

Annex C

MR 480 - MRI GE Voyager 1.5T Specification MRI TRAILER

Trailer manufacture:
Lamboo Mobile Medical

Production year
2017





Control room

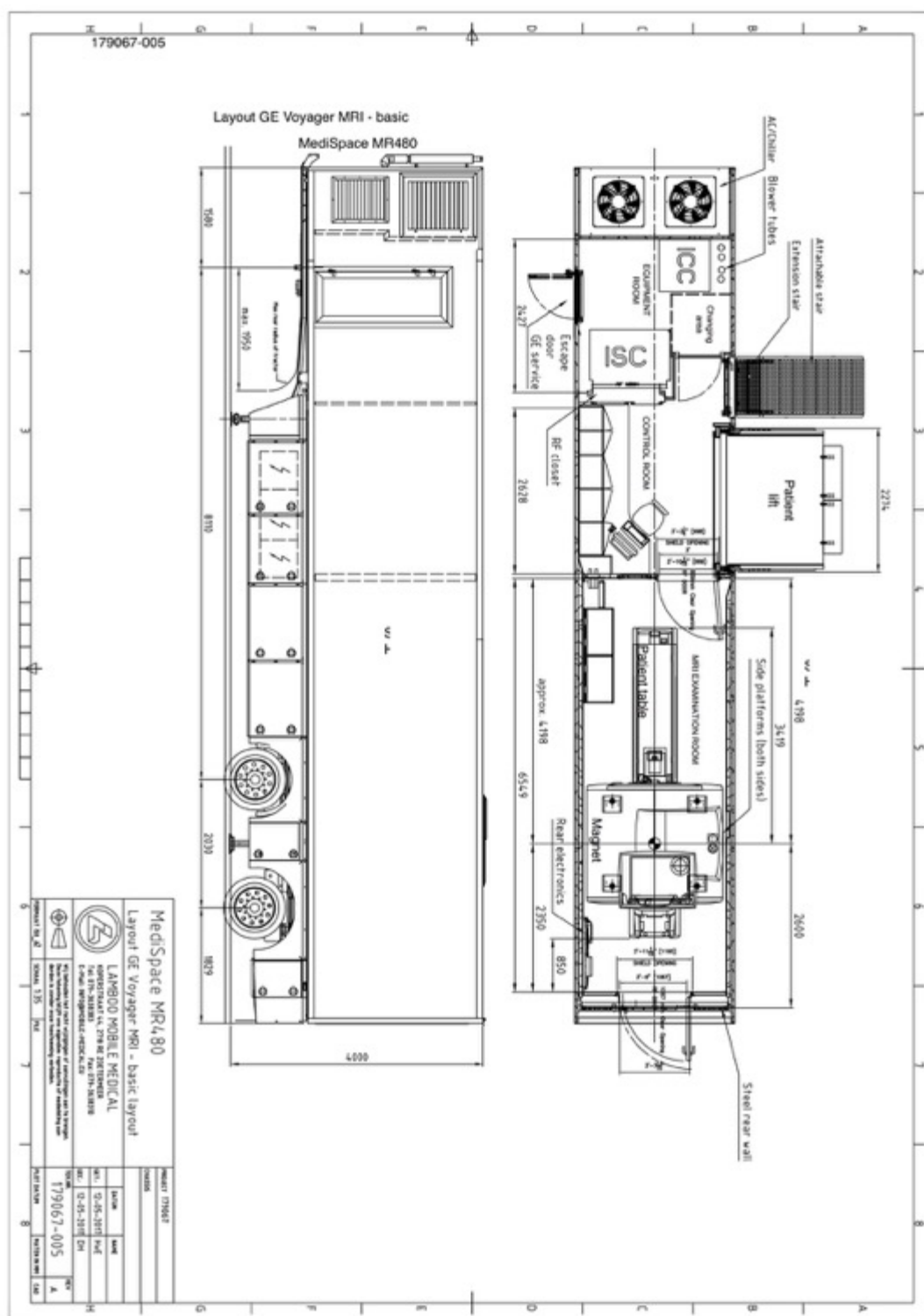


Changing room



MRI Room

Lay Out



General

This medical trailer requires specific site preparations by the operator at each desired location. This guide contains information about the necessary preparations of the site, before placement and connections of the medical trailer.

The site must meet these requirements before the mobile unit can function properly.

Semi-trailer chassis

Measurement

Length:	13,600 mm
Width:	2,550 mm
Neck beam height:	160 mm
Coupling height:	1,200 mm
Chassis height:	1,360 mm

The access way must have a minimum width of 7,200 mm. The radius of the turning circle should have an outer radius of 12,500 mm and an inner radius of 5,3 m of the turning circles.

Ground Requirements

The minimum area required for parking the trailer (without the tractor) is

Length= 16,500 mm

Width= 7,200 mm

The ground and the access way must be clearly paved.

In order to ensure proper operation of the stabilizing system the ground must be level and the deviation must not exceed 1% (which is 0,6 degree!).

Make sure that the patient lift, stairs and belly compartments are easily accessible for patient entry and services.

From side walls and back wall is a minimum clearance of 2,5 m required!

Otherwise the imaging can be affected by metal objects.

Weights

Coupling pressure:	12,000 kg
Total axle pressure:	20,000 kg
Total admissible:	32,000 kg

The ground and access way must be able to carry the weight of the trailer and tractor. The weight of the trailer is appr. 31 000 kg.

Under the support legs must be placed a nylon support block of 0,4 x 0,4 m (delivered with the trailer).

Magnetic Shielding

The MRI unit is equipped with magnetic shielding. The shielding will keep the magnetic field outside the trailer walls below 0,5 mT. Only on the roof the field can be stronger. Inside the trailer, close to the magnet, the magnetic field is higher than 0,5 mT. These areas are restricted for people with pacemakers and magnetic items. These areas are marked with safety signs, provided by the MR manufacturer.

Electrical Requirements

The trailer is equipped with a 400 volt 3 phases 50 Hz electric system according to the TN-S system. The site shall provide a 400 V, 50 Hz, service fused at a minimum of 125 A.

The electrical phase rotation of the supply should be L1 L2 L3.

A 15 meter shoreline cable, wired directly to the trailer, is provided for connecting the mobile unit to local power.

The mains lead is not intended to withstand the wear and tear of traffic passing over it. The site shall provide necessary protective ramps, catenary systems or other means to protect the cable where it traverses roads or pathways.

The shoreline cable is provided with a 400 V -250 A Marechal DS2 male connector with 2 parts:

- 1) Marechal part # 39 28 017: Inlet (male)
- 2) Marechal part # 392A 013: Handle

The customer facility must have the female connector to match this connector.

The electric installation must provide a dedicated medical earth terminal for connecting of the earth connection of the trailer.

This earth cable shall be connected to the trailer and the main supply outlet before the mains cable is plugged in!

WARNING:

It's the user's responsibility to verify that the shore power is electrically compatible with the connector of the mobile trailer. Connecting the power to the wrong type of receptacle could cause serious injury or damage of the medical system.

Power generating set

60 KVA soundproofed, installed in the bottom of the technical area.

The complete power generating set is mounted in an acoustic cabinet to reduce the noise level to a minimum. The diesel tank is mounted under the generator and has a capacity of 250 litres. An indicator lamp which tells whether the power-generating unit is in operation is mounted on the outside of the body on the left-hand side.

The generator is not capable for full MRI scanning but will only be used during transport.

Control room

Entrance 1

By means of an aluminium platform with hook-on steps with stainless steel handrail. This entrance is located on the right-hand side of the body. The door of this entrance can be locked at 90 degrees and 180 degrees. There is an outside light over the entrance. The platform is foldable constructed in a recess porch in combination with a canopy to protect the patients from the weather conditions.

Entrance 2

Entrance door by means of a canopy with gas-loaded springs. Behind this canopy is mounted an electrically operated roller shutter. A hydraulic lift provides access to the floor level of the body. The hydraulic lift is suitable for stretchers and wheel chairs and is located on the right side of the body. For safety considerations the lift is equipped with a railing.

Specification lift and roller shutter

Patient lift

Located directly at the right side of the body
Platform made of aluminium, handrail around platform
Length 2,000 mm
Width 1,320 mm

Technical data:

24Volt Power supply. Lift can be operated with remote control. In case the remote brakes down there is a fixed emergency operating button. Maximum load 1000 kg.

Safety

Roller shutter operation

The aluminium roller shutter opens when the lift reaches the top position. For safety reasons it will not be possible to open the roller shutter if the lift is not in this extreme position. The roller shutter can be opened and closed from the inside when the lift is in the top position. The roller shutter can also be operated from the lift. This is possible only if the lift is in the top position. The lift cannot be moved from the top position to the bottom position when the roller shutter is open. The measures of the roller shutter are 1,600 x 2,150 mm.

Furniture

The left-hand part will be realised as a complete cabinet wall. The cabinets will cover the entire internal height. In this channel will also be mounted the cable duct for the MRI cabling. In the right-hand cabinet a filter will be mounted per specification of the medical supplier.

Steering System

Mechanical steered rear axle at the rear of the MRI trailer.

Telephone & Computer connection

3 telephone sockets and 2 computer sockets (RJ-45) are provided as standard on the trailer. If necessary the trailer can be connected to the hospital IT network. However, the site must supply cables for connecting to the IT network.

Water connection

The trailer is equipped with a water tank for supply of the air humidifier. The water tank can be filled by the filler cap or connected to the shore with a hose.

Specification GE SIGNA Voyager 1.5T

1	310123-001-EU	SIGNA Voyager 1.5T Classic wide-bore. 36mT/m – 150 T/m/s – 33 channel Image 256x256 Full FOV
1	M70012TR	1.5T Scan Room Collector Short
1	M70012LW	Pioneer Equipment Room Collector Short-TJ
1		TDI Post Array coil 32 channel imbedded
1		TDI head Neck Coil – 21 Channel
1	M7000SB	16-Channel Flex Suite Premium: Small, Medium Large for all MSK work
1	M7005BE	GEM FLEX POSITIONER for Flex suite Premium
1	S7525HT	Silent 1.5T
1	M7001SL	3D PROMO
1	M7000PF	MAVRIC SL
1	M7001SE	FOCUS
1	S7525FW	VascularWorks XT
1	M70012RJ	Sand Bag set
1	R33012AC	Standard SCE pack W
1	E88241A	OXYGEN MONITOR

Additional:

- MRI Gurney
- MRI Injector (on request for long term rentals)