



LiftRunner tugger trains are optimising clinical shipments 4,500 meals delivered on schedule

The material flows and shipments that occur at the over 60 clinics, institutes and facilities that make up the University Medical Centre include both regular shipments and special shipments. In order to optimise these processes two STILL LiftRunner tugger trains were brought in. Their daily rounds involve delivering meals and clean laundry to the clinics. Furthermore, the LiftRunners also take away the dirty laundry, clinical waste and recycling. In order to ensure that the trolleys could be loaded effortlessly in the field, the C frame trailers were specially constructed using patented floor pan technology according to the specifications of central logistics.

Sector: Clinical logistics

Company: More than 60 clinics and institutes, around 1,500 beds, treatment of 341,000 patients annually. 7,500 employees

Products: Medical facilities and an international centre of scientific research

Solution: The tugger trains are very versatile and can be used to ship meals, clean laundry, dirty laundry, clinical waste and recycling around the premises.

STILL products: Tugger train with R07 electric tractor and with LiftRunners C frame trailers. Including special load carriers for mail, oxygen, bottled gas and cable reels

The majority of the shipments for more than 60 clinics, institutes and facilities at the University Medical Centre were carried out by these STILL tugger trains.

The University Medical Centre at the Johannes Gutenberg-University in Mainz is the only university medical centre in all of Rhineland-Palatinate, which is why the internationally renowned centre of scientific research offers such a wide range of cutting edge medical treatments. With 7,500 employees, it is also one of the largest employers in the region.

Catering with tugger trains

When it comes to catering, the two STILL LiftRunners help to deliver a wide variety of meals three times a day. Bernd Broszehl, Head of Central Services: "From 6:00 AM to 10:00 PM our tugger trains are constantly on the move. Up to 4,500 meals are delivered from the kitchen to 1,500 hospitalised patients each morning, noon and night. So that the drinks stay chilled and the meals are served warm, the meal trailers are equipped with electronically regulated warming and refrigeration units." The maximum size of the trolleys is determined by the size of the lifts and other narrow passageways that the shipments must pass through. The size of both the floor pans and C frame trailers is also a result of these conditions and depending on how they are connected, they can accommodate up to two trolleys either on the left or the right.

LiftRunners are optimising shipping

The two tugger trains are each made up of one powerful R07 electric tractor and three manoeuvrable C frame trailers. "Their daily rounds include delivering clean laundry to the clinic's wards picking up dirty laundry from the clinic's depots. We transport over nine tonnes of laundry to the laundromat," explains Broszehl.

With the LiftRunner tugger train the C frame tiller is able to execute a left hand turn



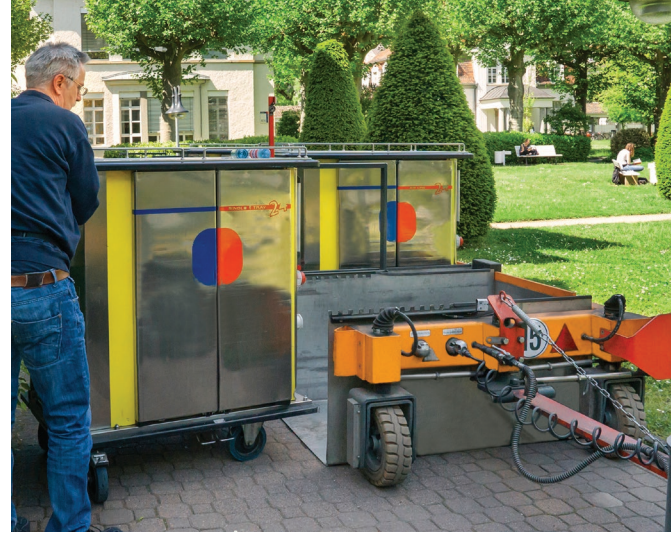


Every day more than 4,500 meals are being shipped out by these two STILL LiftRunners.

using all-wheel drive. This ensures that the tugger train follows a tight path even at high speeds, stabilises braking manoeuvres and trips up ramps, and ensures that the frame remains stable even in sharp corners. The elastic tyres on the C frame compensate for uneven terrain. Uwe Schmitt, Team Leader Supply Management had this to add: “In tight corners the STILL tugger train maintains its pre-determined turning circle. This helps to prevent any electronic faults in the meal carts which can arise due to vibrations, wear and tear and damage to the trolley’s tyres. Moreover the tyre noise is not as loud as before.” The additional weather protection means that the LiftRunner is ideal for outside use.

Floor pans make loading simple and easier on the trolleys

The C frames have been developed and constructed in a size and with a load capacity determined by the needs of central logistics. Even additional safety features involving light barriers have been incorporated. “When you climb into the R07-tow tractor and press the hydraulic lever all of the frames are automatically lifted. When you dismount, they are automatically lowered again. The carefully deburred stainless steel pans can be lowered to floor level using our patented LiftRunner technology thereby allowing the trolleys to be loaded and unloaded with very little effort. The electronics in the meal trailers are protected during journeys, and care is taken so that the rollers on the trolleys are not damaged” explains Andreas Bade, Regional Sales Manager of the STILL subsidiary in Frankfurt.



↑ Easy to secure loads: if the bracket hasn't been lowered, the tow tractor is not able to start.

→ The patented LiftRunner technology means that meal trailers can be lowered to floor level allowing for easy unloading.

→ The C frames are very versatile – depending on how they are connected they can accommodate two trolleys either on the left or on the right.

Powerful towing tractor

The electronic STILL R07 tow tractor is perfect for taking on gradients while also providing enough space for the two people that are needed for quickly unloading the meal trailers at the clinic's wards. The battery life lasts all day. At night it is reloaded and recharged.

Special load carriers, load stabilisation, approved for use on roads

Containers for mail, oxygen, bottled gas and cable reels round out the shipping equipment of the two STILL LiftRunners. By using spacers and securing brackets the contents of the shipments is safely secured in the pans when the tow tractor is moving. The securing brackets are standardised across the entire range of containers. During loading they are put in the vertical position. A clamping mechanism prevents the brackets from falling down. The container brackets are electronically linked with the R07. If a bracket has not been lowered before departure, the tow tractor will not be able to start. This means that there is no risk of injury from vertical container brackets or lack of secure goods.

The LiftRunner's are approved for use on public roads ensuring that they are able to safely drive everywhere on the clinic premises even at cross roads, multi-story car parks and junctions. In order to achieve this, both R07 tow tractors and C frame trailers were equipped with indicators, brake lights, reversing lights and license plates.



Flexible adaptation of the C frames

Sometimes two trailers are required for the shipments to the clinics and facilities at the edges of the premises. By installing an additional shut-off valve, the hydraulics that control the four-wheel drive in the C frames can be interrupted, meaning another trailer can be attached effortlessly.

Because they are flexibly adaptable, the STILL trolley trains are helping to make transport processes safer and more secure.



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