



**ELE**  
International

## **ELE Superpave Gyratory Compactor**

Features and Benefits Summary

## ANGLE OF GYRATION IS FULLY ADJUSTABLE

- Unlike other machines on the market the angle mechanism is locked in place once set, allows for consistent compaction, density and void content measurement.
- Machines that have auto adjust (dynamic angle change) make the use of belts and chains. These mechanisms stretch and fade over time, thus affecting the telemetry of the machine and therefore effecting results.
- The angle is easily adjustable so that research applications can be achieved. These machines ensure reliable, consistent repeatable results.

## RUGGED DESIGN – BUILT TO LAST

- The build quality is first class, with 20mm thick side plates, heavy-duty tie bars and an extra rigid frame, the machine has an extremely high design life.
- At 500kg the machine demonstrates maximum rigidity, avoiding flex under load, thus eliminating variability in results often seen on cheaper less rigid machines. REPEATABILITY!
- A high quality powder coat is applied to all outer surfaces to provide durability that will last a lifetime.
- The unit, considering its weight, has a small footprint in the lab, lending itself ideal to fit in the tightest of spaces.

## VARIOUS MODES OF TEST TERMINATION

- The test can be ended via a wide range of test parameters:
  - Density
  - Voids
  - Number of gyrations
  - Specimen compacted height
  - Temperature
- Intuitive, user-friendly software guides the user step-by-step through set up and test

## COMPACTION OF GROUND TYRES

- With ever increasing use of ground tyres in various regions of the world, the Gyratory Compactor has in built cooling systems and temperature monitoring facilities to make sure samples are fully cured before they are extruded, avoiding sample swelling, few if any manufacturers are able to provide this feature set.

## NO MECHANICAL WORK TO CHANGE SAMPLE SIZE

- There is no requirement to make any changes to the machine when changing between 100 mm diameter and 150 mm diameter samples, saving huge amounts of time in test set up.

## AUTOMATIC LOADING AND UNLOADING OF SAMPLES

- No heavy lifting is required by the operator to perform tests.
- No other offering on the market is as user friendly and simple to use, via the use of the simple slide in/slide out feature this machine makes lightweight of manual handling issues attributed to other machines on the market. Ensures the health and safety of the operator.
- With the option of pneumatic or hydraulic extrusion mechanisms, safety can be guaranteed even when 'sticking' is encountered.

## DATA ACQUISITION IN REALTIME

- There are a number of preset data acquisition modes that can be selected via the software for:
  - Shear stress
  - Temperature
  - Number of gyrations
  - H min
  - Density
- Temperature measurement is unique to this type of products; no other product on the market provides this critical parameter.
- When using ground rubber the test is often deemed complete upon satisfaction of assured height, this can be monitored effectively via the use of the temperature measurement feature.

## HIGH QUALITY SPEED CONTROL

- A high specification motor is controlled by an industrial inverter. This ensures unsurpassed accuracy in the speed of operation and maximum adjustability.
- This makes sure tests are consistent. Utilization of the inverter ensures accurate results via both 50 and 60 Hz electricity supply.
- Other manufacturers are known to use household drills to drive the compactor.

## NO. OF GYRATIONS IS USER-SELECTABLE

- At the push of a button, the number of gyrations per test can be easily adjusted from 1 – 999, resulting in greater test flexibility for research type work when working outside of the normal testing standards.

## DATA CONTROL AND EXPORT

- PC control data can be stored, accessed and manipulated via a great number of methods
- The unit gives the ability to connect remotely from anywhere in the world to see real time data capture, never be late in sending or receiving data reports again.