





SEMITRAILER



THE PROTECTION OF YOUR PROFIT MARGINS IN DISTRIBUTION



HD SR2: a new look at performance

Refrigerated transport is changing. Distribution via intensive urban delivery cycles poses new constraints for the equipment. The SR2 Heavy Duty, devoted to the distribution sector, reinforces all the stress areas to the maximum. Our expertise in the use of composite materials and our knowledge of operating conditions enables us to offer exceptional robustness whilst retaining a maximised payload and minimised fuel consumption.

In order to withstand frequent couplings, SR2 Heavy Duty has a reinforced floor and an offer of reinforced front chassis modules.

To withstand repeated dockings the stainless steel rear frame is fixed directly onto the reinforced panel edges and incorporates a 12 mm three-ply stainless steel sill. It is assembled by bolting, with no welding so no weaknesses, with a UHS(1) steel body structure providing maximum rigidity. The frame is integrally protected from impacts by 60 mm bumpers. The 8 stainless steel double-acting hinges move the doors away from contact areas and protect them.

Impacts are absorbed by the rear chassis module via exclusive deformable HRE rollers and the large central bumpers. Finally, all the panels have also been subject to specific, targeted reinforcements.



Shock absorbers with HRE elastomer rollers

They were developed and patented by our R&D Department and combine a very high capacity for absorbing horizontal impacts and a guarantee that rolling will be maintained vertically. They are made up of 2 cylindrical bumpers with a massive HRE elastomer core, made of a single material and cannot be deformed. They are fitted on a galvanised steel box fixed on the high inertia reinforcing arm of the chassis (height 160 mm).



Bolted removable kingpin with KPES energy diffuser

Frequent couplings, roundabouts, hard braking, etc. The kingpin is an essential safety area. The Lamberet KPES revolutionises the chassis-kingpin connection technology. It is bolted to limit the risk of being torn out or of wear. An elastomer layer dissipates the energy of impacts from the kingpin to the chassis. Maintenance is facilitated because it is possible to check it and replace it very cheaply.







2 front module heights for all uses

HD 55 FRONT MODULE:

With a thickness of 55 mm, its widened box structure provides maximum resistance. The spoiler for protecting the coupling heads prevents knocks from the fifth wheel. For intensive use by a third party (handling or RoRo), the "widened plate" option also provides "shielding" for the front sides under the bodywork.

HD 10 FRONT MODULE:

The HD 10 front module results from the self-supporting floor technology developed by Lamberet. It is innovative with a thickness of just 10 mm but a resistance adapted to the significant stresses of a distribution refrigerated semi-trailer. This module is ideal for vehicles with an interior height greater than 2.65 m, with a need to retain an overall height limited to 4 metres (depending on coupling height).





Innovation: Lamberet SR2 modular chassis

The chassis designed and manufactured by Lamberet is especially for refrigerated transport to offer you more robustness and safety:

> Increased track width to adapt to the larger body widths of refrigerated trucks (2.60 m) and offer better stability: 2090 mm as standard or 2140 mm as the "SuperStable" version (exclusive to Lamberet).

> Bolted modular design to facilitate maintenance and repair. The bolted connection offers more rigidity and a lower weight compared with the old single-piece cross-beams (exclusive to Lamberet).

 > H-shaped beams in UHS steel with reduced height of 180 mm giving a lower centre of gravity, benefiting roadholding.
> Expertise resulting from 50 years' experience.



55 mm



~×system

The response to the demands of carriers looking for real savings that can be exploited immediately on 100% of transport flows.

+ AERODYNAMICS - CONSUMPTION - CO₂



Aerodynamics

AEROTAIL SPOILERS:

Fitted on the rear doors, their deployment and concealment are automatic and do not require any additional action by the driver.

- Exclusive technology linked to the Lamberet double-acting hinges
- Opening and closing assisted by return spring
- Tested saving of 1% minimum in consumption with distribution profile



INTEGRATED DOOR LOCK BARS:

The stainless steel handles are embedded, as are the double-acting hinges. The slightly convex smooth rear face reduces the disturbances of parasitic drag, benefiting consumption. This "Eco-friendly" design also allows a gain in usable length of 40 mm to facilitate the loading of 33 Euro pallets in a multi-temperature setting. Marketing communications are also more visible and not "cut".

Protected rear doors

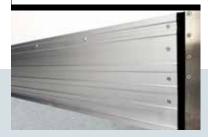
During manoeuvres, the doubleacting hinges keep the doors away from the dock (additional 40 mm). The integrated door lock bars make it possible to push the doors completely back against the sides making docking safe without the risk of catching. Each door leaf is thickened (90 mm) and strengthened by entirely composite profiles, and has better insulation capacity.



Sill made of 12 mm of stainless steel to resist docking platforms and 4 large rubber bumpers to withstand loading from the ground by forklift trucks.For the floor coating there is a choice between polyester, which is easy to maintain, aluminium that is resistant and quiet in the PIEK version, or mixed with aluminium decking at the entrance to resist being knocked by forks and then nonslip corindon for greater safety.

Reinforced HD 300 plinths

Exceptional plinth for exceptional stresses: single-piece along its entire length to prevent packaging being pulled off and long-term wear, fitted with 5 ribs that are 7 mm thick, a built-in return bonded and screwed into the floor for maximum watertightness, and a height of 300 mm, exclusive. It has the advantage of bonded and riveting fixing along the entire length with additional screwing at the frame entrance!





Bolted, reinforced HD stainless steel frame

The modular Heavy Duty stainless steel frame combines solidity, impact resistance, easy fast maintenance with low operating costs.

The vertical uprights, H-shaped beam type, are in stainless steel. They are bolted directly to the panel edges and also attached on the upper cross-beam, as they are on the stainless steel sill, by 4 UHS steel 12 mm brackets and bracket plates. In this way they provide optimum rigidity, a guarantee of longevity, an exceptional capacity to withstand impacts and incomparable roadholding.

The HD frame is free of welding and therefore weaknesses. Its entire height is protected by extra thick rubber shock absorbers. It incorporates 2x4 stainless steel double-acting hinges, also protected by stops when the doors are open.



CX PROFILES

The vertical uprights incorporated into the front face vector the air flow sideways and act on the vortex generated between the tractor and the body shell. The spoiler incorporated into the chassis accelerates the unit's cooling air renewal cycle.

"OPTIFLOW" PATENTED SIDE FAIRING:

Its "aircraft wing" profiled shape limits disturbance of the air flow and converts part of the deflected air into thrust to reduce aerodynamic disturbances and drag.

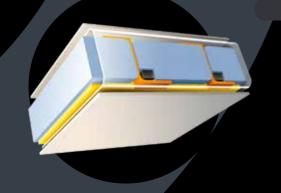




The development in the distribution of products under controlled temperature (food or pharmaceuticals) requires multicompartmental vehicles for fresh (positive cold) and frozen (negative cold) use at the same time. It is ESSENTIAL that partitioning of these compartments is perfectly insulated, watertight, modular, resistant and easy to handle.

ERGOWALL, the new LAMBERET bulkhead, fully meets all these criteria and is a real technological breakthrough via innovative, exclusive solutions. It is made up of two rigid, combined 1/2 panels, made with skins that are impact-resistant and have unmatched flexibility, combined with a shape memory insulation.

The hypercompact lifting assistance tool, favours the usable height under the bulkhead and reduces the risk of tangling the load. The ERGOWALL bulkhead with its lower weight reduces the handling stress for operators by a fifth, thus decreasing the risks of MSD*.



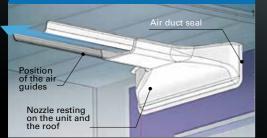
Expert in composite technology

The Lamberet insulating panels are the fruit of years of experience, research and development.

It is the mastery of a real technology exclusively dedicated to cold.

Associating composite materials with complex implementation and high insulating capacity, this technology gives our panel unique advantages: 16 % more insulating than a panel with metallic sidings, ideal for multi-temperature because it is non-conductive, without any metal and therefore no corrosion and economical to repair, waterproof and vapour proof.

The SR2 HD is equipped with panels strengthened with strong section inserts and reinforced with a thickened facing.



Patented IAFO system

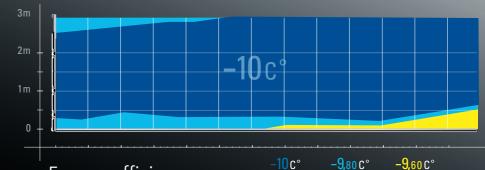
Internal aeraulics

Homogeneous control of air temperature at approx. 0.5°C, i.e. the objective of the standard, NF X15-140, required in pharmacy. Reduction in the unit's consumption.

Patented IAFO system

This revolutionary open triple component system is made up of:

- > A nozzle which channels the air flow from its outlet.
- > A central channel which straightens the air flow.
- > An open air guide system which channels this flow to the rear of the vehicle.



Energy efficiency

Increase in motor performance of the cooling unit

The CX profiles combined with the chassis spoiler reduce pressure drops and favour air intake depending on a vertical vector on the unit, optimising motor performance.

Better level of insulation and watertightness

The preformed polyester foam composite panels are 16% more insulating than the panels with metal coverings and injected foam. The single-piece, multi-lip seals (8) in very high quality rubber provide unmatched watertightness. They have the benefit of Teflon treatment to facilitate opening.

* Internal Air Flow Optimizer



PROTECTIVE ALUMINIUM MOULDINGS 100% single-piece, rivet-free, with no projecting parts! Impacts and friction are absorbed by the top and bottom side faces as well as by the exclusive CX System columns in the front face. The recessed side lights are not exposed.



ALUMINIUM FUEL TANK The Lamberet tank prevents the risks of

leaks from plastic containers and offers better durability and maximum safety should there be an accident. It has a double filling pipe and integrated anti-siphoning. Available as 175, 240 and 400 litre versions.



EDL ASSISTED ROTARY DOOR STOP Easy Door Lock, an exclusive patented Lamberet system, offers better ergonomics, gentle, user-friendly handling, with no danger of pinching. Locking the bolt on each door leaf limits the risk of unhooking to provide maximum safety.



LAMBERET DRYLIN SLIDING AIR HAND The support is bolted in a recess on the front of the chassis, protected from impacts. It slides on a Drylin monorail without maintenance or locking. The risks of MSD ** for the driver are reduced. The hose service life is extended, without being pulled out. 24S, 24N, 15-pin plugs included.



PROTECTIVE GRILLE & AIR CIRCULATION The front face has a grille and shock absorbers. Their design provides optimum air recycling and easy cleaning, in comparison with the closed plates, which are not very hygienic. With optional articulation, access to the unit is provided with no dismantling.



INDEPENDENT RAISING & LOWERING AND ADI The Lamberet 100% independent 3-button raising and lowering is pneumatic and independent of any electricity source so as to operate when uncoupled. The anti-unexpected movement system controls the parking brake on the SR to make the work of dock operators safe. With built-in interior controls on the left.



INTEGRATED DOCKING ASSISTANCE Protect the rear from violent impacts! Ultrasound sensors locate the effective distance up to the dock and trigger the successive application of the brakes. This optional system is entirely integrated into the chassis and the EBS to provide flawless reliability. The sensors are protected.



SAFELIGHT LED SIGNALLING BAR Ideally located at the top of the frame and protected by bumpers, the bar incorporates repeaters for scrolling indicators and brake/ side lights. It provides maximum visibility and safety. Powerful working lights and a camera can be added as an option.



SAFELIGHT LED ROTARY ANTI-IMPACT LIGHTS The new 100% LED rear signature patented by Lamberet provides greater safety and savings! Its lighting functions are independent and interchangeable. They are incorporated into a watertight, anti-breakage hulled box with 180° (+90°/+90°) rotation with an automatic return to the road position.



DISTRI+ PNEUMATIC ISOTHERMAL CURTAIN Ideal for use in distribution, the Distri+ curtain provides assisted automatic opening and closing. It is 100% pneumatic, independent even when uncoupled because it has no electrical power supply. It also facilitates loading with its width (2.42 m), optimised headroom and embedded sliders.



ROLL-ON/ROLL-OFF UNACCOMPANIED FERRY For sea travel the SR2 is fitted with front reinforcement plates for jack stands, 8 ferry rings, stands with rollers, an advanced BAE with shoes and ro-ro markings. As an option: round sill bar, anti-impact plates on rear doors, cooling unit protection, Dock/Off/Ship circuit-breaker.

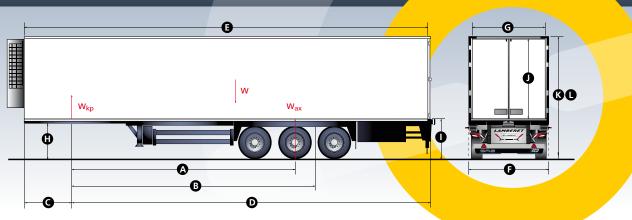


REAR LIFTGATE

Specifically designed and reinforced to optimise the integration of tailgates, the dedicated rear module may be completed with gutters protecting the truck bed in the road position and anti-fouling flaps between the last axle and the tailgate, preventing the platform from being contaminated with impurities.



TECHNICAL SPECIFICATIONS



Chassis / upper body dimensions and configuration

A Wheel base	7 m 45
B Virtual wheel base	8 m 105
C Front overhang (off unit)	1 m 60
D Rear length	12 m
E Interior length	13 m 41
F Overall width	2 m 60
G Usable interior width	2 m 46

SR2 turning circle

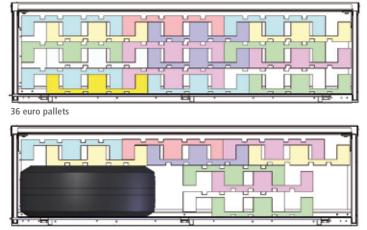
SR2 vehicle configuration	Without lift axle, without self-steering axle	With 1st lift axle, without self-steering axle	With 1st lift axle, with self-steering
Interior turning radius for an external turning radius of 12.5 m	6 m 04	5 m 31	6 m 12

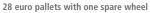
In order to be in conformity with the European directive 96/53 about the turning radius, the interior turning radius must remain greater than 5 m 30. For information, for a semi-trailer with a wheel base of 7 m 70, the radiia will be respectively: 5 m 78, 4 m 99 (not statutory) 5 m 84.

Coupling and discharge height for roof of K 85 mm/L 115 mm

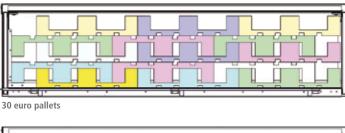
	EMPTY	LOADED	EMPTY	LOADED	EMPTY	LOADED	EMPTY	LOADED
H Coupling height	1 100	1 070	1 100	1 070	1 100	1 070	1 150	1 120
J Interior usable height	2 600		2 650		2 700		2600	
K Overall height HD55 / HD10	3 980 / 3 935	3 950 / 3 905	4 030 / 3 985	4 000 / 3 955	4 080 / 4 035	4 050 / 4 005	4 030 / 3 985	4 000 / 3 955
L Overall height HD55 / HD10	4 010 / 3 965	3 980 / 3 935	4 060 / 4 015	4 030 / 3 985	5 010 / 4 065	4 080 / 4 035	4 060 / 4 015	4 030 / 3 985
I Rear floor height								
Road	1 290	1 260	1 290	1 260	1 290	1 260	1 340	1 310

Pallet storage box





(1)UHS: Ultra High Tensile Strength / *MSD: Musculo-Skeletal Disorders





22 euro pallets with one spare wheel



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