

## Introduction to load restraint

### ► Who is responsible in Germany?

The shipping agent, the vehicle owner and the driver. The shipping agent (shipping either for himself or for third parties) is responsible for roadworthy loads. The owner (the person who owns the vehicle and has control of it) is responsible for the suitability of the vehicle. The driver is the person who knowingly operates or controls a vehicle and is responsible for roadworthy stowage of the load and making sure load platform, bodywork and any load securing equipment are in sound and serviceable condition. Everybody has responsibilities.

### ► Duties of shipper, vehicle owner and driver in Germany

§ 22 of the German Road Traffic Act states: the load, including load restraint equipment, should be stowed and secured that it cannot slide, roll-over in any direction, wander because of vibration, fall off vehicle or make the vehicle tip over or produce avoidable noise, even during heavy braking or dangerous maneuvers. Generally accepted technical rules should be followed. § 37 (4) of the German Accident Prevention Regulations states that the load should be secured to hinder cargo from falling over and to prevent avoidable noises.

§ 412 of the German Commercial Code: Unless circumstances or common usage dictates otherwise, the dispatcher must load, stow, secure and unload the goods safely. The carrier is responsible for safe loading. § 823 of the German Civil Code define compensation. § 831 of the German Civil Code contains definitions of liability.

§ 30 of the German Road Traffic Licensing Regulations governs the requirements relating to the condition of vehicles; § 31 of the same legislation stipulates that responsibility for vehicle operation lies with the owner and driver. The vehicles must be safe to operate, for example, show no technical defects and all load restraint required for the intended journey must be available. The vehicle must also be roadworthy, which includes the vehicle operator being trained accordingly to secure the load adequately (§ 30 + § 31).

### ► EN 12 195 Part 1 – Calculation of securing forces

Vehicles over 3.5 t total weight, use various securing methods such as blocking, lashing or a combination thereof for securing loads in road vehicles which are defined in part 1.

Information about the blocking force „BC in daN“ of shoring elements is important for the calculation (BC = blocking capacity).

### ► Recognized technical rules in Germany – VDI 2700 ff

In addition to EN 12 195-1, VDI Guideline 2700 ff provides a summary of physical principles and specific examples for load restraint.

The guidelines make many references to the relevant statutory rules and standards. The list of specific examples of load restraint is being extended continuously. The training requirements for people responsible for the load restraint is also described.

The VDI guidelines are definitive in legal disputes in Germany.

### ► EN 12 195 Part 2 – Lashing straps

- EN 12195-2 regulates the labeling and handling of lashing straps.
- All lashing straps must be marked with a legible label.
- If label is no longer attached or if it is no longer legible, the strap can not be used.
- Straps can not be used if they show clear signs of damage, e.g. tears, cuts stitching breakage or corrosion
- It is not permitted to knot the straps.
- The driver must carry at least one set of instructions for use (supplied with the product) and be able to provide these upon request.
- There is no general expiration date for lashing straps.

### ► Standards for securing loads

ISO 27955	ISO 27956	EN 12 640	EN 12 641	EN 12 642	EN 283/284	EN 12 195	EN 12 195	additionally: VDI 2700 ff
Lashing points	Lashing points	Lashing points	Trailers	Trailers	Trailers	Load restraint		
Passenger vehicle, wagon, light commercial vehicle	Light commercial vehicle	Flatbed trucks - > 3.5t	Tarpaulin		Swap bodies	Section 1: Calculating securing forces	Section 2: Lashing strap made from synthetic fibers	Recognized regulations for securing loads