

Professional transportation of highly infectious patients





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Function description



The MIESEN Infection ambulance is based on a box-type van and equipped with a special ventilation and filtering technique, which allows to transport highly contagious patients without any danger for the surrounding population.

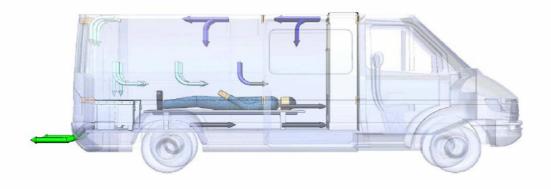
In connection with the high quality and airtight GRP (= GFK) lining of the patients compartment, and in conjunction with the air condition - filter system type CLION 6000 IFU of Company Westermann Kältetechnik GmbH, it's possible to generate a negative pressure of -250 Pa in the patients compartment. This negative pressure ensures that no unfiltered air leaves the patients compartment.

This is supported by two high-performance filters which draws the contaminated air of the patients compartment from the ground and exhaust it by high perfomance blowers (pressure build up to 12.000 Pa) through special filters particle free in the environment (acc. DIN EN 1822 Class H13).

Within the patient's compartment the air will be cleaned continuously by an air condition system with a performance of 6.000 watts, also through two special filters acc. DIN EN 1822 Class H13, so that the conditioned air in the room has approximately cleanroom quality. Through this conjunction the particle number within the patients compartment is at a low level.

The filter elements are located independend in the A/C-system so there is no possibility to contamine the heat exchanger. As additional security the condensed water will be collected and gets an thermal treatment by an evaporator.

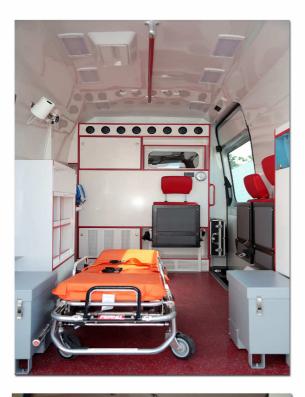
The infection ambulance can be use as an ordinary ambulance by deactivating of the filter-system, respectively by replacing of the filter cartridges. This transformation can perform within a few simple steps .





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The interior design





The concept of this ambulance is primarily focussed on the transport of highly infectious (contagious) patients without risk to the environment. This is realized by a constant negative pressure in the patients compartment and filtration of exhaust air through high efficiency filters.

The ambulance is equipped with all medical devices for diagnostical and therapeutical care of the patient.

Our interior lining of the patients compartment, consisting of ceiling, side walls and wheel arches is made with only three GRP (=GFK) forming parts. These forming parts are specially glued to one unit.

Because of the forming parts we obtain no sharp edges in the patients room. The smooth surface also ensures a proper cleaning and disinfection of the patients compartment.

The high strength of the GFK-material prevents shards of the paneling in case of an accident (safety aspect). We specially developed for this purpose a method for sealing to receive an airtight patients compartment which is necessary to the generate the negative pressure.

Through our modular design of the cabinet elements we achieve a multitude possibilities to design your ambulance.





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Certificate of functionality



Safety and rescue of people are the focus of all activities of the company Christian Miesen GmbH & Co KG.

To demonstrate the effectiveness of our infection ambulance, we have tested our product by an independent instance.

The efficacy of the negative pressure and filtering system is tested successfully on 24th june 2009 by the independent testing center "DMT GmbH & Co KG - Prüfstelle für Lufthygiene", a member of the accredited TÜV Nord Group.

Confirmed with Report no.: GS3 00 039 09



Testing laboratory for air hyg Am Technologiepark 1 45307 Essen Germany

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Managing Company: DMT Verwaltungsgesellschaft mbH represented by its managing director Heinz-Gerd Körner (CEO) Prof. Dr. Elko Räklers

Chairman of the Supervisory Board Dr. Guido Rettig

DMT GmbH & Co. KG Registered office: Essen Registration court: Amtsgericht Essen, registration no. HRA 909

DMT Verwaltungsgesellschaft mbH Registered office: Essen Registration court: Amtsgericht Essen, registration no. HRB 20420

Report

tests determining the effectiveness of the negative pressure and filter protection system of an intensive care ambulance

Test object

C. Miesen negative pressure ambulance for infection control with installed filter and air-conditioning system of M. Westermann Kältetechnik GmbH Type CLION 6000 IUF

Essen, 24.06.2009 DMT GmbH & Co. KG

i. v. Rend

Enclosures

9001 9001

Result of the analysis:

"The results determined during the functional test of the C. Miesen underpressure ambulance for infection control with installed filter and air-conditioning system (...) have shown that the design of the vehicle actually functions correctly. The vehicle is thus suited for transporting patients with contagious diseases."







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The Company

Since establishment of the enterprise in the year 1870 we place our entire experience and customer orientation completely into the service of emergency means.

By our extensive firm tradition we are on the up and development of ambulances, patient carriage, emergency surgeon employment vehicles, lying carriage, obstruction transport dare specialized and rank among the most experienced structure manufacturers in Germany.

Until today we have several representations abroad and are further on expansion course. With a firm trunk at 80 qualified coworkers we place all kinds of outpatient clinic vehicles on all marketable basic vehicles ago.

The adherence to the respective structure guidelines, the conversion of country-specific requirements are just as natural for us, as the manufacturing according to the strict safety standard DIN EN 1789. Owing to our high flexibility we manufacture outpatient clinic vehicles in close co-operation with the customer and thus cut to the respective requirements locally.

Among our customers among other things all considerable vehicle manufacturers and their distributers rank as well as emergency services, fire-brigades, German Federal Armed Forces, as well as private patient transport enterprises.

Take advantage in the possibilities, which we offer you. Decide for our products and our know how.

If you have further questions or like to know more about our work we would be very pleased to receive your inquiry. We are sure to find a concept wich meets your desires and requirements.

Your contact to us:



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