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9200-0041

**CE**

## **Operating instructions and technical description**

### **Adjustable bed CALMA 2\*, 3\* and 4\***

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## Introduction

These operating instructions are not only for the personnel trained for the care of patients, but they are also for people being charged with care of patients.



**Prior to any handling with the bed it is necessary to get familiar with these instructions.**

- All operations must be done in accordance with them.
- Any other operations are considered to be repairs and so it is necessary to keep the operating instructions until the bed is liquidated.

## Use

The adjustable bed CALMA is designed for standard **hospital care**. It is necessary to consult any other using of the bed with the producer.

The bed is designed for one person - patient.

**The bed is can be used in the surroundings where:**

the range of temperature is from +10° C to + 40° C

the range of relative humidity is from 30 % to 75%

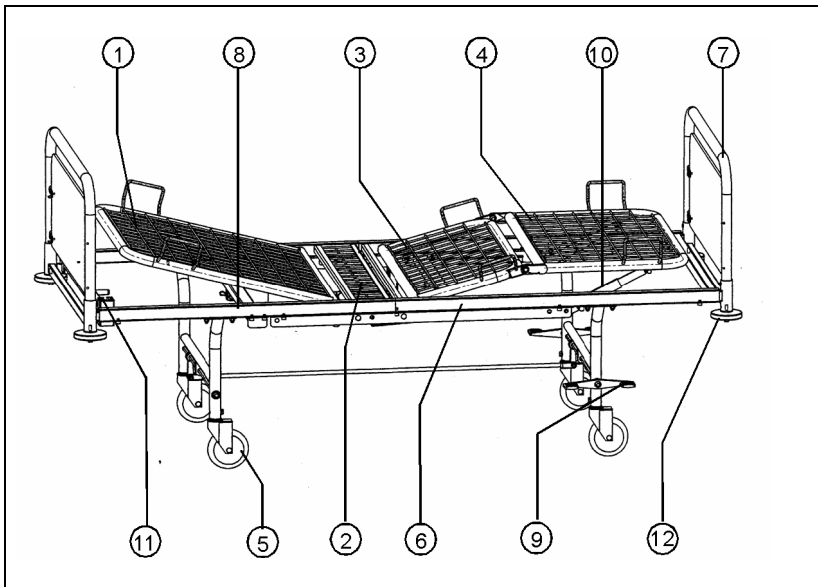
the range of atmospheric pressure is from 700 hPa to 1060 hPa

**The bed must not be used in the explosive surroundings!**

## Technical measures

max. size:	2130 x 970 mm
max. size with siderails:	2130 x 1060 mm
size of bed space (dimension for the mattress):	2000 x 860 mm
Integrated bed extension:	2 x 100 mm
back section	- length 760 mm
	- angle of elevation 75°
thigh section	- length 360 mm
	- angle of elevation 45°
pelvic section	- length 265 mm
calf section	- length 615 mm
height of bedding area (without mattress)	550 mm
weight	approx. 70 kg (depending on equipment)
maximum load limit	170 kg
maximum load limit for straightening device	75 kg

## Description



- 1) Back section
- 2) Pelvic section
- 3) Thigh section
- 4) Calf section
- 5) Centrally controlled wheels
- 6) Frame of the bed - leg section
- 7) Foot end
- 8) Frame of the bed-body section
- 9) Lever of central controlling
- 10) The raster of calf section positioning
- 11) The grid for lifting pole
- 12) Protective bumpers

## Safety

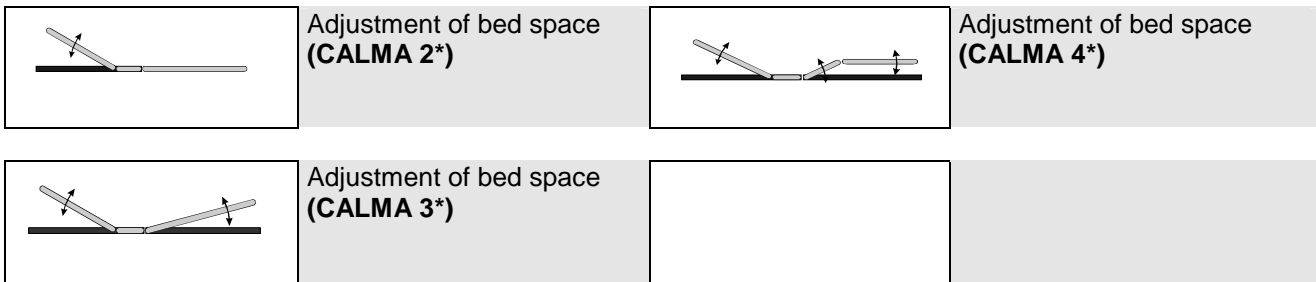
The product meets the requirements of the MDD 93/42/EEC

## Description

The bed is movable without height adjustment and tilting the bed space. It is produced in model groups with two-parts (CALMA 2\*), three-part (CALMA 3\*) and four-part (CALMA 4\*) bed space. The back part is positioned either mechanically or by gas spring. The thigh part is positioned either mechanically or by gas spring, the calf part is always positioned mechanically with arrestment by the toothed raster.

## Function

The bed space can be adjusted as follows:



## Equipment of individual models

type	height	tilting	back	thigh	calf
CALMA 201	-	-	M	-	-
CALMA 202	-	-	PP	-	-
CALMA 301	-	-	M	M	-
CALMA 302	-	-	PP	M	-
CALMA 401	-	-	M	M	M
CALMA 402	-	-	PP	PP	M
<b>PP</b> - gas spring <b>M</b> - mechanical positioning					



The manufacturer reserves the right to carry out small changes in the construction of the bed in such extent so that neither its function nor its quality is altered.

## Packing

The bed is delivered assembled and packed in cardboard paper. Straightening bar, side boards and etc. are packed separately.



**If there are any defects or damages, contact immediately the carrier and supplier.**

## Transport

The bed is delivered assembled and it can be packed in the cardboard box for export purposes.



**- If the beds are transported assembled, we recommend to put paper boards or textile sheets between single parts to avoid a damage of the polish.**



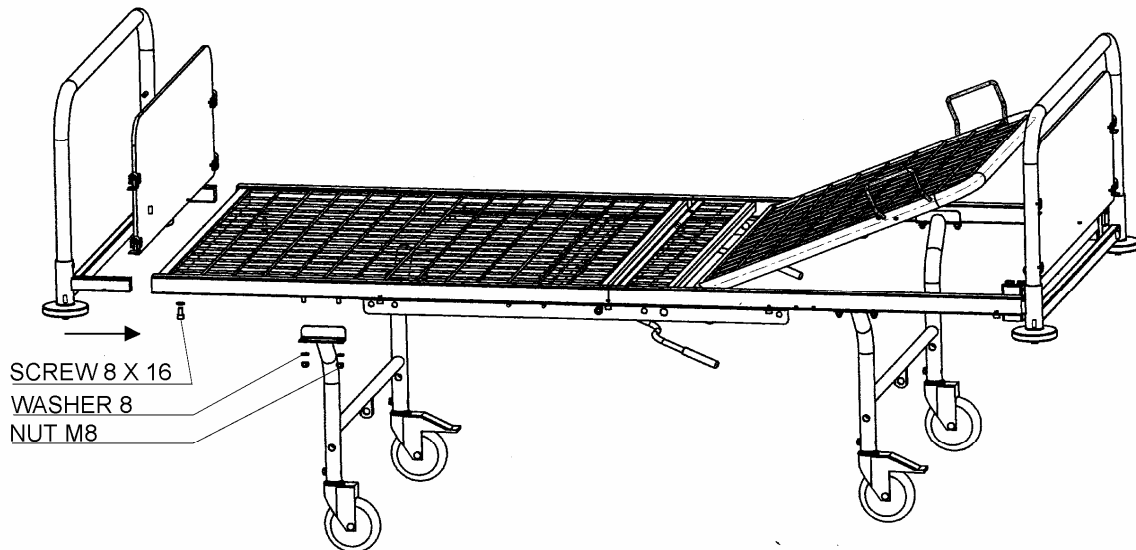
**- While handling the bed, make sure that the wheel breaks are released (see page 12)!**

## Assembly

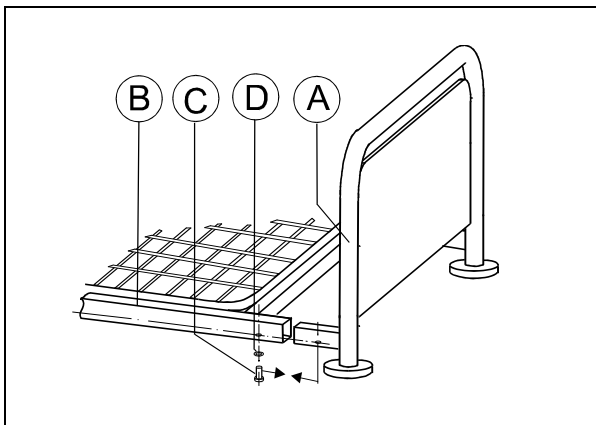
If the bed is packed in the box, simple assembling operations must be carried out before the bed can be put into operation.

### Assembly of bed undercarriage

At first, place the legs of the bed on the screws of the frame and then fix them by 8 nuts with washers to the bed space.

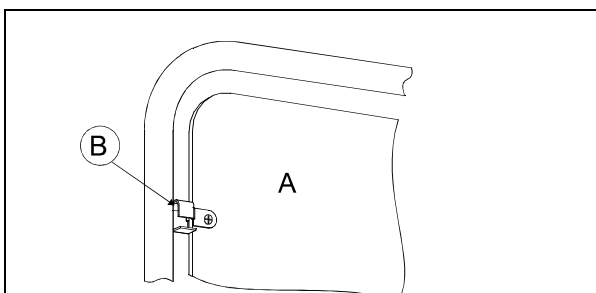


### Assembly of bed heads




- 1) Place the head into the holes in the frame of the bed as the arrows indicate.
- 2) Place the nuts M8 on the screws M8 x 16 and screw the head on the lower part of the frame.
- 3) Assemble the to other head in a similar way

### Assembly of plastic head panelling



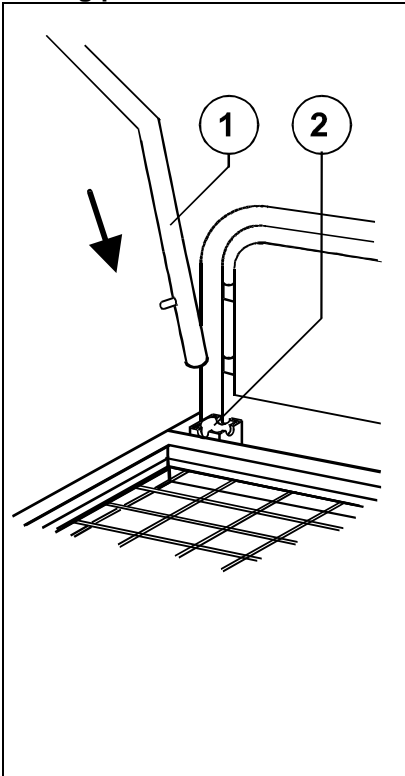
Place the plastic panelling (A) on the sticks of the head columns (B) from the inside of the bed.

 **If the panelling was placed from the outer side of the bed, it could be incidentally pushed out by the legs of the patient.**

## Assembly of accessories

**⚠ The accessories are not part of the bed and must be ordered separately!**

### Lifting pole



The lifting pole (1) is fixed into one of the grips in the corner of the bed space frame (in the head part). Place the lifting pole into the grip (2) as the arrows indicate. The arrestment will be carried out by turning the bar so that the arresting pin will fall down into one of the cut-outs.

**It can be arrested either in the longitudinal direction when the bar is directing above the patient, or in the cross direction when it is parallel with the head and does not obstruct making the bed or handling the patient!**

The light triangular plastic catch can then be hung on the pole.

**⚠ The horizontal bar is not designed for rehabilitation exercises of patients!**

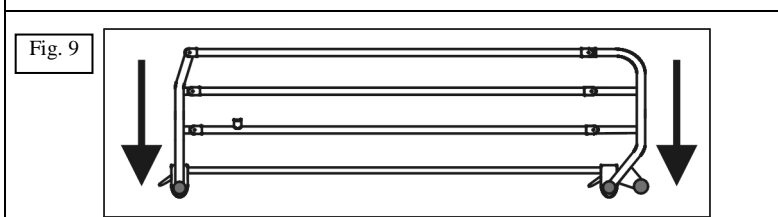
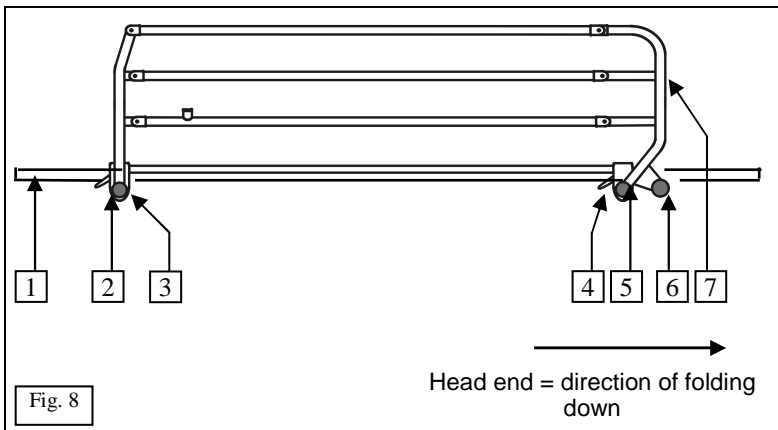
Using the reduction, an infusion stand can be installed into the grips for the straightening bar. infusions stands are delivered with this reduction.

**⚠ It is necessary to be careful when replacing the patient from the stretcher to the bed to avoid overturning of the bed.**



## Siderails

- according to the chosen model (they are not a part of the bed)

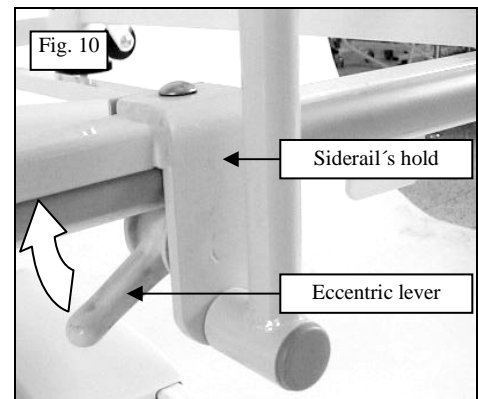


**Before a patient is laid on the bed, you must check, if the siderails are placed on the marked places and if the eccentric levers are tighten correctly.**

### Installation:

During placing on the bed frame (1) must be the siderail's collapsing bow (7) orientated to the bed's head end (see the arrow on the fig. 8).

Put both siderail's holds (3,5) on the bed frame (1) on places, marked by the sticker (fig. 9) and tighten the eccentric levers (2,4) acc. to detailed picture (fig. 10). Use this way for installation of both (right + left) siderails.



## Dismantling

At first dismantle accessories (siderails, horizontal bar, etc.) which are placed on the bed. Then use the same way as while assembling but in the reverse way.

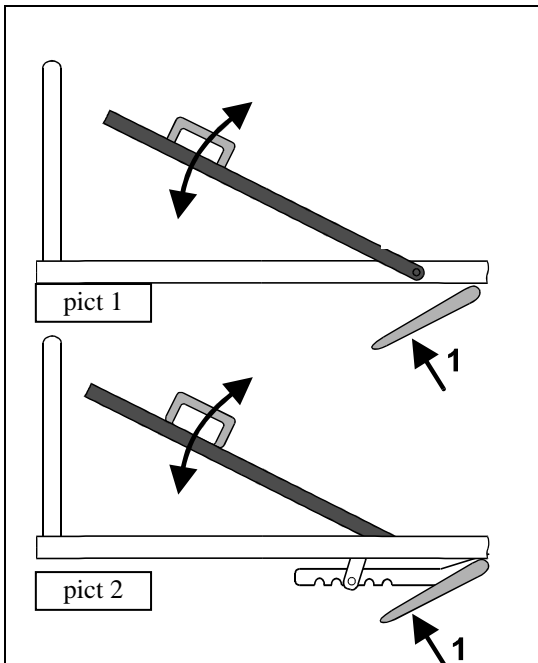
## Checking the functions

Assembling the bed it is necessary to check up some functions. Check up all positions going without breaking. The single positions are described in more detailed way in the following part.

## Adjustment

Bed space adjusting is carried out (according to the model) either by an electric engine, mechanically or by gas springs.

### Adjustment of the back section

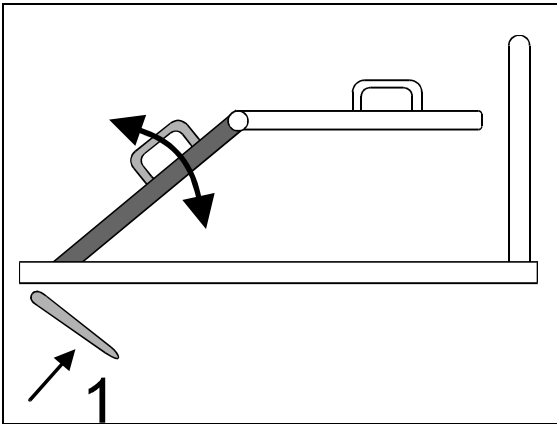


If the back part positioning is carried out by **gas spring** (picture 1), follow the following instructions. Hold by one hand the handrail of the back part and press the operating lever (1) by the other hand as the arrow shows. After adjustment of the required position release the lever. While dropping use the same way, but press the frame of the back part down.

In case of the **mechanical** positioning (picture 2) the process is similar. Hold by one hand the handrail of the back part and press the releasing lever (1) by the other hand as the arrow shows. Fitting the pin in the raster the arrestment of the required position is done.

### Adjustment of the thigh section

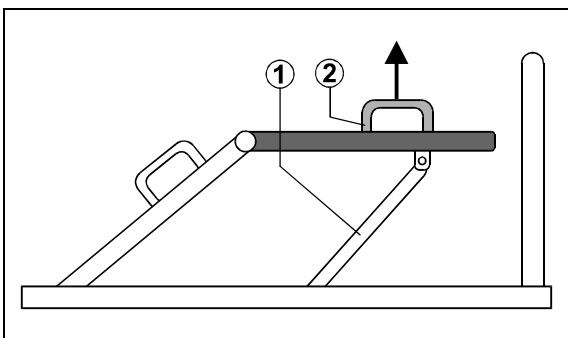
(only models with 4-section bed space)



To position the thigh section using the **gas spring** follow the following instructions: Hold the frame of the thigh section by one hand and press releasing lever as the arrow **1** shows. After adjustment of required position put the releasing lever back to the initial position. While dropping the thigh section use the way but press the frame of the section down. In case of **mechanical positioning** is the process similar. Hold by one hand the handrail of the back section and press the releasing lever (1) as the arrow shows by the other hand. Arrestment of the required position is carried out in the same way as in case of mechanical positioning of the back section.

### Adjustment of the calf section

(only models with 4-section bed space)



It is always positioned mechanically by toothed raster (1). Hold the calf section handrail on the top section of the frame pull it upwards. Reaching the required position release and let it fit the raster pin. For lowering lift the section into the interposition of the raster (it will cause putting the raster of operation) and drop down.

### Adjustment of the leg section

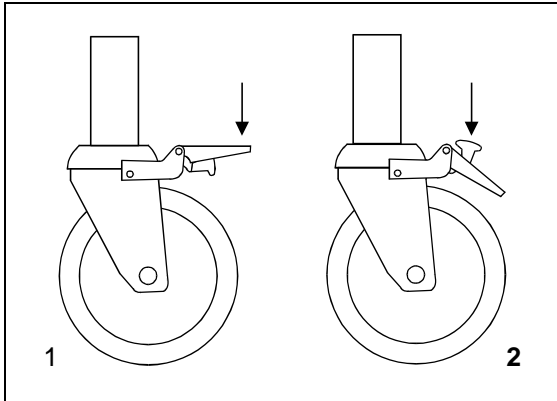
(only for the models with 3-section bed space)

Positioning is always mechanical.

While positioning use the same way as while positioning of fibular section.

## Controlling the wheels

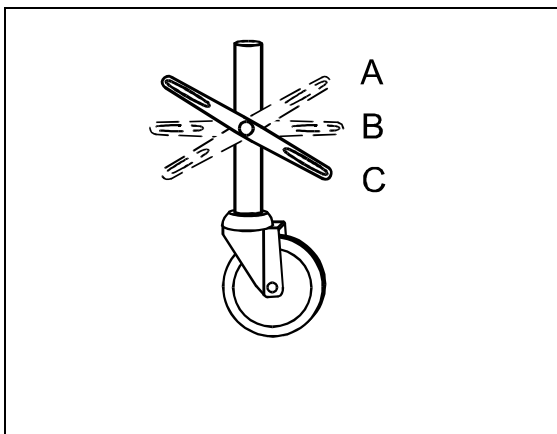
### The wheels without central controlling



Step on the brake as the picture 1 shows and brake the wheel!

The brake is released by stepping on the arrestment lever - see picture 2.

### The wheels with the central controlling



In case the bed is equipped by the central controlling the wheels, follow the following instructions:

**A** - setting the controlling lever into this position you will arrest the left wheels in the straight line and ensure easy manoeuvring while driving.

**B** - setting the controlling lever into this position you will release all four wheels and it is possible to drive the bed in all directions.

**C** - setting the controlling lever into this position you will brake and arrest all four wheels.



- Make sure that the wheel brakes are always put in operation when the bed is at rest or while assembling or dismantling.

- The power cord must be disconnected prior to moving.

- Driving the bed make sure that the bed does not run over the cables.

## Cleaning and disinfecting

At first disconnect the bed from the power net. Cleaning of the whole bed is carried out by commonly used detergents and disinfectants in the concentration as determined for the health facilities (0.5% PERSTERIL, 1% CHLORAMINE etc.)

Clean the bed by using humid rag. Special care must be taken when cleaning the electric engine.



- Do not use abrasive cleaning means, e.g. sands or scourer.

- The bed must not be disinfected in washer!

## Defects and their repairing

Defects	Possible cause	Repairing
Positioning by gas springs does not work	<ol style="list-style-type: none"><li>1. The mechanism is obstructed by textile or other material.</li><li>2. The gas spring is defective</li><li>3. The mechanism is defective, the moving parts are deformed</li></ol>	<ol style="list-style-type: none"><li>1. Check the moving parts and remove the sources of obstructions.</li><li>2. and 3. Arrange replacement of the damaged parts by specialists.</li></ol>

## Storing

To avoid problems, we recommend:

1. Disconnect the bed from the electric power net.
2. Dismantle the accessories (siderails, straightening bar, etc.)
3. Pack the bed and the accessories to avoid damaging the polish.

It is possible to dismantle the bed and put it into the paperboard box to save the storing space.



**The conditions of storing space must be the same as the operating conditions. (see page 3 - Use)**

## Maintenance

The maintenance should be regular. Carry out the maintenance always once in 6 months. When checking pay attention especially to the following:

### Wear

Check the single sections to find out their wear by cleaning or other damages. Find out the reason and remove it or get the damaged sections repaired by service.

### Functions

Check all the positioning to be able to carry out up to the maximum positions.

### Gas springs

Check that all gas springs can be shifted out, shifted in and arrested..

### Wheels

Check the function of the wheels as well as the breaks. Clean dust, hair and other impurities.



**In case you find out irremovable defects, the bed must not be used.  
Contact immediately the manufacturer or distributor.**

## Spare parts

The manufacturer or seller you bought the bed from will provide to qualified staff the diagrams of connections and the list of spare parts, description, instructions or other information on request. It will help you to repair these parts that are marked as repairable by producer.

## Environmental protection

The company LINET, spol. s r.o. is aware of the necessity to protect the environment for future generations and therefore devotes great attention to the development, innovation – planning, production and use of such technology and materials that are environmentally friendly.

This product is constructed from materials that are environmentally friendly! The product does not contain dangerous substances based on cadmium, mercury, asbestos, PCB or CFC! The operational noise-level of the product meets the requirements for the protection of public health against undesirable noise and vibration in protected indoor building premises. Wooden parts used in the product are not made from exotic wood such as mahogany, jacaranda, ebony, teak, grenadil or santo, and do not come from the Amazonian rainforests or other virgin forests.

All waste packaging left over from when the product is made operational is marked in accordance with the legal regulations on packaging. Sort the waste packaging, which is left over once the product is made operational by following the graphic symbols and deliver it to a person authorised to further utilise it.

The product contains recyclable steel, plastic and electronic components – to optimise recycling once the operation of the product ends, separate the individual parts so that the raw materials from which the product is made can be put to further use (see CHART).



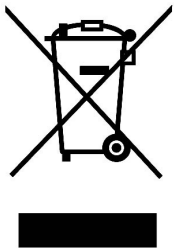
The product may contain lead accumulators (AKB) marked with this graphic symbol: Once the service life of these accumulators ends, deliver them to a person authorised for recollection (you will not have to pay a recollection charge!).



**The product is not designed for removal as part of communal waste!**



**Information for the users of electric and electronic equipment (see CHART):**



This symbol on the product or accompanying documentation means that the electric or electronic components used (waste from electric and electronic equipment = OEEZ/WEEE) may not be disposed of (destroyed) together with communal waste. In order to correctly eliminate the entire product, deliver OEEZ/WEEE to the workplaces of firms specialised in this task, where they will be accepted free of charge.

By removing this product appropriately you will help preserve valuable natural resources and help prevent potential negative effects on the environment and human health, which could result from the incorrect destruction of waste. You can request further details from authorised environmental protection authorities, or the closest collection point for separated waste collection.



**Fines may be imposed under national regulations if an incorrect procedure for waste removal is used.**

**Information for users about the removal of electric and electronic equipment in other countries outside the European Union:**

The symbol shown above is valid only in the countries of the European Union. You can apply to your authorities or the equipment seller for detailed information about the correct way of removing separated OEEZ/WEEE (electric and electronic equipment) and lead accumulators.

Protect your health and the environment. Thank you.

## Guarantee and service

The guarantee period provided for the bed is **24 months** from the day of delivery!

The guarantee and post-guarantee repairs are carried out by the manufacturer or by authorised repairmen on the basis of certification issued by the manufacturer.

## Contacts

If you have any questions, please, contact your distributor.

Your manufacturer:

LINET SPOL S R. O. , Želevčice 5, 274 01 Slaný, Czech republic

- Tel.: +420 312 576 111
- Fax: +420 312 522 668
- E-mail: [info@linet.cz](mailto:info@linet.cz)
- <http://www.linet.com>



# EC CONFORMITY DECLARATION

Date of issue: 10. 11. 2004

## Conformity declaration issued by:

Commercial name	<b>Linet spol. s r. o.</b>
Registered address	Želevčice 5, 274 01 Slaný, Czech Republic
Reg. No.	00507814
Telephone	+420 312 576 111
Fax	+420 312 522 668

## As the producer of the product - name (brand):

**CALMA**

## Variants of the product:

1C20XXXXXXXXXX, 1C30XXXXXXXXXX  
1C40XXXXXXXXXX (the variants are specified in the technical documentation of the product)

## Description and function designation:

Positionable bed for standard hospital units, including the accessories named in the user manual

## Classification of the product as the medical device:

**Class I** nonsterile, without measuring function

## A) Declaration

I declare that the said product is safe under the conditions of common use in compliance with the instructions and that measures have been taken to ensure the conformity of all the products brought to market with basic requirements of directives related thereto, stated in paragraph B.

## B) Fulfilled technical requirements

This product's characteristics comply with the technical parameters related to it and stated in MDD 93/42/EEC which stipulates the technical parameters for healthcare products.

## C) Means of assessing conformity

Conformity was assessed by the procedure stated MDD 93/42/EEC, Annex VII.



Ing. Zbyněk Frolík  
company director