

Information sheet of ERV Edition 3



Information to ERV Edition 3

New evaluation methods and new evaluation criteria have been introduced in Edition 3. The main changes include the introduction of the Biofidelic Dummy and an evaluation matrix based on the trauma room criteria of DGU (German Accident Surgery Association) of international standards. The Biofidelic dummy used, corresponds approximately to an average adult human in terms of its mass distribution, movement and fracture behavior of the skeletal structure. This procedure is an excellent way of achieving a technical, reproducible evaluation of the test results. This categorizes passed tests (in a star qualification system from one to three stars), making the evaluation more transparent and comparable.

Certification in accordance with ERV Edition 3 is currently possible at the following test laboratories:

- Beschussamt Ulm
- Beschussamt München
- Beschussamt Mellrichstadt



Source of images: CTS dummy-solution GmbH & Co. KG



Evaluation basis

Different criteria are included in the evaluation of the test, depending on the explosive tests and explosive areas. A certificate and test report are issued for each successfully completed test. The three different test variants include the following:

1. Roof explosion

No certificate is issued for roof explosions if, according to the assessment scheme, the

- armor elements
- splintering indicator
- surface of the interior
- contact sensor

do not satisfy the applicable requirements.

If the above requirements are met, a passed test is categorized as follows:

- **3 stars** are awarded if all requirements are met without any limitation
- **2 stars** are awarded if the contact sensor has indicated according to the evaluation scheme and the splintering indicator has not penetrated
- **1 star** is awarded if an opening is visible in the armor elements

2. Floor explosion

No certificate is issued for floor explosions if, according to the assessment scheme, the

- armor elements
- splintering indicator
- surface of the interior
- Biofidelic Dummy

do not satisfy the applicable requirements.

If the above requirements are met, a passed test is categorized in the form of an evaluation matrix as follows:



- 3 stars are awarded if the Dummy is undamaged (functionality and movement options of the Dummy are maintained)
 2 stars are awarded if the Dummy is slightly damaged (functionality and movement options of the Dummy are altered)
 1 stars is awarded if the Dummy is demaged
- **1 star** is awarded if the **Dummy is damaged** (functionality and movement options of the Dummy are significantly altered)

3. Side explosion

No certificate is issued for side explosion if, according to the assessment scheme, the

- armor elements
- surface of the interior
- Dummy
- pressure values

do not satisfy the applicable requirements.

If the above requirements are met, a passed test is categorized in the form of an evaluation matrix as follows:

- 3 stars	are awarded if the Dummy is undamaged (functionality and movement options of the Dummy are maintained)
- 2 stars	are awarded if the Dummy is slightly damaged (functionality and movement options of the Dummy are altered)
- 1 star	is awarded if the Dummy is damaged (functionality and movement options of the Dummy are significantly altered)

4. Additional tests

If additional tests need to be performed due to identifiable weak points and additional seating positions, these are included in the evaluation of the respective test. The additional tests are documented exclusively in the test report. Thus, the worst result determines the overall assessment and can lead to devaluation.