BS Standart No. EN 1789:2020



Type : EMS-SPR4 Manufacturer : EMS MOBIL SISTEMLER A.Ş.

Test Report

According to BS EN 1789:2020

Test Report: Medical Vehicles and their Equipment – Road Ambulances

BS EN 1789:2020

as last amended by BS EN 1789:2020

	Application Status
	Test report only
	Extension to type approval no. / test report only ⁽¹⁾
	Correction to type approval no. / test report only ⁽¹⁾
(1) Dele	te where not applicable



Type: EMS-SPR4Manufacturer: EMS MOBIL SISTEMLER A.Ş.

0.	General	
0.1.	Make (trade name of manufacturer)	: EMS
0.2.	Туре	: EMS-SPR4
0.2.1.	Commercial description	: Sprinter
0.4.	Category of vehicle	: M1, M1G
0.5.	Manufacturer's name and address	: EMS MOBİL SİSTEMLER A.Ş. 1. Organize Sanayi Bölgesi Kırımhanlığı Cad. No:9 Sincan-Ankara / TURKEY
0.6.	Manufacturer's information document	
	No. Date of issue Date of last change	: Not applicable : Not applicable : Not applicable
0.8.	Name and address of assembly plant	: EMS MOBİL SİSTEMLER A.Ş. 1. Organize Sanayi Bölgesi Kırımhanlığı Cad. No:9 Sincan-Ankara / TURKEY
0.9.	Name and address of manufacturer's representative	: EMS Mobile Systems GmbH Kalkumer Str. 125 40468 Düsseldorf Germany
0.10.	Location of approval mark (where applicable)	: Not applicable



Type: EMS-SPR4Manufacturer: EMS MOBIL SISTEMLER A.Ş.

1. <u>Test Object</u>

1.1. Worst Case Selection

The representative vehicle was tested according to BS 1789:2020. All achieved test results are given below.

2

:

1.2. Test Required

General Requirements	: Yes
Performance	: Yes
Electrical Requirements	: Yes
Vehicle Body	: Yes
Patient's Compartment	: Yes
Testing	: Yes
Medical Devices	: N/A

1.3. Remarks

: None



Type: EMS-SPR4Manufacturer: EMS MOBIL SISTEMLER A.Ş.

2. <u>Test Record</u>

2.1. Test Conditions

2.1.1. Parameter of the test area : Flat measuring area

2.1.2. Equipment for measuring and testing :

Equipment	Serial or Certificate No.	Calibration due
Tape measure	GCS-TM28	05.2020
Calliper	GCS-VC16	05.2020
Luxmeter	GCS-LX01	08.2019
Sound Level Meter	GCS-SL01	01.2020

BS Standart No. EN 1789:2020



Fulfilled? Yes / No / N/A

Yes

Type: EMS-SPR4Manufacturer: EMS MOBIL SISTEMLER A.Ş.

2.2. Test Results

Below items are from legislation

4.1.

General Requirements

Road ambulances and equipment shall, when operated in normal use and maintained according to the instructions of the manufacturer, cause no safety hazard which could reasonably be foreseen using risk management procedures, e.g. in accordance with EN ISO 14971:2019, and which is connected with their intended application, in normal condition and in single fault condition.

Electrical Requirements

advertent short circuit.

General

4.2.1.	Electrical installations comply with the clauses of IEC 60364-7-721:2017 that are applicable to ambulances.	:	Yes
	Note: This does not apply to the original electrical equipment.		
4.2.1.	Supply system of the medical equipment complies with EN 60601-1:2006+A1:2013 and EN 60601-2-12:2015.	:	Yes
	Electromagnetic Compatibility (EMC)		
4.2.2.	Communication equipment (e.g. radio installation) shall comply with national and/or European regulations.	:	Yes
4.2.2.	Complete operational vehicle consists of components, equipment or sub systems that comply or certified as conforming to the respective in- dustry EMC regulations	:	Yes
	Battery and Alternator		
4.2.3.	Batteries shall be positioned to allow maintenance without removing the battery from its securing device. The construction of the battery and all connections to it shall be such as to prevent any possibility of an in-	:	Yes

- 4.2.3. For types A2, B and C road ambulances the electrical system shall be capable of holding a reserve of electrical power for restarting the engine.
- 4.2.3. The characteristics of the alternator, the starter batteries as well as additional batteries, if fitted, shall comply with Table 1.

Yes

Yes

BS Standart No. EN 1789:2020



Туре	: EMS-SPR4
Manufacturer	: EMS MOBİL SİSTEMLER A.Ş.

			Type of road a	ambulance	
		A ₁	A ₂	В	С
Starter battery(ies)	Nominal voltage 12 V	54 Ah	54 Ah up to 4 seats and 80 Ah more than 4 seats in the compartment	80 Ah	80 Ah
	Nominal voltage 24 V		R 0	63 Ah (2 × 12 V)	63 Ah (2 × 12 V)
Additional ^b	Nominal voltage 12 V	1120	550	80 Ah a	80 Ah
battery(ies)	Nominal voltage 24 V	1.22		63 Ah ^a (2 × 12 V)	63 Ah (2 × 12 V)
Alternator po	ower	700 W	700 W	1 200 W	1 200 W

Table 1 — Minimum capacity/power

Electrical Installation

4.2.4.1.	For B and C type ambulances, there is a recessed, externally power- mounted connector to enable external power to be provided to the ve- hicle.	:	Yes
4.2.4.1.	It is not possible to start the engine whilst it is connected to the external 220/240 V power supply, unless an automatic mechanical disconnection is fitted.	:	Yes
4.2.4.1.	If no automatic mechanical disconnection is fitted, the connector is on the driver's side.	:	Yes
4.2.4.1.	 110V or 220/240V circuit is protected by one of the following options: 'Earth leakage device' with a maximum setting of 30 mA* Separate transformer* *Strikethrough, as appropriate. 	:	Yes
4.2.4.1.	Where protection is given by an 'earth leakage device' only, there is a label near the plug that reads 'CAUTION! CONNECT ONLY TO AN AUTHORISED SOCKET'.	:	Yes
4.2.4.2.	Minimum number of separately protected 12 V DC outlet shall be available according to Table 2.	:	Yes
4.2.4.2.	Outlets shall be available for medical devices, located area of use and in the storage area. The nominal voltage shall be 13,8 V. voltage fluctuations shall not exceed the range of 12,4 V and 15,1 V.		Yes



Туре : EMS-SPR4 Manufacturer : EMS MOBIL SISTEMLER A.Ş.

		Ty	pe of	road	l am	bulaı	ıce	
	A	A1 A2 B		(C			
Minimum number of connections	1	1	1	1	3	1	3	1
Minimum capacity in Ampere	10	15	10	15	10	15	10	15

Table 2 — 12 V connections for medical devices in patient's compartment

4.2.4.2.	The power supply shall continuously supply the medical devices with electrical power with the engine running.		Yes
4.2.4.2.	The outlets for the medical devices shall be labelled with the nominal voltage and current rating.		Yes
4.2.4.2.	The outlets shall have a visible indication under intended operational conditions in order to show if there is voltage on the outlet.		Yes
4.2.4.3.	All circuits in the additional system have separate overload protection.	:	Yes
4.2.4.3.	All circuits are well identified and cables clearly marked at the connec- tion points, and at a maximum of 1 m intervals along its length.	:	Yes
4.2.4.3.	The system shall have enough circuits and be so constructed that when/if a circuit fails the patient treatment area shall remain illuminated and at least one power supply source for medical technical equipment shall still work.	:	Yes
4.2.4.3.	Every power socket in the patient compartment shall be fitted with a permanently visible indicator light to confirm that there is power to the socket.		Yes
4.2.4.4.	No wiring is located in or passes through the conduit intended for medi- cal gas installation.	:	N/A
4.3.4.4.	Wiring is not loaded higher than stated by the wire manufacturer.	:	Yes
4.3.4.5.	Where there are different voltage systems, the connections are non-in-terchangeable.	:	Yes



Туре	: EMS-SPR4
Manufacturer	: EMS MOBİL SİSTEMLER A.Ş.

	Visual Warning System and Audible Warning System (siren)	
4.2.5.1.	The road ambulance has fitted with a visual warning and audible warn- ing system (in accordance with national regulations) to alert other road vehicles and pedestrians of its approach, in order to expedite its jour- ney through traffic, whilst being used for emergency operation. <i>Note: It is optional for Type A ambulances, according to national regulations.</i>	: Yes
4.2.5.2.	The vehicle has 360-degree visibility of warning lights around the vehi- cle.	: Yes
4.2.5.3.	The vehicle has an audible warning system additional to the warning lights.	: Yes
4.2.5.3.	The audible warning system is activating the visual warning light.	: Yes
4.2.5.3.	The audible alarm can only be in function if the visible alarm is in oper- ation.	Yes
	Reversing System	
4.2.6.	Reversing System The ambulance shall be fitted with an audible reversing warning alarm, activated by the selection of the reverse gear.	Yes
4.2.6. 4.2.6.	The ambulance shall be fitted with an audible reversing warning alarm,	Yes
	The ambulance shall be fitted with an audible reversing warning alarm, activated by the selection of the reverse gear. This function shall be possible to disable from the driver seating position, with default back to on, when reverse gear is engaged the next	
4.2.6.	The ambulance shall be fitted with an audible reversing warning alarm, activated by the selection of the reverse gear. This function shall be possible to disable from the driver seating position, with default back to on, when reverse gear is engaged the next time.	Yes
4.2.6.	The ambulance shall be fitted with an audible reversing warning alarm, activated by the selection of the reverse gear.This function shall be possible to disable from the driver seating position, with default back to on, when reverse gear is engaged the next time.There shall be a system enabling the driver to detect obstacles behind.	Yes

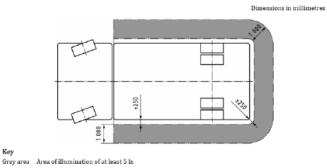


Figure 1 — Exterior lighting for type B and type C

TEST LABORATORY GCS TEST LTD (EOOD) FR-ETR-0235 Issued Date: 28.01.2019 Rev. No: / Date: 01/10.09.2021



Type: EMS-SPR4Manufacturer: EMS MOBIL SISTEMLER A.Ş.

Vehicle Body

	Fire Safety		
4.3.1.	All interior materials shall have a burning rate of less than 100 mm/mi- nute when tested in accordance with ISO 3795:1989.	:[Yes
	Driver's seat configuration		
4.3.2.	Ergonomic space of the driver's compartment and of the seat adjust- ment, as approved by the base vehicle manufacturer, is not reduced.	:[Yes
	Minimum Pasenger Capacity		
4.3.3.	Ambulance has the minimum number of seats/stretchers, in accord- ance with Table 3.	: [Yes
	Bulkhead		
4.3.4.	One or two windows are provided in the bulkhead, with a minimum separation of 100 mm.	: [Yes
4.3.4.	Each window has a maximum area of 0.2 m ² 0,10 m ²		
4.3.4.	Window allows direct visual contact with the driver and is secured against self-opening. It has an adjustable blind or other means of pre- venting the driver being disturbed by the light of the patient's compart- ment.	:	Yes
	Openings (Doors, Windows, Emergency Exits)		
4.3.5.1.	There is a minimum of two external openings, one at the rear (door/tail- gate) and one at the side/door of the patient's compartment.	:[Yes
4.3.5.1.	All openings have seals to protect against the ingress of water.	:[Yes
4.3.5.1.	All openings comply with the minimum opening dimensions:Side opening height:1950Side opening width:950Rear opening height:1850Rear opening width:1420	:[Yes



Type: EMS-SPR4Manufacturer: EMS MOBIL SISTEMLER A.Ş.

Emergency exits

- 4.3.5.2.The patient compartment shall have at least two emergency exits on
different sides of the vehicle. One of the emergency exits can be on the
roof. The emergency exits shall be easy to open from the inside.
- 4.3.5.2. The side door and rear door can be used as emergency exits.

Doors

-

- 4.3.5.3. Each external door of the patient's compartment is fitted with a security system that enables the following:
 - Lock and unlock from the inside without use of a key;
 - Lock and unlock from the outside without use of a key;
 - Unlock from the outside using a key when the door is locked from the inside.

Note: This system may be integrated with an optional central locking system.

Windows

4.3.5.4. Windows are positioned or screened to ensure the patient's privacy, when required.

Loading Area

- 4.3.6.Loading area dimensions are in accordance with Table 5:Minimum tailgate height:2550Maximum stretcher loading angle:14Maximum stretcher loading height:520
- 4.4.6. Where a ramp or lift is installed between ground level and the vehicle floor level, it is covered with an anti-slip surface and capable of taking a constant load of 350 kg.

Yes

Yes

Yes

Yes

Yes

Yes



Type: EMS-SPR4Manufacturer: EMS MOBIL SISTEMLER A.Ş.

Patient's Compartment

General

4.4.1.	Patient's compartment is designed and constructed to accommodate the medical devices listed in tables 9 to 19.	:	Yes
	Safety		
4.4.2.	Exposed edges (except projections of less than 3.2 mm) that could come into contact with occupants have radii of curvature of not less than 2.5 mm or are made from non-rigid material. For projections of less than 3.2 mm, the edges are blunted and the height of the projection is not more than half its width.	:	Yes
4.4.2.	Cabinet drawers are secured against self-opening and lockers with up- ward opening doors are fitted with positive hold open mechanisms.	:[Yes
4.4.2.	Type B and C ambulances are equipped with a lockable drugs com- partment with a security lock.	:[Yes
4.4.2.	Floor covering provides adequate grip including when wet, and is durable and easy to clean.	:[Yes
4.4.2.	Type B and C ambulances are fitted with a hand-holding device posi- tioned above each stretcher.	:[Yes
4.4.2.	If the patient's compartment is equipped with a non-foldable sedan chair (EN 1865), space is provided with a width of at least 600 mm at elbow height and a ceiling height above the seat squab of at least 920 mm.	:	N/A
	Width at elbow height:mmCeiling height above seat squab:mm		
4.4.2.	Vehicle maintenance equipment is not accessible from within the pa- tient's compartment.	:	Yes
4.4.2.	Devices, equipment and controls which may be required while the vehi- cle is in motion positioned in such a way that they can be operated with the seat belt fastened while the vehicle is in motion.		Yes
	Hygiene		
4.4.3.	To provide a safe environment and maintain hygiene standards for both patients and crew, the equipment and interior design of an ambu- lance allowa for ease of cleaning to provide for infection control and prevent cross contamination.		Yes



Type Manufacturer	: EMS-SPR4 : EMS MOBİL SİSTEMLER A.Ş.	Global Ce	runcation services
4.4.3.	The interior of the patient compartment including the and doors lined with a material that is non-permeable continuous cleaning.		Yes
4.4.3.	The edges of all surfaces designed and/or sealed in fluid can infiltrate. Note: If the floor arrangement does not allow fluids to flow away, or plugs shall be provided.	-	Yes
	Patient's Compartment Dimensions		
4.4.4.1.	The dimensions relate to the patient's compartment achieve only structural solidity a reduction of the dim % is acceptable in limited areas; door openings exclu	ensions of up to 5 :	Yes
	Patient's compartment dimensions for type A1, A	A2 and B road ambulan	ces
4.4.4.2	Patient's compartment complies with the minimum d in figures 3 to 5 (without cupboards, seats, medical o ment):		Yes
	Width from RH side to LH side (except roof curva- ture):	1750 mm	
	Length from rear to bulkhead at stretcher height:	2890 mm	
	Height from floor to roof: Height of stretcher holding assembly to roof (meas- ured in the middle of the longitudinal axis of the	1850 mm 1752 mm	
	stretcher): Height between centre of seat and roof:	1400 mm	
	Height between centre of seat and floor covering:	450 mm	
	Type B Ambulances		
	Area 1:		
4.4.4.2	There is a minimum of 500 mm between the bulk- head and the head end part of the stretcher frame or stretcher platform (measured at mid-axis and at stretcher height):	700 mm	
4.4.4.2	Minimum height of 1,600 mm is provided:	1850 mm	
	Area 2:		
4.4.4.2	Minimum height of 1,600 mm is provided.	1850 mm	

BS Standart No. EN 1789:2020



Туре	: EMS-SPR4
Manufacturer	: EMS MOBİL SİSTEMLER A.Ş.

	Area 3:	
4.4.4.2.	Flat and horizontal surface of minimum 400 mm length is provided alongside the stretcher from the head end of the stretcher frame:	
4.4.4.2	Minimum height of 1,300 mm is provided. 1850 mm	
	Patient's compartment and treatment area dimensions for type C	
4.4.4.3.	Dimensions of the treatment area are in accordance with Figure 6.	: Yes
4.4.4.3.	All protrusions are designed and constructed to fold away to provide the minimum dimensions.	: Yes
4.4.4.3.	 Any seat that intrudes into the treatment area protrudes no more than: 125 mm at the head end of the stretcher; 125 mm on one side* Sum of 125 mm on both sides* *Strikethrough, as appropriate. 	: Yes
4.4.4.3.	Stretcher has a working height between 320 mm and 600 mm:	: Yes
4.4.4.3.	Radius of curvature of the treatment area is no more than 500 mm:500 mm	: Yes
	Patient and Crew Seating	
	Number of seating positions:2Number of seats on one side of stretcher:1Number of seats in upper stretcher:1	
4.4.5.	Seats comply with the minimum dimensions in Table 7.	: Yes
4.4.5.	 Seats are installed in one of the following positions: Forward facing* Rear facing* *Strikethrough, as appropriate. 	: Yes
4.4.5.	Head restraints are fitted to all seats.	: Yes
4.4.5.	Backrests are constructed to a minimum dimension of 300 mm x 100 mm.	: Yes
4.4.5.	Upholstery has a minimum thickness of 20 mm.	: Yes

Page: 13 of 23



Type Manufacturer	: EMS-SPR4 : EMS MOBIL SISTEMLER A.Ş.		
	Ventilation and Anaesthetic Gas Scavenging Systems		
	Ventilation system		
4.4.6.1.	Ventilation system fitted that provides a minimum of 20 air changes per hour when the vehicle is stationary.	:	Yes
	Anaesthetic gas scavenging system (AGSS)		
4.4.6.2.	If the ambulance is intended to be used with delivery systems for an- aesthetic gases and vapours, it is equipped with an anti-gas scaveng- ing system (AGSS).	:	N/A
	Temperature Control System		
4.4.7.1.	Heating and cooling systems in the patient compartment are inde- pendently controlled from the driver's compartment system. Note: Heating/cooling in the patient compartment can be provided in a combined system.		Yes
	Heating		
4.4.7.2	In addition to the heating of the driver's compartment, there is an inde- pendent adjustable system for: - Type A and B: Heating system; - Type C: Fresh air heating.	:	Yes
4.4.7.2	System is designed so that given an outside and inside temperature of 5 °C, the heating up to at least 22 °C does not take longer than 15 minutes:	:	Yes
4.4.7.2	After 15 minutes, a temperature of at least 22 °C is reached in the patient's compartment: 27,5 °C	:	Yes
4.4.7.2	Actual temperature does not vary from the set temperature by more than 5 $^{\circ}\mathrm{C}.$:	Yes
4.4.7.2	Heating system is capable of meeting the performance criteria with the ventilation system switched off and the heating system set to re-circulate the air in the patient's compartment.	:	Yes
4.4.7.2	Installation prevents exhaust gases entering the patient's compart- ment.	:	Yes
	Cooling		
4.4.7.3.	If a cooling system is fitted, it is such that given an outside and inside temperature of 32 °C, the cooling down to 27 °C takes no longer than 15 minutes:	:	Yes

BS Standart No. EN 1789:2020



Type Manufacturer	: EMS-SPR4 : EMS MOBİL SİSTEMLER A.Ş.		Services
4.4.7.3.	After 30 minutes, a temperature of 25 °C is reached.	:	Yes
4.4.7.3.	Installation prevents exhaust gases entering the patient's compart- ment.	:	Yes
	Interior Lighting		
4.4.8.	Natural colour balance lighting is provided, as set out in Table 8, for patient area (stretcher) and the surrounding area.	the :	Yes
4.4.8.	In Type C, there is an additional light in the treatment area that provides a minimum of 1,650 lux:	x :	Yes
4.4.8.	In Type B and C ambulances, there is a facility for switching the ligh ing level down to 150 lx.	t- :	Yes
	Interior Noise Level		
4.4.9.	The noise level in the patient and drivers compartment shall be kept low as possible across the vehicle speed range. Maximum sound pr sure level shall not exceed 77 dB(A) at 120 km/h or the vehicle max mum speed if it is lower than 120 km/h.	es	Yes
	Holding System for Infusion		
4.4.10.	Holding system is provided to support two vertically fixed infusions in such a way as to use the maximum available height above the stretcher holding assembly.		Yes
4.4.10.	It is possible to position the infusions for use at either end of the stretcher holding assembly.		Yes
4.4.10.	Infusion mounting has a minimum capacity of 5 kg: 25 kg	j :	Yes
4.4.10	It is able to hold two fluid bags independent of each other and is de- signed to minimise oscillation.	:	Yes
	Retention, fixation and restraint systems		
4.4.11.	All persons and items are restrained, installed or stowed to prevent them becoming a projectile when subjected to these accelerations / celerations of 10 g in the forward, rearward, transverse and vertical rections.		Yes
4.4.11.	When subjected to these accelerations / decelerations, the distance travelled by a person or item does not endanger the safety of person in the ambulance.		Yes

BS Standart No. EN 1789:2020



Type: EMS-SPR4Manufacturer: EMS MOBİL SİSTEMLER A.Ş.

4.4.11. After being subjected to these accelerations / decelerations:

- 4.3.11.(a) No items have sharp edges or endanger the safety of persons in the ambulance;
- 4.4.11.(b) Maximum distance the stretcher and any item attached to either the holding assembly or stretcher travelled was no more than 150 mm; Note: Patient may travel more than 150 mm during the test.
- All tested lockers, rails and non-dedicated storage locations or storage devices are labelled to show the maximum permissible weight allowed.

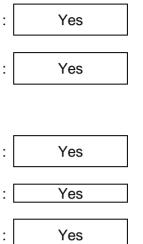
Mass Reserve

- 4.4.12. & 6.4.
 Minimum mass reserve required for the listed sanitary, medical and technical devices in tables 9 to 19 is as follows:

 Type A1 100 kg:
 100 kg:

 Type A2 115 kg:
 --- kg
 - Type B 225 kg: Type C – 260 kg:

100	kg
	kg
225	kg
260	kg





Type: EMS-SPR4Manufacturer: EMS MOBIL SISTEMLER A.Ş.

Testing

General

5.1. During the testing, vehicles designed to take stretcher(s) are placed according to paragraphs 5.2 and 5.3. Each stretcher is loaded according to this standard and tested in the normal position of use.

Yes

Measurements

5.2.2. Noise level tested at speeds determined by paragraph 4.4.9. Five5.2.2. speeds are tested with one at each end and three evenly distributed between the end points.

Yes

Note: Test result for each speed is the average of two measurements.

Measurement	Vehicle Speed (km/h)	Measurement Value	Min Limit	Max. Limit
		dB(A)	dB(A)	dB(A)
1	60	71,2	70	78
2	80	72,9	70	78
3	90	73	70	78
4	100	76,1	70	78
5	120	76,3	70	78

Retention systems and fixation of the equipment in the patient's compartment

5.3.Testing of the retention systems and fixations of the equipment in the
passenger compartment is carried out to the specifications outlined in
paragraph 5.3 of CEN 1789:2020
Report number(s), if applicable:
See appendix 7

Yes

2

Round Edges and Radius inside Passenger's Compartment

All doors in the patient's compartment\$ and drawers shall be in closed position. Manoeuvre the protrusion test ball in all possible attitudes to-wards any rigid protrusion on the furniture above the plan. The plan is the horizontal plan located at 700 mm from the lowest point of the floor excluding steps or wells.

5.4.

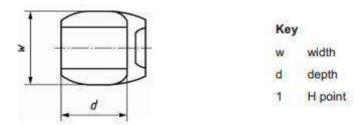


Type Manufacturer	: EMS-SPR4 : EMS MOBIL SISTEMLER A.Ş.	Giobai v	certification services
	Patient's Compartment Specifications		
5.5.	Testing of the patient's compartment is not possible to determine th permeability or seals of the floors.	e :[Yes
5.5.	Manufacturer provides a material certificate.	:[Yes
	Loading Area		
5.6.2.	If the vehicle is fitted with lowering rear suspension, it should be full lowered. Where standard suspension is fitted, the vehicle shall be tested with a mass of 150 kg within the patient's compartment in ad dition to the stretcher and its locks, mountings and loading platform where appropriate.	- :	N/A
	Report number(s), if applicable:		
5.6.2.	Loading angle α is measured as being the incline of the ramp from ground to vehicle floor or slope of the loading platform where used.	:[Yes
	Dimensions of the Patient's Compartment		
5.7.1. / 5.7.2.	Testing of the patient's compartment dimensions is carried out to th specification outlined in paragraph 4.5.2. of CEN 1789:2020	e :	Yes
	Seat Dimensions of the Patient's Compartment		
5.8.	The dimensions of the seats shall be checked physically or by reference to drawings. Rounded corners are to be ignored.	· :[Yes
	Carrying chair: the width at the elbow level, width of the chair in- cluded, should be measured at a height between 250 mm to 300 mm (conventional elbow height).	m :	Yes
	Check that swivel seats can be locked, in predetermined position, front or rear facing.	:[Yes
	Seats designed with tip up seat bases may have the 450 mm width dimension reduced adjacent to the back rest.	:[Yes
	Ensure that the dimension of the seat is not less than a 300 mm by 450 mm rectangle taken 30 mm from R point.	:[Yes

BS Standart No. EN 1789:2020



Type: EMS-SPR4Manufacturer: EMS MOBİL SİSTEMLER A.Ş.



Ventilation System

5.9. check by calculation that the choice of the product allows at least 20 changes per hour of the air volume of the patient's compartment (without interior arrangement).

Yes

Heating System

Cooling System

5.11.

5.10. Testing of the heating system is carried out to the specification outlined in paragraph 5.10 of CEN 1789:2020.

lined in paragraph 5.11 of CEN 1789:2020

Yes

Yes

Yes

Yes

Yes

Yes

Interior Lighting

5.12. The test shall be performed in a darkroom or with the exterior surface of all saloon windows covered in nonlight transmitting material to avoid light entering.

For types B and C ambulances take the lowest possible position of the stretcher into account.

Testing of the cooling system is carried out to the specification out-

The measurements shall be taken with the mattress in place.

Before starting the measurement wait a minimum of 10 min after switching the light on.

Infusion Holding System

5.13. The TS shall also verify the vehicle compliance when checking 4.4.11 requirements ("10 g dynamic test") or by a static test.

Yes



2

Type: EMS-SPR4Manufacturer: EMS MOBIL SISTEMLER A.Ş.

Each infusion holding system shall be loaded with a mass of 5 kg for a dynamic test and 7,5 kg for a static test. In the case of an adjustable/mobile holder, position the mass in the longitudinal axle of the stretcher at the middle.

Medical Devices

Note: Not applicable for whole vehicle approval. Selection of the particular medical device is the responsibility of the operator, not the body builder. Only sections 6.1, 6.3.8.2 and 6.5 are applicable to the vehicle manufacturer.

Yes



Type: EMS-SPR4Manufacturer: EMS MOBIL SISTEMLER A.Ş.

2.3. Other information

Place of testing	: EMS	S MOBİL SİSTEMLER A.Ş., Ankara / TURKEY
Date of testing		28 August 2015, 01-02 July 2019, 17 July 2019 20 April 2022 (Documentation)
GCS representative	: Yav	uz Yazgan, Meriç Elisert, Burak Yüksel
Manufacturer's representative	: Gök	sel Kaçar, Özgür Özkök
Remarks		
(1)-Measurement of uncertainty	abo mea	asurement of uncertainty is not included to the ve test results. Please contact GCS TEST for asurement of uncertainty of this test method
	(If A	pplicable).
(2)-If any	: Non	e.

3. <u>Appendices</u>

2.4.

- 1. List of modifications
- 2. Photographs and drawings of a representative vehicle and seat layouts
- 3. Side seat and assembly drawings (SAFE V1)
- 4. Separator seat and assembly drawings (SAFE V2)
- 5. Approval of safety belt
- 6. List of Safety glazing
- 7. Test reports of mounting system
- 8. EMC test report according to 60601-1-1 and ECE R10.05
- 9. Heating System Approval
- 10. Test Report of ECE R17
- 11. Flammability test reports according to ISO 3795 and ECE R118



Type: EMS-SPR4Manufacturer: EMS MOBIL SISTEMLER A.Ş.

4. <u>Statement of conformity</u>

The type described above is in compliance with the Test Specification mentioned above.

The test results refer to exclusively to the provided test objects mentioned under item 1. of this report. Test object(s) were representative to the type approved. The report is no longer valid should any changes be made to the type.

The Test Report comprises pages 1 to 23.

The Test Report shall be reproduced and published in full only and by the client only. It shall be reproduced partially with the written permission of the Test Laboratory only.

TEST LABORATORY GCS TEST LTD (EOOD)

Signature:

Expert Signature:

Conformity Checked by:

Name: Position: Date: Place: Yavuz Yazgan Type Approval Engineer 20.04.2022 Bursa, Turkey Meriç Elisert Type Approval Engineer



GCS TEST LTD (EOOD) Studentski Grad District Prof. Rasho Rashev Street No:4 2nd Floor, Office 14 Sofia 1700 / BULGARIA Phone: + 359 2 440 00 84 Fax: + 359 2 427 80 01 e-mail: info@gcs-lab.com



Type : EMS-SPR4 Manufacturer : EMS MOBIL SISTEMLER A.Ş.

Appendix 1

List of modifications

More details for application of

Correction of		
Modification of	:	
Addition of	:	
Deletion of	:	
Reasons(s) of modifica-	:	

tions (if required)

Page:

23 of 23

Appendix 1