

Containerised Lobby System

Modular medical solutions, at the **right time**, at the **right place**



Benefits:

- (Semi-) permanent
- Proven concept
- Any configuration is possible
- Robust and easy to maintain
- Autonomous modular units
- Customizable to specific need
- Provides high quality health service in any circumstance

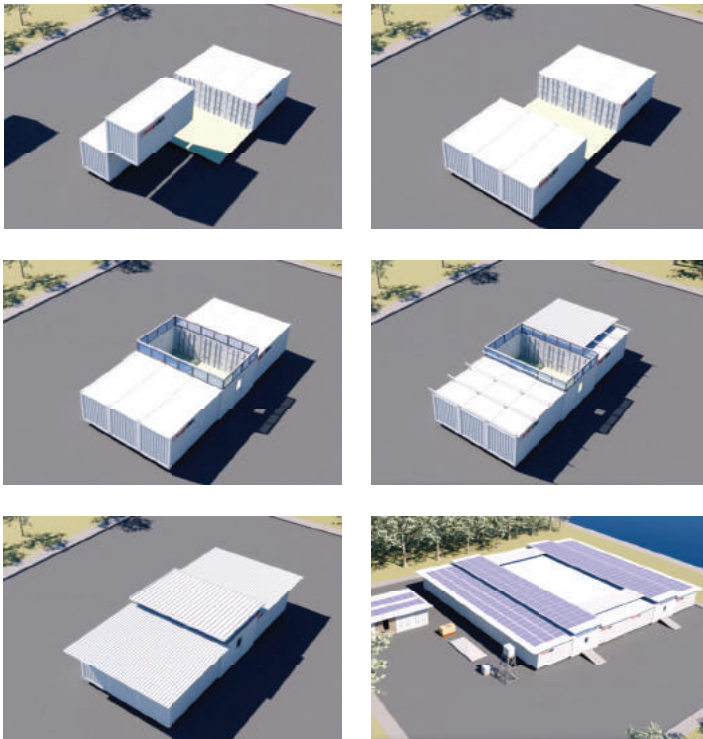
The Lobby System



APAC SYSTEMS

With the Lobby System, you can design and assemble your own clinic or hospital. Decide the departments you need, collect the corresponding container modules (like LEGO blocks) and connect them to the bright and central lobby. This way you can build your own solution.

A Hospitainer with a lobby can be made from small set-ups (2 or 4 containers) up to complete hospitals with different wings and eventual multiple stories. It is a turn-key solution including all required installations, medical equipment and consumables. Even deployment is included.



Modularity in practice

During the Ebola crisis in Sierra Leone, a rapid medical solution to detect and treat people with the Ebola Virus was needed. Within a few weeks Hospitainer shipped a complete and turn key Containerised Lobby System. It consisted out of 6x a 20ft container and functioned as an isolation centre for infected people.

Since ISO Certified shipping containers can last for 30-40 years, the Lobby System was still in good shape after the Ebola crisis. The client decided to move the containers and created a new medical clinic and use it for primary care.

From plan to realization

Plan, production and planning: When the design for a lobby is made, Hospitainer will produce the required containerized modules. We can deliver products from stock or build on demand. As soon as the medical containers are finished, the complete lobby system will be packed inside these containers, as well as all medical equipment, consumables and medicines.

The building blocks will be shipped to the final location, where a Hospitainer team will be present to deploy the hospital.

We will manage a local construction team or provide a complete team on demand. Hospitainer can therefore relieve you of all work surrounding the construction or management of construction. The lobby structure will be erected and the containers connected to the lobby. Electrical, sanitation and all other systems will be provided, connected and tested. In a matter of days, the clinic or hospital can receive the first patients.

This combined makes the construction and use easy, quick and accessible anyplace, anywhere, anytime. All based on your needs and wishes.





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a modular medical solution



Another example can be found on the Mediterranean Sea. Hospitainers Lobby System was located on a ship for Search and Rescue missions. During these missions, the exact need changed and a revision was needed. New containers, including a morgue, were added to the ship in a later stage to increase capacity.

On a certain moment, the Search and Rescue missions from this NGO were aborted. The containers were taken from the ship and relocated to a refugee camp in Europe, where they could be used for a second time.

The lobby

The units are connected through a central lobby with aluminium window frames all around the structure for a large area of natural light. The frames are connected on top of the containers. The lobby itself can be used for different medical services such as a waiting area for patients, a nurse post or scrubbing area before surgery. The size of the lobby will increase with the number of required containers. Separation walls can be placed inside the lobby based on demand. The content of the lobby can be adapted to your wishes.



Technical installations

Each container is a stand-alone module with its own technical installations; a switch board, AC for cooling and heating, water treatment (if required) and air filtering. These installations are mounted in the technical area. This technical area can be found in the back of each container, accessible from outside the hospital.

This gives the Hospitainer Lobby System two advantages:

1. Maintenance of the installations can be done without entering the clean medical area.
2. Each container can be easily replaced by another container if different medical services are needed.

Next to the modular installations per container, there is also connectivity to other infrastructure:

Electricity: depending on the situation and requirements, a connection to local power source, a (back-up) generator, solar panels, UPS and a switch box can be integrated.

Water: the lobby system can be connected to a local water source and sewage system, but also water tanks (clean- and wastewater) or custom wastewater treatment is possible.

Medical departments



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All listed medical departments can be built in a 20ft container. If desired the containers can also be combined together to create more room. Because of the modularity, any kind of hospital, in any size, can be created.

Each unit has a medical grade finishing, easy to clean surfaces and a coved floor.

Maternity

A maternity unit is designed to provide a safe and clean environment where women can give birth in a private sphere. It comes with a treatment/delivery room and a recovery area.

Equipment and consumables for assistance for 300 deliveries and treatment of 200 victims of GBV are included as a standard.



X-ray & diagnostics

Diagnostic services such as orthopedic care, ultrasound, TB screening and mammography can be performed in the diagnostic room. All related equipment can be included and will be selected for its purpose. For example: X-ray machine can

either be mobile or static and is specifically selected to be used in a container. Since the container consists of steel surroundings, no extra lead shielding is required for our low radiation X-ray machines. Protective clothing will be included.



Laboratory

The laboratory provides a clean and safe place to perform all kind of medical tests. From general lab to biosafety lab are possible. Also a blood bank can be included.

Each laboratory room is designed with work bench-

es, cupboards for storage and lab stools. It can be equipped with a wide range of laboratory equipment. Depending on type of testing, functions like a sluice, underpressure or an extra changing area can be added.



Recovery room/ Intensive care

In this container, (critical) patients can be intensively monitored, being prepared for the OT or recover from a surgical procedure. A 20ft container fits 2 patient trolleys, a baby bassinet and 2 patient monitors when being used as recovery room

This unit can also be used for Intensive Care, providing space for at least 1 ICU bed and medical equipment.

Combining two 20ft containers will provide room for more beds.



Dental

The dental unit consists of a waiting area with a small desk, a dental treatment room and comes fully packed with consumables, medicines and equipment. When this dental unit is included to the lobby system, a dentist will be able to

perform general oral health care such as:

- Extraction of teeth
- Scaling and root planing
- Endodontic root canal treatment
- Preventative measures for gum diseases.





Operation Theatre

An Operation Theatre can be placed in one 20ft container. It provides room for an operating table, including medical equipment. By connecting 2 x 20ft containers, the Operation Theatre has a double floor space of 5,3 x 4,6 m. This provides room for one or even two operating tables including OT-light,

anaesthesia machine and oxygen concentrator. After the staff scrubbed their hands in the lobby, the room is accessible by swinging doors. It comes with equipment and consumables for a wide range of operations to perform, designed for a client based amount of surgical procedures.



Primary Health Care

With this medical room, a hospital can focus on delivering more general healthcare such as basic check-ups and treatments. During emergency and disaster scenario's it can also be used for triage. The unit comes with an examination

table, examination light, cabinets for storage and a sink. It can also provide room for a nurse post with a desk for a computer. Medicines (like an IEHK kit) and consumables can be included.



Dialysis

To provide medical care for patients with kidney failure, a dialysis unit can be placed in a 20ft container. This unit provides enough space for two treatment chairs simultaneously. It comes with a special water installation to purify the water for IV use.

It also provides room for a workstation for patient registration and monitoring.

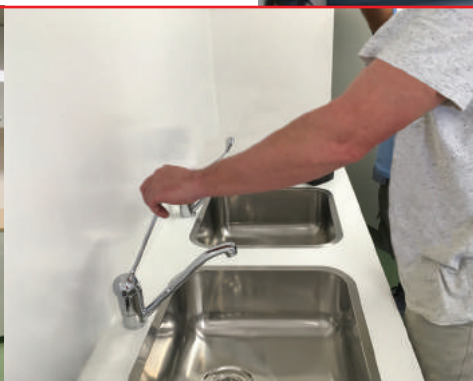
Anything can be included, like: dialysis consumables, kitchen supplies for food preparation and entertainment during treatment.



Other departments

Because of the modularity, any kind of medical service can be added to the containerized lobby system. Other proven concepts for medical treatment or supporting medical services in a container are:

- | | |
|------------------------|-----------------------|
| • CSSD (sterilisation) | • Wards |
| • Pharmacy | • Storage |
| • Morque | • Control and command |
| • Ophthalmic | • Sanitation |
| • Nurse post/admin | • CT-scanner |



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Hospitainer is a full service provider and works as a one-stop-shop for turn-key mobile medical products. This proven approach saves valuable time in responding to emergency situations when human lives are at risk. The services Hospitainer provides, cover the transport and packing of the medical containers, deployment and instruction, supply chain management and the helpdesk.

Transport and packing

The lobby system is highly mobile and compact. The ISO containers can be delivered in any harbour around the world. CIF delivery is standard included. For every single

item, a suitable packing method is selected. Critical medical equipment is stored in rugged flight cases or foamed crates. The central lobby itself is packed in one of the containers.



Deployment and instruction

As soon as the containers arrive at the final location, deployment can start. Hospitainer staff will be present during this operation as long as the location is considered safe by Hospitainer.

Depending on the size, the lobby system can be set-up within a few days. A concrete slab as foundation is needed for the containers. A crane or forklift truck is needed to erect the structure and needs to be available during the first days of the deployment.

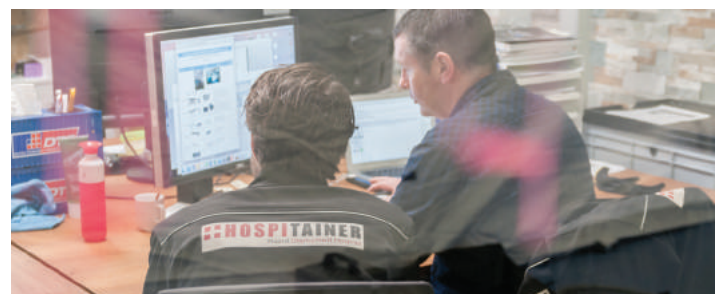
For successful operation, it is important to know the details of the system. With diverse instructions on site, the necessary knowledge is transferred to the team on the ground. The instruction covers the following:

- Packing and unpacking
- Construction
- Maintenance
- Installations
- Infrastructure
- Electrical
- Water
- Air-treatment
- Medical equipment
- Furniture

After this instruction, the staff will be able to deploy the system independently. A deployment manual is included.

Helpdesk

If any questions arise after the training due to a problem in the field, Hospitainer is available for support on distance by phone, email and Whatsapp. In diverse regions, Hospitainer also has a local service partner which can visit the hospital to support on site.



Supply chain management

The lobby system comes standard with materials for 1 year, including spare parts for the installation. If any item is running low, Hospitainer can re-supply these materials. Also new equipment, consumables or extensions/upgrades of the hospital can be delivered upon request. Diverse service level agreements can be contracted.

Technical Specifications



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Dimensions and construction

Total lobby system:

Width	ca 17m
Length	2,44m per container
Height	ca 4,0m

Floor space (LxW)

Standard container	5,3 x 2,2m
Double container	5,3 x 4,6m
Lobby width:	4,6m x 2,44m per container

Materials

Material inner wall & ceiling	Steel, PIR foam core
Finishing inner wall & ceiling	Waterproof coating
Insulation	Rc 2,8
Windows lobby	Aluminium frame
Material floors	PVC, coved edges
Material doors	Aluminium, double glass
Material roof	Aluminium + coated steel
Sinks	Stainless steel
Toilets/showers	Rigid and easy to clean
General finishing	Waterproof, easy to clean, all edges are sealed.
Optional:	shadow roof

Installations

Air-treatment

Air conditioning	AC for cooling & heating
Air treatment - standard	G3, F7, overpressure
Options:	HEPA, UV-light, undepressure

Water

Customized filtration and infrastructure upon request.

Power

Hospitainer will deliver a complete system design upon either a generator, solar panels or connection to a land-line.

