



Shattered windscreen of toughened safety glass

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□ Sequence of events

- Due to unknown reasons, the windscreen of a combine is shattered during the traversing movement. The trainee and the 5-year-old son of the driver were also in the cab and observed the harvesting process.
- Suddenly there was a loud bang and the windscreen of the cab was completely shattered. The driver stopped the combine with the hydrostatic drive immediately.
- Because of the colossal break force of the combine with hydrostatic drive on tracks the son of the driver was thrown through the front opening on the cutting table and trapped by the cross auger

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Assessment

Nr: 1231 MT 09/11-1/6026 of 30 November 2011

Subject: Combine accident of 11 August 2011

- ❑ **Result:**
- ❑ The technical assessment of the used combine showed no evidence of a technical malfunction, a defect respectively an error in material or workmanship.
- ❑ Shattering of the windscreen by a collision of an occupant, the operation of the windscreen wiper or the retrieved feeder house slat can be largely eliminated.
- ❑ A glass beverage bottle lying on the bottom of the cab is able to shatter the toughened glass of the windscreen when it hits the windscreen because of a full breaking.
- ❑ A spontaneous rupture of the toughened glass is technically not excluded
- ❑ The problem of the present vehicle is that in case of rupture of the windscreen there is **no** further fall protection.

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Film

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Affected kinds of machines

- ❑ Combine harvesters
- ❑ Forage harvesters
- ❑ Self-propelled sprayers
- ❑ Potato and beet harvester
- ❑ Other self-propelled machines
- ❑ Tractors partially affected



□ Amendment of ISO 4254-1

4.5.2 Platforms

4.5.2.2 Platforms - except those only used when the machine is stationary and which are less than 1 000 mm above the ground - shall be equipped with a foot guard, hand rail and intermediate rail around the edge of the platform with the dimensions shown in Figure 4. No foot guard shall be provided at the entrance of the platform.

In addition, if static machine components are used as a foot guard, handrail and/or intermediate rail, the requirements given in 4.5.1.3.1 and 4.5.1.3.2 shall be fulfilled. Toughened safety glass does not meet these requirements.

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**Thank you
for your attention**