

TE-14 Chain Saw Cut Resistance Tester

Purpose:

Apparatus is intended for testing resistance to cutting by a chain saw of personal protective equipment designed to protect against the risks arising from the use of hand-held chain saws.

Apparatus is made according to the requirements and apply for the tests according to the following standards:

EN 381-1 Protective clothing for users of hand-held chain saws – Part 1: Test rig for testing resistance to cutting by a chain saw
(ISO 11393-1)

Description of the device:

The device was made according to requirements of standards EN 381-1 (ISO 11393-1) with ability to adjust a test speed up to 30 m/s and consists of digital speed display, digital timer (in sec/100) of measurement for free running stopping time, system for positioning adjustment of chain saw and lowest positioning safety stopper for test mount protection, transparent protective cover and distance plate for determination of distance between chain and test sample or calibration pad. On the device with the application of different accessories for mounting samples can perform testing on different kinds of personal protective equipment:

- **Leg protectors** according to EN 381-1 + EN 381-2 (ISO 11393-1 + ISO 11939-2)
- **Footwear** according to EN 381-3 (ISO 11393-3)
- **Gloves** according to EN 381-4 (ISO 11393-4)
- **Gaiters** according to EN 381-8 (ISO 11393-5)
- **Upper body protectors** EN 381-10 (ISO 11393-6)

Dimension: 1050(L) x 750(W) x 1415(H) mm

Weight: 85 kg

Power supply: 230V ~ 50Hz

Power consumption: 2000W

Operating principle:

The test rig has been designed to apply a moving chain saw to personal protective equipment in such a way that both the speed of chain and the amount of kinetic energy applied are controllable. At the moment of test the chain is not at the power (physically disconnected) and moves solely under the influence of its own momentum, together with that of a flywheel to which it is connected. The chain is then allowed to pivot down into the test sample. The result of test is observation whether or not the sample shows a cut-through at given test speed.

