

# ZOOM

FOCUS ON TECHNOLOGY



PRODUCT COMPARISON

## DAILY Bumpers.

Maximum Safety,  
Quality and Reliability.



in collaboration with  DEKRA

**Genuine Parts**  
HIGH PERFORMANCE

# Features.



## Safety.

The bumper has the function of preventing, limiting or absorbing the impact of a collision, which is why **safety** is a fundamental feature.

IVECO Genuine bumpers are able to absorb the energy generated in an accident, transmitting it to the entire bodywork. In fact, thanks to their excellent resistance to deformation and impact, they always provide **maximum protection** not only for the driver, but also for all the components located in the front part of the vehicle.



To increase safety, as an additional frontal protection for the bumper, it is possible to install the pushbar from the IVECO Accessories Line, with European certification, which can **increase the active and passive protection** of the vehicle and pedestrians.



## Quality and reliability.

IVECO Genuine bumpers guarantee maximum **quality** in terms of raw materials and production processes, in scrupulous compliance with strict quality standards.

They are also characterised by their **reliability** and precision of assembly which ensures optimal strength of the structure.

In addition, aesthetic finishes and longevity are guaranteed by the robustness of the materials and by the optimal protection against wear.

An **IVECO Genuine** bumper is designed specifically for the vehicle and is exactly the same as the "first fit" component it will replace.



Its **perfect compatibility** also guarantees the correct aerodynamic flow and requires shorter repair times, resulting in improved cost-effectiveness of the repair.

# How they are tested.

The IVECO Genuine bumpers were tested together with three competitor brands by the independent German testing institute DEKRA.

All the tests were carried out by DEKRA technicians, in laboratories and workshops, in compliance with the following standards:

- Bending test UNI EN ISO 178:2019
- Izod resilience test UNI EN ISO 180/A:2013
- Vicat softening test UNI EN ISO 306:2014
- Cold impact test FIAT 9.55253:2006
- Material scanning (DSC) ISO 11357-1-2-3, microscopic analysis ISO 3451-1:2019
- Assembly precision, aesthetic finishes and assembly/disassembly times according to SAE scale



## About Dekra.

DEKRA has been active in the field of safety for more than 90 years. Founded in 1925 in Berlin as Deutscher Kraftfahrzeug-Überwachungs-Verein e.V. (German Motor Vehicle Inspection Association), today it is one of the world's leading expert organizations.



## The results.

The tests were carried out on the front bumpers of the Daily M.Y. 2016, using as a benchmark three competitors representing three different quality levels, with particular attention to 4 different parameters:

### Safety

Resistance to deformation and hot/cold impacts

### Quality

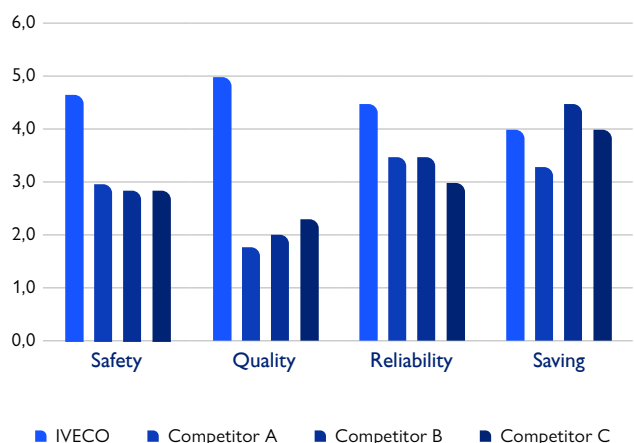
Characteristics of the raw material

### Reliability

Assembly precision and aesthetic finishes

### Saving

Quality, repair time (disassembly/assembly) and costs



# Safety.

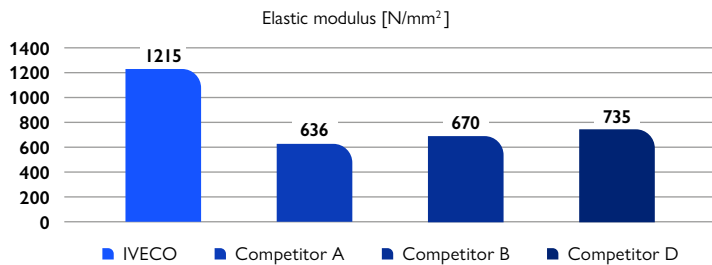
## Resistance to deformation and hot/cold impacts.

These are the characteristics tested by DEKRA to evaluate SAFETY.



### Resistance to deformation

With the bending test, DEKRA measured the elasticity, the property that allows the bumper to deform under the action of an external force and to regain its original shape when the stressing cause disappears; the elastic modulus is the value that determines the stiffness of the material.



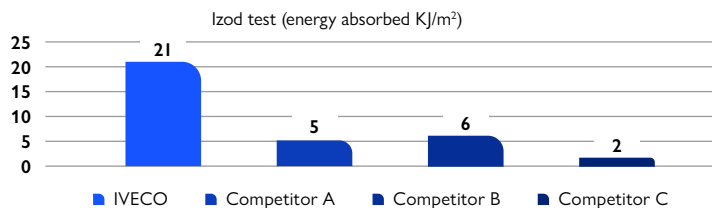
2x

**The IVECO Genuine bumper has a DEFORMATION RESISTANCE which is double that of its competitors.** By deforming without breaking, **it limits collision damage** at both high and low speeds.



### Resistance to hot/cold impacts

It is measured in absorbed energy. Using the Izod test, DEKRA measured the maximum effort that every bumper was able to support before breaking; hot and cold impact tests were carried out (at temperatures of +23 °C and -30 °C) to simulate different environmental conditions.



10x

**The IVECO Genuine bumper has a RESISTANCE TO HOT/COLD IMPACTS which is ten times greater than its competitors.**

In tests in a climatic chamber, which simulate extreme environmental conditions (with temperatures of -45 °C and +180 °C), the IVECO Genuine bumper did not show fractures or crack formation. In addition, the Vicat softening test, which measures the temperature at which the bumper begins to change its state of aggregation from solid to fluid, did not show any anomalous values.

**In any environmental conditions, the IVECO Genuine bumper is better at absorbing the energy generated in a collision, always ensuring maximum SAFETY and durability.**

**THE TESTS CARRIED OUT BY DEKRA SHOWED THAT THE IVECO GENUINE BUMPER IS THE BEST IN ITS CLASS IN TERMS OF SAFETY.**

# Quality.

## Characteristics of the raw material.

This is the main parameter tested by DEKRA to determine the QUALITY of the bumper.



### Characteristics of the raw material

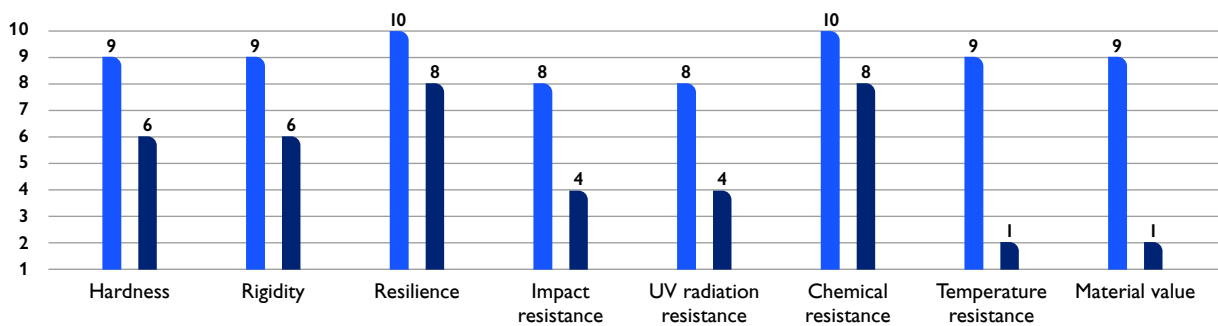
These establish the overall mechanical performance of the bumper, and are fundamental in evaluating its actual QUALITY.

**Using the differential scanning calorimetry test, DEKRA showed that the raw material used by IVECO is different from that used by the competitors:**

■ IVECO: Polypropylene (PP)

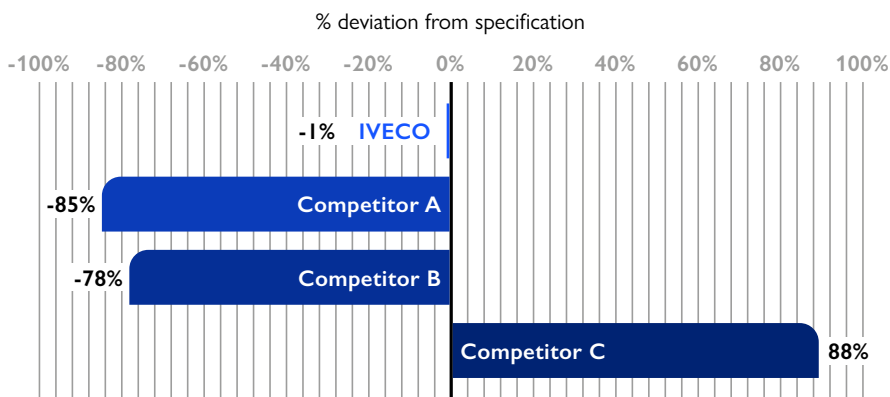
■ Competitors A-B-C: Polyethylene (PE)

Both thermoplastic polymers, but with completely different characteristics; for this reason, after the laboratory tests, DEKRA assigned a score from 0 to 10 on various quality aspects:



**By means of microscope observation, DEKRA verified the talc content.**

Deviation from the original talc specification leads to a decrease in mechanical performance; lower percentages show a worsening of resistance to deformation, higher percentages show a worsening of impact resistance.



The IVECO Genuine bumper is the only one to have a talc percentage in line with the original specification of the component.

**Only the raw material of the IVECO Genuine bumper is suitable for use on bodywork subject to impacts. In fact, DEKRA assigned an overall double score in QUALITY compared to the competitors.**

**THE TESTS CARRIED OUT BY DEKRA SHOWED THAT ONLY THE IVECO GENUINE BUMPER HAS THE RIGHT RAW MATERIAL CHARACTERISTICS TO PROVIDE REAL QUALITY.**

# Reliability.

## Precision of assembly and aesthetic finishes.

These are the qualities verified by DEKRA to determine the RELIABILITY of the bumpers.



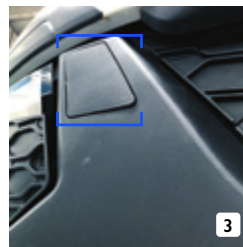
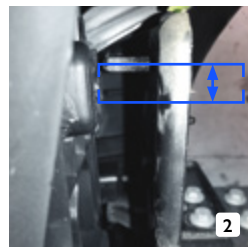
### Precision of assembly

A well-assembled bumper provides structural stability, ensures quick and easy fitting and removal, and prevents annoying vibrations and friction noises during vehicle use.

The three main components which determine PRECISION OF ASSEMBLY are:

- 1 Metal attachments (presence and type)
- 2 Plastic structures (strength and positioning)
- 3 End caps (assembly and finish)

After the checks, the DEKRA technicians assigned an overall score between 0 and 5:



IVECO	★★★★★
Competitor A	★★★↓
Competitor B	★★★★★
Competitor C	★★★★↓

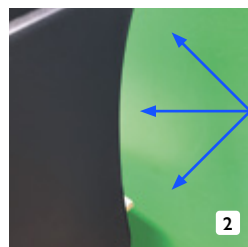
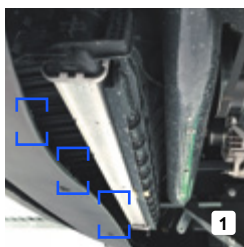
### Aesthetic finishes

In addition to protecting against impacts, the bumper is a critical element in the aesthetics of the vehicle. An excellent aesthetic finish also reduces any extra costs for corrective actions on the bodywork.

The three main characteristics that ensure an excellent AESTHETIC FINISH are:

- 1 Quality of the material (colour, graininess, deformation)
- 2 Finishing of the production process (plastic burrs)
- 3 Packaging conditions (surface scratches)

After the checks, the DEKRA technicians assigned an overall score between 0 and 5:



IVECO	★★★★★
Competitor A	★★★★
Competitor B	★★★★★
Competitor C	★



**ALL THE TESTS CARRIED OUT BY DEKRA SHOWED THAT THE IVECO GENUINE BUMPER IS THE BEST IN ITS CATEGORY IN TERMS OF RELIABILITY.**

# Saving.

## Intervention quality and time (disassembly/assembly) and costs.

These are the variables checked by DEKRA to determine the SAVINGS made by the bumpers.



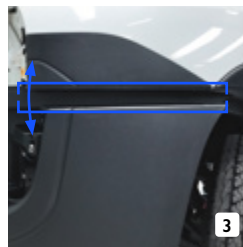
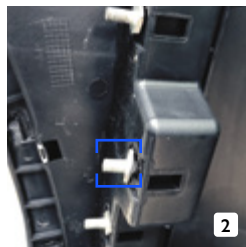
### Intervention quality (disassembly/assembly)

The better the intervention quality, the less necessary it will be to carry out additional repairs and thereby increase labour costs.

The three main aspects to check in order to evaluate the INTERVENTION QUALITY are:

- 1 Positioning of the chassis brackets (alignment)
- 2 Quality of the attachments (presence and integrity)
- 3 Compatibility with other body parts (aerodynamic properties and final result)

After the checks, the DEKRA technicians assigned an overall score between 0 and 5:



IVECO	★★★★★
Competitor A	★★★★
Competitor B	★★★★★
Competitor C	★★★



### Intervention time (disassembly/assembly)

The less the time spent on intervention, the less the cost of labour. In the workshop, the DEKRA technicians measured the average time for disassembly/assembly of all the bumpers examined:



IVECO



Competitor A  
Δ +10 min



Competitor B



Competitor C  
Δ +15 min



### Costs

The COSTS include not only the initial investment, but also all the expenses incurred in repairs and maintenance. Only the IVECO Genuine bumper was shown to have the best qualities of safety, quality, reliability and durability, providing real protection of your investment from all the additional costs of repairs and maintenance.

**THE DEKRA TESTS DEMONSTRATED THE EXCELLENT VALUE FOR MONEY OF THE IVECO GENUINE BUMPER, WHICH REPRESENTS THE BEST INVESTMENT IN TERMS OF SAVINGS IN ITS CATEGORY.**

# **IVECO**

**Drive the road of change**

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