BlueImpact Single Drop HIC-meter

Before use

Check the packing slip to see if you have received all the parts.

Warranty

The HIC meter has a warranty period of 1 year by normal use of the device. Normal use is drop heights at max. 3.3 meters and Gmax 400.

Preparing HIC meter

Before you can use the HIC meter to perform HIC measurements, the battery needs to be fully charged.

- Connect the supplied charging adapter to the HIC meter.
- Plug the charging adapter into a power outlet.
- When the `CHARGE` LED no longer flashes red but is constantly green, the meter is fully charged and ready for use. The charging time is approximately 2 to 3 hours.
- Screw the cap back onto the charging connector so that no moisture or dust can get in.

Measuring, preparation
Press the [on] key for about 1 second. The following message appears on the display:

To perform a measurement, press and hold the [on] key again and the next command will be displayed:

Then release the handle so that the HIC meter falls down.

Points of attention when drop:

- Pay attention to the surface.
- Note that the HIC meter cannot fall on your feet.
- Release the handle at once.
- Keep your arm as still as possible when releasing it.

After the measurement

After the measurement you will see the following data on the display:
- Fall height
- HIC value
- G value
- dt (T2-T1)

Next measurement

Press the [on] key for 1 second and you will see the message [drop ball] again.

The previous measurement data have now been deleted and you can take another measurement.

Note: Keep the ball as still as possible when measuring the HIC. Too much movement at the moment of release can cause deviations in the measurements.

Practical situation

Make sure you know the critical fall height of the playground equipment.
Keep the HIC meter at this height.
The following values must not be exceeded:

HIC value	1000
G value	200

In this case, the substrate is sufficient in relation to the appliance that is installed.

Calibration

According to EN1177:2018 sensors needs to be calibrated every 2 years.

Uncertainty test on reference surface according to EN 1177:2018

Carry out a series of ten consecutive drops from the same drop height and on the same test position continually (within 15 min) on a reference surface.

Discard any obvious incorrect results and calculate the standard deviation of the calculated HIC and the measured gmax.

A standard deviation below 5 % of the ten calculated HIC and the ten measured gmax values is considered satisfactory. If this is not the case, maintenance or calibration operations shall be conducted, and a verification performed.