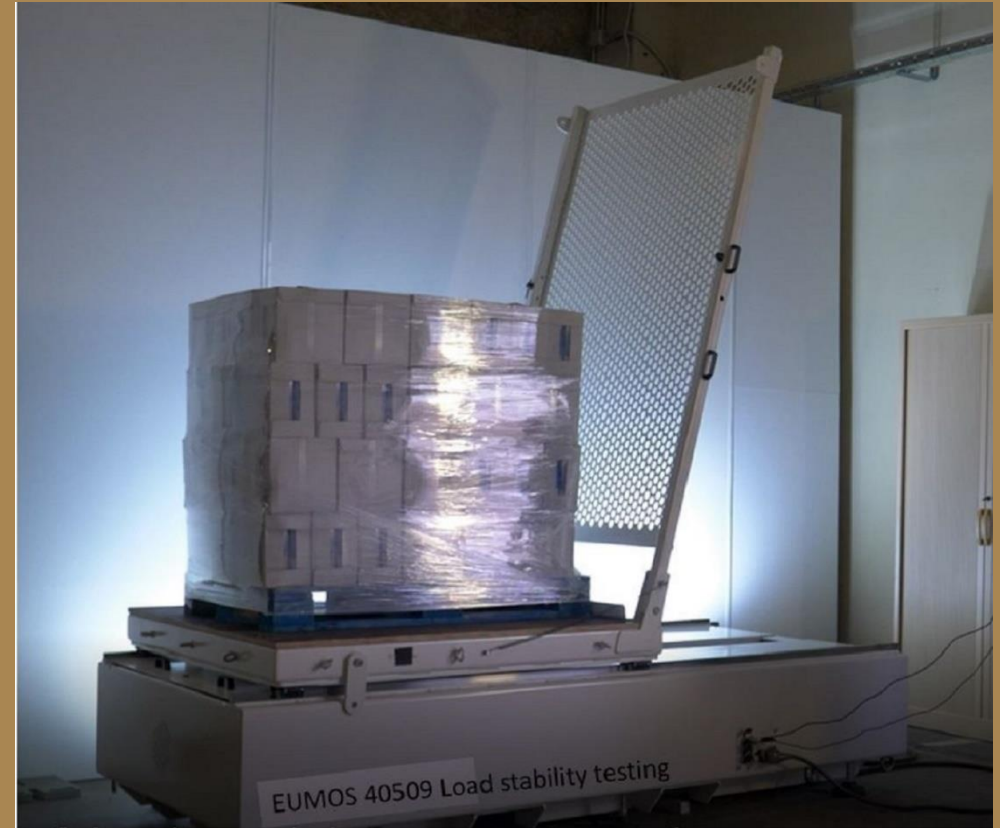




CS-TS bv

Cargo Securing Testing Services

About
CS-TS
since 2019





Our story

- CS-TS is an independent and specialized consultancy and testing agency for transport and pallets
- We offer services to manage the risks and stability around load units, packaging and pallets, load securing and transport safety.
- We test and advise in compliance with the related requirements according to the regulations and standards, and we deliver the certificates.



Our story

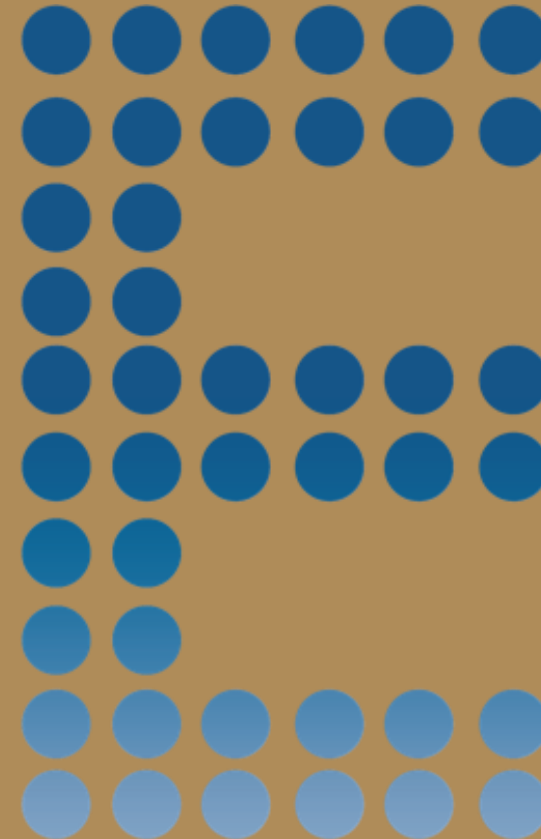
- Reduce the cost per pallet;
- Use less plastic packaging and support in sustainability;
- Be in compliance with Belgian law;
- Prevent damage;
- Increase safety in internal transport;
- Increase security warehousing;
- Improve pallet stability.

What we do !

Safe transport is in everyone's interest, and this starts with the correct packaging of the goods on load units. The European Directive 2014/47/EU, finds that correct packaging must comply with the EUMOS 40509 standard.

This standard defines a precise test procedure that each load unit and its packaging must comply with. CS-TS has the appropriate testing facility to carry out the EUMOS 40509 test, and more, our facility is mobile, so we can perform these tests on site.

CS-TS is a dynamic company that focuses on certifying and making transport-safe load units (pallets).



EUMOS
40509

Article 45bis. Loading of the vehicles: specific regulations

§ 3. In this paragraph, **loading unit** is understood to mean: **a quantity of goods that has been bundled or otherwise brought together in such a way that the handling, stacking and storage can take place as one packaging unit.**

If the primary packaging or loading unit of a good is damaged or is not sufficiently strong for the safe transport of the goods, **the packer and/or shipper** must additionally encase the goods in transport packaging that is undamaged and strong enough to allow adequate load securing. to make.

The shipper provides the carrier he calls on in **advance** in **writing** with all information that the carrier deems necessary to stow the goods. **That information consists of at least:**

- 1° the nature of the loading unit;
- 2° the mass of the load and each load unit;
- 3° the position of the center of gravity of each loading unit if it is off-centre;
- 4° the external dimensions of each loading unit;
- 5° the restrictions on stacking and the direction to be applied during transport;
- 6° the friction factor of the goods, if it is not included in Annex B of EN 12195:2010 or in the Annex to the IMO/UNECE/ILO standards;
- 7° any additional information required for the correct fuse.

Article 45bis. Loading of the vehicles: specific regulations

The cargo securing methods are in accordance with the most recent version of the standards below:

Standard Subject

- EN 12195-1 Calculation of the lashing forces
- EN 12640 Lashing Points
- EN 12642 Strength of the loading floor structure
- EN 12195-2 Lashing straps made of synthetic fibres
- EN 12195-3 Lashing Chains
- EN 12195-4 Lashing wire ropes
- ISO 1161, ISO 1496 ISO container
- EN 283 Swap bodies
- EN 12641 Tarpaulins
- EUMOS 40511 Poles – Stanchions
- **EUMOS 40509 Transport – Packaging.**

What is a EUMOS 40509 Test ?



Whats is a EUMOS 40509 Test ?

The principle of the test is to apply a defined horizontal acceleration to a (TLP) Testing load platform
simulating full power when a road truck takes a turn at full speed



0,5 G

Whats is a EUMOS 40509 Test ?

The principle of the test is to apply a defined horizontal acceleration to a (TLP) Testing load platform

Simulation of the full power when a truck hits the brakes full



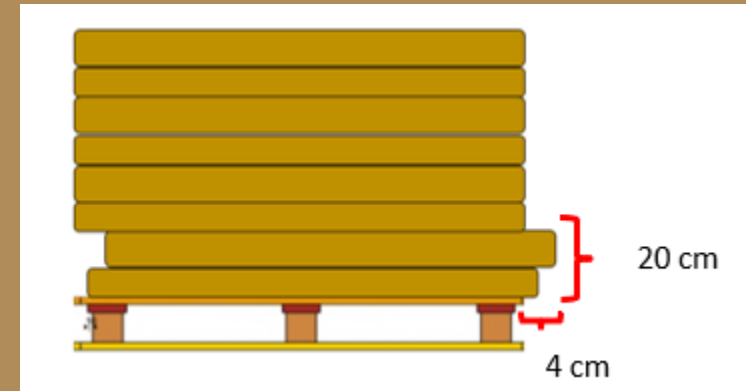
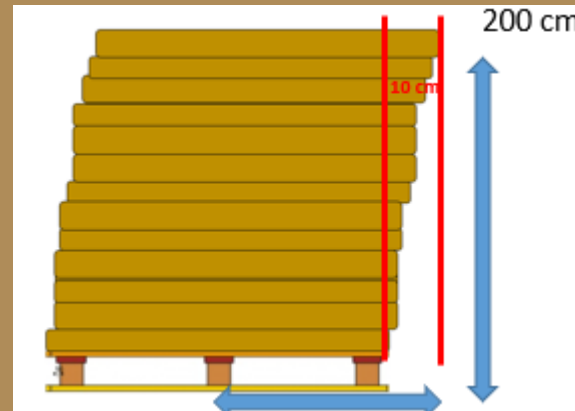
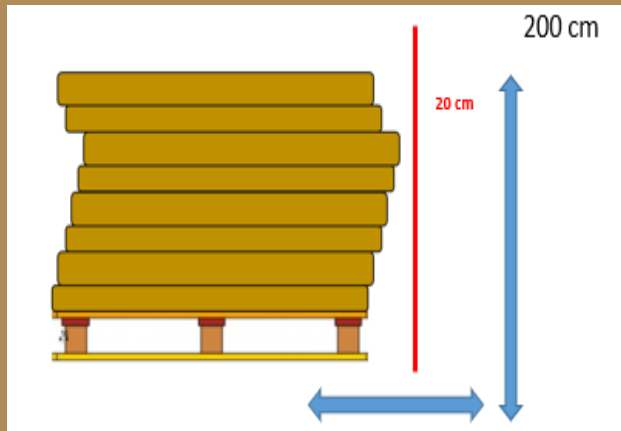
0,8 G!!

What is a EUMOS 40509 Test ?

The principle of the test is to apply a defined horizontal acceleration to a (TLP) The loading platform

The loading platform is accelerated in forward direction with a specific acceleration of at least $k \times g$ on average for at least 300 ms and then decelerated

- The elastic displacement of all parts of the test load unit must not exceed 10 % of the total height of load unit
- The permanent displacement of all parts of the test load unit must not exceed 5 % of the total height of load unit
- The permanent displacement in the bottom 20 cm of the test load unit is to be less than 4 cm
- No visible structural damage or leakage of products at the end of the test.



What we do !

Carry out Eumos tests with our mobile test lab on site, anywhere in Europe, at the manufacturer, shipper or packer's location

- ➔ Certification after successful testing in accordance with Eumos 40509 standard
- ➔ Can be shown to comply with legal requirements in police security checks & transport damage disputes

CS-TS is the only one in Europe that offers an efficient, fast and user-friendly solution for the shipper, packer, manufacturer...



What we do !

Testing the unit and its packaging on site has the following advantages:

- no pre-or post-transport of each unit to a test lab;
- possibility of adjustment of the packaging if initial results are insufficient;
- during testing: optimization of winding, racking or shrink covers and strapping;

CS-TS delivers an EUMOS 40509 transport safe certificate for each load unit that meets the various parameters of the test. This allows, in roadside safety checks by the authorities, to demonstrate that the packaging meets the legal requirements. This can also be used to exclude any dispute in the event of transport damage.

The concept has been developed in such a way that you just have to set up your load unit, we do the rest!



What we do !

Optimization of your load units and packaging



The advantage

Optimization of your load units and packaging

Transport safety

- In the warehouse
- On truck



The advantage

Optimization of your load units and packaging

Cost each pallet



Dutch cookie bakery 230 pallets every day

Before testing



780 gram on 23 My wrapping film

Cost each pallet : 1,94 € (2,49€/kg)

Daily cost: 446,2€

After testing



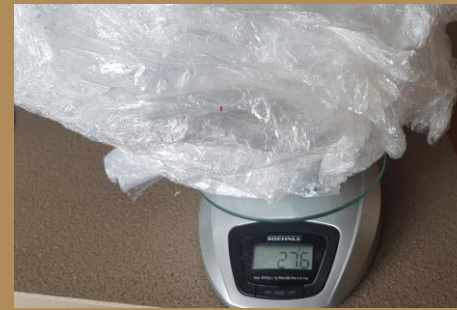
280 gram on 17 My wrapping film

Cost each pallet : 0,84€ (3,68€/kg)

Daily cost: 193,2€

The advantage

Optimization of your load units and packaging
sustainability



Dutch cookie bakery 230 pallets every day

Before testing



**780 gram on 23 My wrapping film
Each day: 174.4 Kg plastics**

After testing



**280 gram on 17 My wrapping film
Each day 64,4 Kg palstics**

Savings 90 Kg each day

The advantage

Optimization of your load units and packaging

Eumos 40509 certified

- Police check
- Insurance

➤ **Truck may only continue driving after presentation of EUMOS certificates for the loading units**

➤ **Insurance rejects damage in case of failure to submit a Eumos 40509 certificate**



What we do !

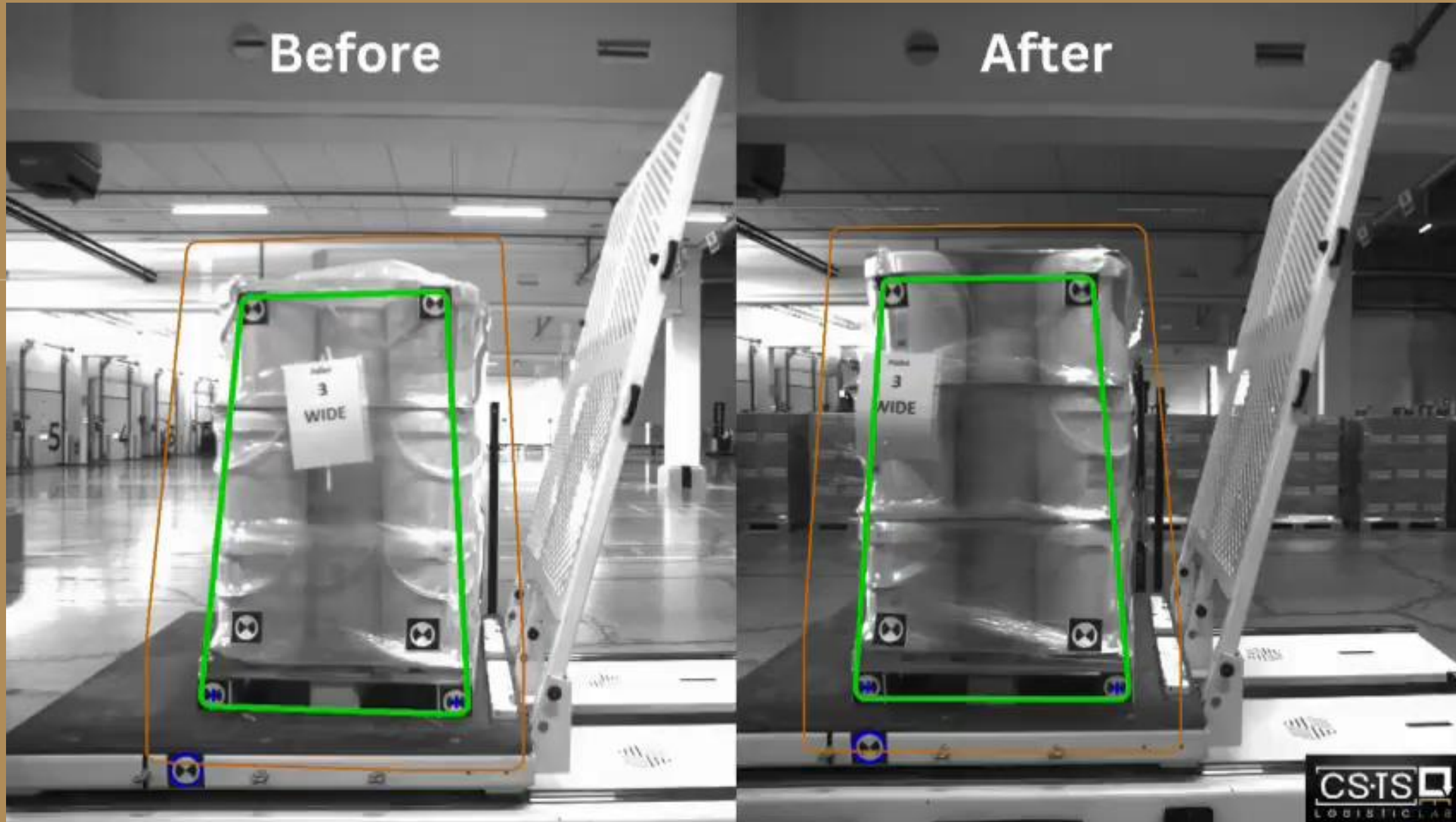
We can test load units and packaging with following specifications:

- Max weight: 1800 kg 0,5 G / 1000Kg on 0,8G
- Max dimension:L150 cm X W150 cm X H250 cm

In addition we are able to perform FEF-200 tests



Result



Contact us



Vijverstraat 3
8450 Bredene Belgium



www.cs-ts.be
info@cs-ts.be



+32 (0) 475 58 22 03