Translation from magazine of Belarusian Association of International Forwarders www.baif.by

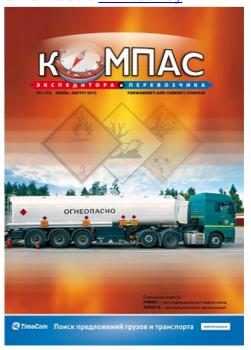
Cargo securing.

Ignorance of standards is no excuse

Anatoly Shmelev

Senior expert – Deputy director, LLC "Russurvey" anatoly@kapitanshmelev.ru

The European committee on International transportation of dangerous group working team recommended including on the p. 7.5.7.1 of ADR (Accord européen relatif au transport international des marchandises Dangereuses par Route) the following amendment: "The requirements of the present paragraph are considered satisfied if dangerous goods are secured in accordance to EN 12195-1:2010 standard". Thus, all the countries-members of ADR are committed to observe the specified rules of dangerous goods securing.



There are no such rules in Russia. The parties, involved in the process of road transportation, do not dispose of a single document to regulate cargo securing. Hence – damages to cargoes and vehicles, road accidents. The concerned amendment obliges the Russian Federation, as a member of ADR, to develop and approve the rules of cargo securing in accordance to EN 12195-1:2010 standard, as well as enforce them.

Unlike Russian colleagues, since 2005 carriers in Belarus are guided by "The rules of safe loading and securing of cargo in a trailer of a motor vehicle", based on a more rigorous EN 12195:2003 standard.



Ever since the ADR came into force, the situation in Germany and Belarus has been taking a pretty interesting turn. Both countries have national standards for cargo securing, and for all possible types of cargo, transported by road. In Germany it is the Standard of German Engineers (Verein

Deutscher Ingenieure) VDI2700 "The cargo securing on motor vehicles" ("Ladungssicherung auf Straßenfahrzeugen"). This standard has been operational for over 20 years and became the foundation of EN 12195:2003 standard. It is EN 12195:2003 standard Belarusian rules of safe loading and securing of cargo in turn are based on. Thus, the national standards, effective in both countries, impose more rigorous requirements to nonhazardous cargoes securing, than the new EN 12195-1:2010 imposes to securing of dangerous cargoes. Turns out, the securing of dangerous cargoes in Germany is accomplished according to the new standard, at the same time the Police inspection of nonhazardous cargoes is guided by the national DIN EN 12195-1 (April 2004) standard, which is basically analogous to EN 12195:2003, yet more stringent.

In Belarus the situation remains the same: cargo securing in accordance to "The rules of safe loading and securing of cargo in a trailer of a motor vehicle" allows successful passing the Police inspection in Germany. However it is worth noting, that the overwhelming majority of Belarusian caries do not have a slightest clue about this Rules existence.

Here is the list of some paragraphs of VDI2700, just for a general knowledge:

- 1. Paragraph 1: Training program;
- 2. Paragraph 2: Forces acting on cargo;
- 3. Paragraph 3.1: Securing devices application guide;
- 4. Paragraph 3.2: Cargo securing means and equipment;
- 5. Paragraph 4: Load distribution plan;
- 6. Paragraph 5: Quality control system;
- 7. Paragraph 6: Partial and composite loading;
- 8. Paragraph 7: Cargo securing for international transport (KLV);
- 9. Paragraph 8: Passenger and light commercial vehicles securing;
- 10. Paragraph 8.1: Passenger and light commercial vehicles securing on automobile transporters;
- 11. Paragraph 9: Paper reels securing;
- 12. Paragraph 11: Reinforced concrete cargo securing;
- 13. Paragraph 12: Drinks cargo securing;
- 14. Paragraph 13: Wide and heavy-weight cargo securing:
- 15. Paragraph 15: Antiskid materials;
- 16. Paragraph 17: Cargo securing in trailers of dumper-trucks;
- 17. Paragraph 19: Steel strip, list and structural steel securing.

Besides, there are 12 more German Institute for Standardization – DIN (Deutsches Institut für Normung) standards regarding cargo securing.

The existence of such a number of rules and standards itself disputes the ability of a driver to take a correct view and apply sufficient securing. As a rule, the only representative of the Shipper at the place of loading is the driver of a truck loader, and the driver of a motor vehicle is the only person on behalf of Carrier and Forwarder.

Forwarders keep working out instructions that the driver has to assess the sufficiency of packing and control appropriate loading and securing. Undoubtedly, properly trained drivers are capable of

many things; the impression is that the majority of them dodge the duties of controlling the process of loading.

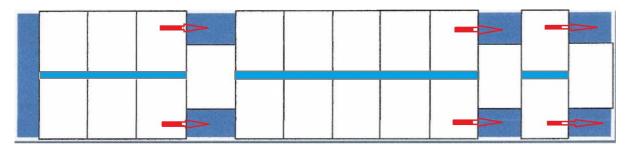
An illustrative example is the loading of 21 pallets of tomatoes, formed on ISO (1200x1000 mm trays) into a refrigerator-trailer.

Standard refrigerator-trailer loads 26 such pallets. However, shipments of fruit and vegetables often include only 21, which conform to a shipment, delivered in one refrigerator container to the ports of Europe by sea. Compact usual loading in two rows alongside, without gaps, leaves empty space in the back of a trailer, and it is the area, the drivers tend to move pallets to. At the same time, in order to reduce the rare axle load the demand to load single pallets in front part.





Pallets deformation in front part of refrigerator-trailers







Pallets deformation in front part of refrigerator-trailers

The result is predictable. Under the action of inertial forces unsecured pallets tilt forward, fill gaps in loading, and become deformed. And every party is trying to avoid responsibility: motor vehicle

driver claims he, allegedly, had no chance to influence Shipper's (the loading truck driver's, actually) actions; the loading truck driver claims he fulfilled Carrier's (the motor vehicle driver's, actually) requirements.

In situations like this one may refer to CMR Convention (Convention on the Contract for the International Carriage of Goods by Road) Article 17 p. 4, which states that the Carrier is relieved from responsibility if the loss of damage of cargo is a direct consequence of a special risk, inseparably connected with replacing, loading, transportation or unloading of cargo by the Shipper or the Consignee, or persons acting on behalf of the Shipper or the Consignee.

What qualification should a driver have to be capable of assessing the risk of cargo damage? The Directive No. 2003/59/EC defined the following basic qualification requirements for drivers of certain motor vehicle types:

Licences C, C+E, C1, C1+E

- 1.4. Objective: ability to load the vehicle with due regard for safety rules and proper vehicle use:
- Forces affecting vehicles in motion, use of gearbox ratios according to vehicle load and road profile, calculation of payload of vehicle or assembly, calculation of total volume, load distribution, consequences of overloading the axle, vehicle stability and centre of gravity, types of packaging and pallets; main categories of goods needing securing, clamping and securing techniques, use of securing straps, checking of securing devices, use of handling equipment, placing and removal of tarpaulins.

Licences D, D+E, D1, D1+E

- 1.6. Objective: ability to load the vehicle with due regard for safety rules and proper vehicle use:
- Forces affecting vehicles in motion, use of gearbox-ratios according to vehicle load and road profile, calculation of payload of vehicle or assembly, load distribution, consequences of overloading the axle, vehicle stability and centre of gravity.

Seemingly, the driver has the capability and the duty to assess the risk of damage, but too often it is impossible to do due to complexity of concealed defects of cargo units under packing film. This is when the experts of transport companies are to make the entrance, ensure appropriate loading and securing, give clear and definite instructions to driver and to the Shipper's employees through driver. Unfortunately, it requires at least a basic cargo securing experience, which is not available to the majority of forwarding companies experts.





www.kapitanshmelev.ru