

Test report summary

Musca bracket 2500 joules UR350

Report No. TR-12-001
Date: 2015-10-02
Place: Troax Test Center

Purpose

To evaluate the function of the Musca system with UR350 anti-collapse panels in combination with a Musca bracket with 150mm stand-off from the pallet racking.

Test material

Panel: UR350 2200x1500, 2200x1000 mm
Fixing: Musca bracket with kit secure

The test was done in an installation with UR350 panels with the newly developed Economy bracket with a new reinforcement device which holds the panels in place. The total measurements of the meshing was L=8800mm and H=4000mm (1500+1500+1000) with approx. 500mm floor distance. The pallet rack was a standard EAB with beams L=2750mm.

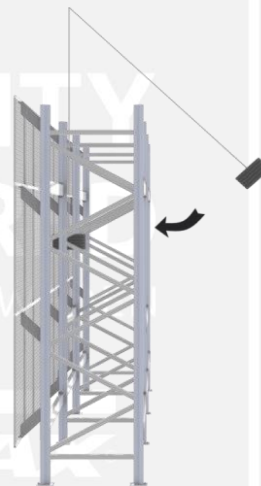
Test procedure

To reach the energy of 2500 J the 160 kg pendulum was raised 1591 mm from the starting point X. The pendulum was adjusted so the impact hits the mesh and not the frame of the panel.

Impact energy

Pendulum mass: 160 kg
Pendulum speed: 20,1 km/h

$$W = m \cdot g \cdot h = 160 \cdot 9,82 \cdot 1,591 = 2500 \text{ J}$$
$$W = m \cdot v^2 / 2 = 160 \cdot (20,125 / 3,6)^2 / 2 = 2500 \text{ J}$$



Results

The energy of 2500 Joule was achieved. The installation withstands the impact energy and absorbs all energy. All panels, brackets and retainers remained attached.



Ola Eriksson
R&D Manager Troax AB



Martin Ask
Product Manager A&R