

# **TEST REPORT - Panel Curve** Smart Fix 1600 Joules

 Report No.
 TR-20-006

 Date:
 2020-01-29

 Place:
 Troax Test Center



## **TEST MATERIAL**

Panel: Panel Curve, 2050x800 mm, ST20 Post: 60x40x2200 mm Fixing: Smart Fix bracket Floor fixing: Bolted to test rig

#### PURPOSE

To document the effect of a high energy impact test from inside the hazard zone with Smart Fix machine guard system, the 60x40 posts and the ST20 panel curve.

## **TEST PROCEDURE**

Pendulum mass: 140 kg Pendulum speed: 17,2 km/h Impact energy: 1600J

The test was performed in accordance with the pendulum test method stated in ISO14120:2015 Annex C. Panels and posts were assembled with the Smart Fix system according to the assembly instruction and then fixed to the test rig with M10 bolts. The pendulum was adjusted so the impact hits the panel 1466mm above the floor, 2/3 of the total wall height of 2200 mm. To reach the energy of 1600 J the pendulum was raised 1164 mm from the starting point.

### RESULTS

The Smart Fix system with panel curve performed well in the test and withstands the high energy impact. The panel and the posts absorb all energy and obtain a remaining deformation. The total deflection of the panel curve was 323 mm.

Despite the high energy impact there was no penetration and no parts departed. The Smart Fix bracket shows no deformation.



Address Troax AB Box 89 SE-335 04 Hillerstorp Sweden **Telephone** +46 (0)370 828 00 **Reg.No.** 556093-5719

Website www.troax.com E-mail info@troax.com