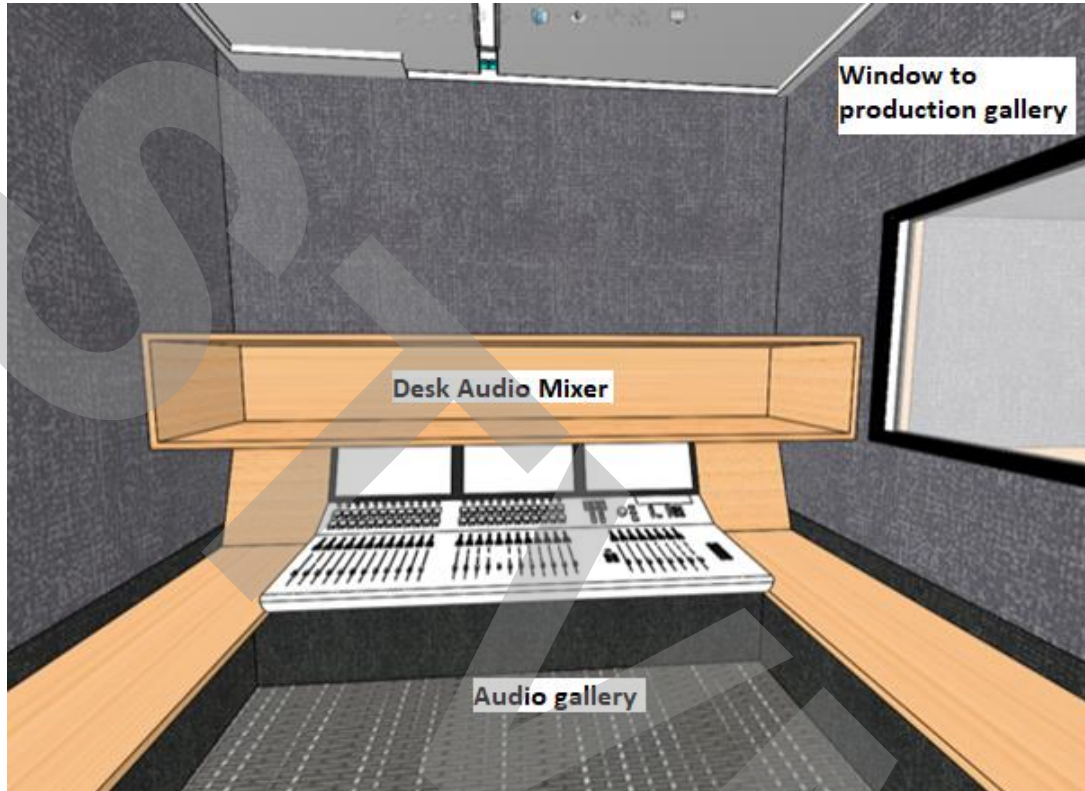
The Main Power Distribution panel is located at the very front of the room between the Equipment racks and the main operational desk.





### Audio gallery

The audio gallery is designed to host two operators sitting in facing position to the left wall where there is a side window between audio gallery and main production gallery.



It has a suspended rack with 4x 12RU sections for various items such as patch panels, audio player and recorders, telephone hybrids and others.

There are 2x 12RU 60 cm deep racks under the desk. There is a cable shaft from right side of the desk going up to the suspended rack to provide connectivity between the two.

There is back access to the suspended rack of the Audio gallery from the Main Production gallery.

#### **Furniture and internal decoration:**

All technical furniture is made from beech plywood covered with high pressure laminate. Also all cosmetic wood trims are made from beech plywood covered with natural teak laminate.

The floor PVC is high grade woven type PVC with 60 cm x 60 cm tiles, which makes repairs very easy.

#### **Detailed description of the front platform:**

The ladder folds and slides into the platform. The hand rails are lifted up and lay flat on the platform for stowage. The tent has 4x gas pistons holding it up. When the tent is closed it is hold in place by 4x rubber fasteners. For heavy snow areas it is possible to change the piston strength and increase it.

There are three cabinets on right side:

1. Power input cabinet.  
This cabinet is where power input panel is. Its door/lid is designed to be kept in three positions; fully open, semi open and closed. In semi open and closed positions it can be locked preventing access to unauthorized people.
2. Hydraulics system cabinet.  
This cabinet holds the main components of the hydraulics system such as oil tank, valve and gauges and oil pump.
3. Battery and power output cabinet.  
This cabinet holds two 230 WH/ 12 Volt batteries, their charger as well as the circuit breakers for AC System and power outlets. Its door/lid is designed to be kept in three positions; fully open, semi open and closed. In semi open and closed positions it can be locked preventing access to unauthorized people.

#### **Detailed description of the back platform:**

The ladder folds and slides into the platform. The hand rails are lifted up and lay flat on the platform for stowage. The tent has 2x gas pistons holding it up. When the tent is closed it is hold in place by 2x rubber fasteners. For heavy snow areas it is possible to change the piston strength and increase it.

The back of the trailer holds TP cabinet and the AC Main System cabinet.

The TP cabinet has 60 cm depth, making it suitable to place motorized cable drums and other items according to the end users requirements. Its door/lid is designed to be kept in three positions; fully open, semi open and closed. In semi open and closed positions it can be locked preventing access to unauthorized people.



**Base frame / Chassis:**

The semi-trailer is used as base chassis with minimal modification to the original frame. This is a low-liner chassis with 5<sup>th</sup> wheel height of 850 mm and full flat top finish at 1060 mm. The trailer has 3 axles and the axle closest to the king pin has auto lift function to provide smaller turning radius when making turns.



Image front left



Image from left back side



Image from the back side

State of the Art brand new double side extended rack ready OB Trailer available for sale

**Pictures of the OB Trailer while it was under construction:**

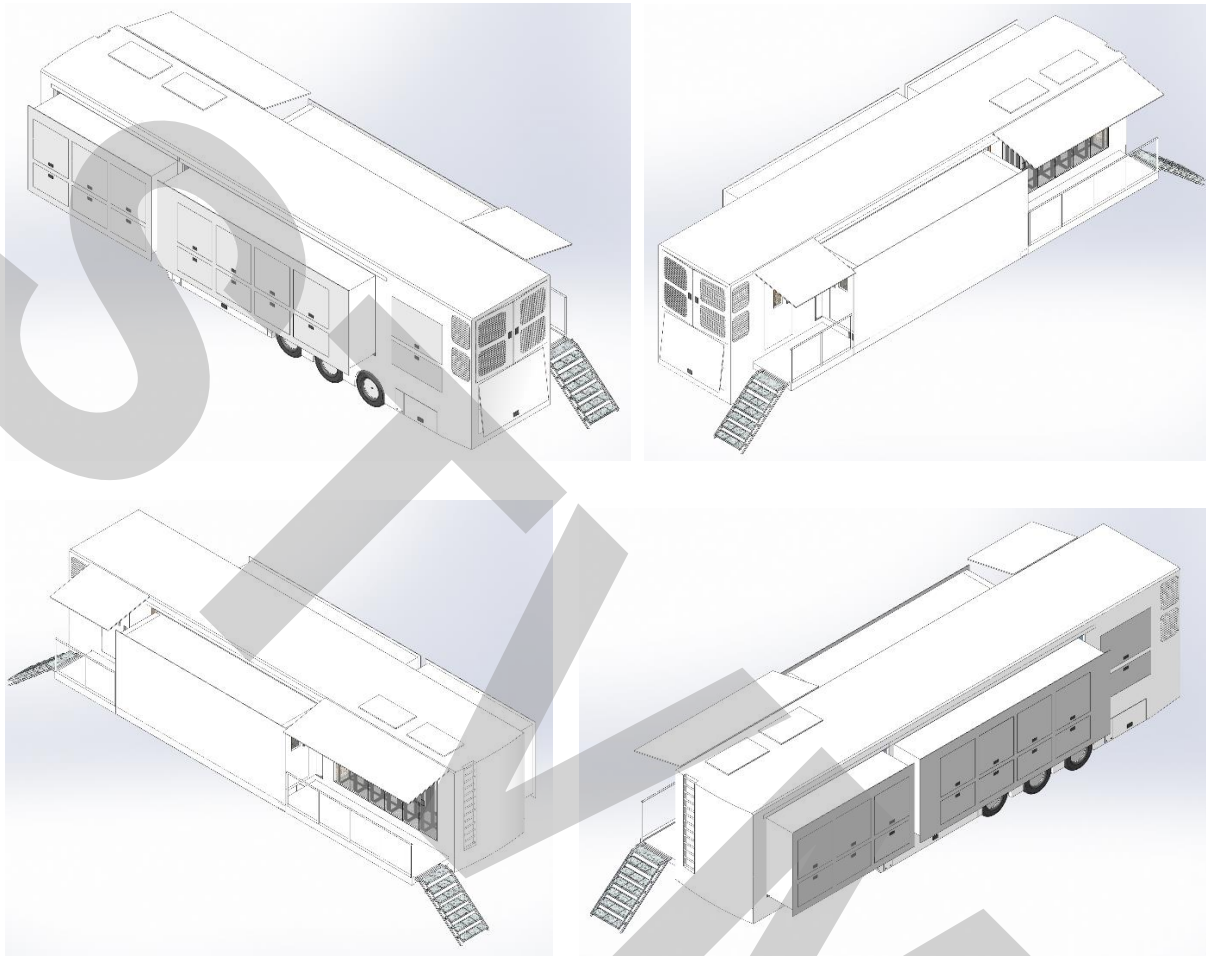




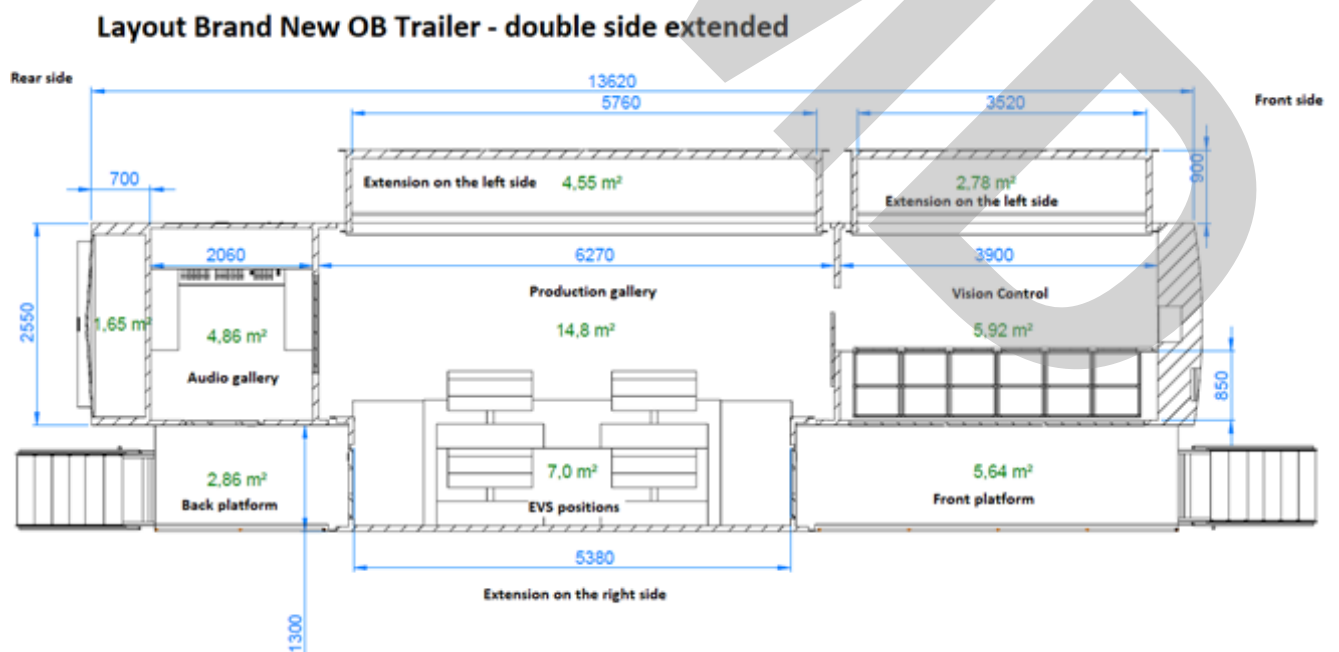




### 3D planning layout of the Trailer:



### Layout of the Trailer:



# sports tv media distribution

Paradeisergasse 9 • 9020 Klagenfurt, Austria  
Tel.: +43 463-90 8000 • Fax: +43 463-90 8000-99  
e-mail: stvmd@stvmd.com • <http://www.stvmd.com>

## Price on request:

Excl. VAT

Excl. transportation and insurance costs

Excl. custom fees

## **For more information please contact:**

sports tv media  
distribution

Otmar Valzachi  
sports tv media distribution GmbH

Paradeisergasse 9  
9020 Klagenfurt

Austria

Tel: +43 463 908000  
Fax: +43 463 908000 99  
Mobile: +43 676 848606211  
email: [ov@stvmd.com](mailto:ov@stvmd.com)  
<http://www.stvmd.com>