

The Geotechnics Impact Tester (GIT) is used to determine the Impact Value (IV) on a range of construction materials

For the test method, please refer to ASTM D-5874 / AS 1289 6 9.1

Your GIT carry case should contain the following items:

- Geotechnics Impact Tester
- Two coaxial cables
- One polyurethane check ring
- Quick guide

1. Pre-test check

It is important to check the functionality of your GIT before performing a test.

- Place the GIT on a solid, smooth surface e.g. a kerb or a step.
- Note the IV on the check ring.
- Place the ring centrally beneath the drop weight the correct way up - this is stated on the ring.
- Connect the coaxial cable to the handle and meter box. (Note: these are 'twist' connectors, not 'push' connectors.)
- Press the 'On' button on the meter box.
- Stabilise the impact tester by stepping on the base of the guide tube.
- Draw the hammer up to the guide tube stopper and allow it to drop freely onto the check ring.
- Note the IV displayed on the meter box.
- Reset by pushing the 'On' button and repeat steps f - h four times.
The IV readings should match the value recorded on the check ring ± 2 .
Extreme hot and cold temperatures may affect the IV of the check ring (the control temperature is 20°).
- Return the check ring to the carry case.

2. Test

- Place the GIT on a flat test surface that has been cleared of loose material.
- Withdraw the locking pin.
- Connect one of the coaxial cables.
- Press the 'On' button.
- Stabilise the impact tester, draw the hammer up, and allow it to drop freely onto the surface.
- Repeat the previous step three times and record the highest IV.

3. Trouble shooting

If the meter box does not turn on, try replacing the battery. The battery must have at least 8.9 V remaining for the meter box to function reliably.

- To access the battery, use a 10 mm spanner to remove the bolts which attach the meter box to the guide tube.
- Remove the bottom cover of the meter box with a Philips-head screwdriver.

- c. Remove and exchange the battery.
- d. When reassembling the meter box, ensure that the silica-gel sachet is properly restrained. If the silica colour has changed to orange, a new sachet will be required.
- e. Do not over-tighten the bolts and screws when reassembling.

4. Hints & tips

- a. The check ring is identified by a serial number to match its calibration certificate.
- b. To help prevent a 'catch-strike' hammer drop, always drop the hammer with the locking eyelet facing away from the catch.
- c. Always disconnect the cable when returning the impact tester to its case.
- d. If the handle end plug is missing, please replace as soon as possible.
- e. Do not expose the check ring to direct sunlight for prolonged periods.
- f. If cleaning is required use a lightly dampened cloth and ensure dry before returning to case. The hammer weight can be cleaned with a steel brush.
- g. We do not recommend using this instrument in the rain. If the GIT has been exposed to rain/ excessive moisture, please contact the Measurement & Calibration Centre for advice.
- h. Prevent corrosion of the hammer by applying a light coat of long-lasting oil when storing for extended periods.
- i. Never use this instrument directly on concrete or other surfaces with an IV >99.

5. Calibration

It is recommended to have your impact tester serviced and electronically recalibrated by an authorised calibration laboratory on an annual basis. Contact The Measurement & Calibration Centre as per details below.

6. Warranty

Geotechnics warrants your GIT against malfunction under normal use conditions for 1 year from the date of purchase. The warranty excludes normal wear and tear; and damage caused by accident or mis-use.

Failure to properly set up, use and care for this product can increase the risk of damage.

Other than battery changes, do not attempt to take apart, repair, service, or modify the impact tester. Doing so could damage your impact tester and may void your warranty and calibration.

7. Contact us

Company Name	Contact Number	Email	Address
Calibration/Repair: The Measurement & Calibration Centre Ltd	0800 CALIBRATE 09 356 3510	Calibration@themcc.co.nz	1 Hill Street, Onehunga, Auckland, 1061
Technical Queries/ Replacement Parts: Geotechnics Ltd	0508 223 444 09 356 3510	Enquiry@geotechnics.co.nz	