SAFETY BARRIERS
EUROPEAN STANDARDS AND GREEK REALITY

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EXTENDED SUMMARY

ABSTRACT

European standards that concern safety barriers on road restraint systems have been set since 1998. Eleven vehicle impact tests have been recognized in these standards, which are identified by the combination of three parameters: the total vehicle mass, the impact speed and the impact angle. Nine containment levels turn up as a result of the routine impact tests. In parallel every type of safety barriers is recognized by the impact severity that causes violent deceleration to the passengers as well as its working width after the dynamic deflection that is suffers following the impact with the vehicle.

The countries of the European Union have moved toward the necessary impact tests, as to judge the capability of the safety barriers that are used in their road system and to classify them to their corresponding containment levels.

The Greek road system uses steel safety barriers and New Jersey concrete safety-walls. The weakness they present due to their construction is known, as well as their behavior in real conditions of vehicle impact. As a result it is imperative to judge them according to impact tests and classify them according to containment levels.

KEY WORDS: European standards, road safety, safety devices, safety barriers, restraint systems