



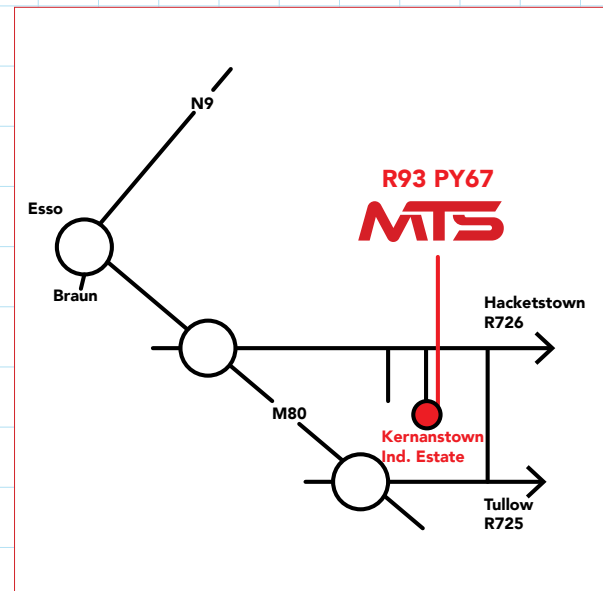
ACCREDITED CONSTRUCTION MATERIALS LABORATORY

Building Confidence in Construction



**19 Kernanstown Ind. Estate
Carlow
R93 PY67
Ireland**

**+353 59 913 0044
info@mtsltd.ie
mtsltd.ie**



Independent Materials Testing for the Built Environment

MTS Limited was founded in 1993 to provide an independent quality control service to local authorities and construction industries.

Laboratory Testing

- Aggregates
- Soils
- Concrete
- Masonry Units
- Asphalts
- Bituminous Emulsions

On Site

- Testing
- Sampling
- Coring



MTS Ltd is an Independent materials testing service providing laboratory and on-site testing to the Civil Engineering and Construction Industries. Established in 1993 MTS operates from a purpose built facility in Carlow town.

INAB accreditation was first awarded by the National Accreditation Board in October 2000. Subsequently, the scope of our accreditation has been continuously extended.

Our range of services includes: Site investigation, laboratory and field testing of soils, aggregates, bituminous and cement bound materials, road markings and other road materials.



Site Work

At MTS Ltd, our trained and audited technicians are ready to assist our clients with their on-site testing needs. Senior personnel are required to have qualification in the faculties of Civil Engineering or the Sciences who support engineers, contractors and producers within the construction and civil engineering sector.

We are INAB accredited to conduct a range of on-site testing. Specialised and fully equipped vans are readily available and provide a nationwide service. Offering responsive and reliable service throughout Ireland, construction and civil engineering clients have benefited from our professional expertise on-site as we consistently exceed expectations.

Our on-site services can include certified sampling which is accompanied by chain-of-custody certificates, ensuring transparency in areas of dispute, quality control and compliance.





- CBR
- Cube Making
- In Situ Density - Core Cutter Method
- Laying Records
- Moisture Condition Value
- Nuclear Density Gauge
- On Site Sampling
- Plate Bearing Test
- Rolling Straight Edge
- Sand Replacement Test
- Skid / Slip Resistance (Pendulum)
- Slump Test & cube making
- Concrete & asphalt coring
- Site Investigation / Trial pits
- Texture Depths
- Aggregate, Soil & Asphalt sampling



Asphalt

MTS provides an extensive range of testing for all bituminous materials including HRA, SMA, coated macadams and surface chippings.

The scope of our testing compliments requirements from the European asphalt product specifications and Transport Infrastructure Ireland, TII publications.

Our laboratory-based testing facility is located in Carlow; fully accredited by INAB to IS EN 17025, Testing and Calibration Laboratories. We also provide on-site support, QA/QC checks and testing conducted by our experienced field technicians.

We service Local Authorities, aggregate producers and end users meeting testing requirements and offering consultancy services to all clients.

MTS support asphalt manufacturers in R&D programmes ranging from mix design to product certification.





- Binder Affinity
- Binder Content and Grading analysis
- Binder Recovery and Penetration
- Bulk Density
- Core cutting
- Determination of Voids
- Dimensions
- Hardness of Mastic Asphalt
- Hot Sand Test
- Max Density
- Percentage Refusal Density (PRD)
- Nuclear Density Gauge Testing
- Rate of Spread (Tile test)



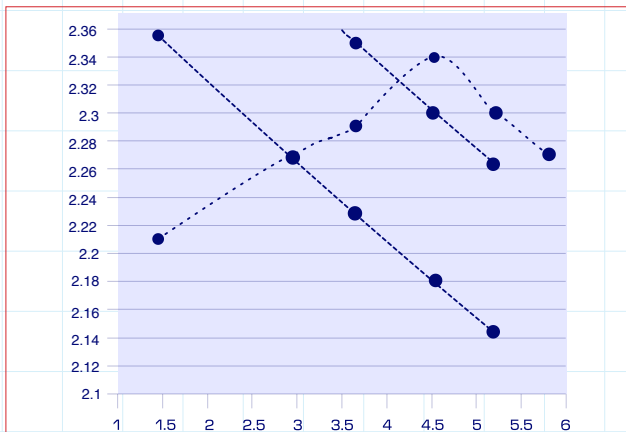
Aggregates

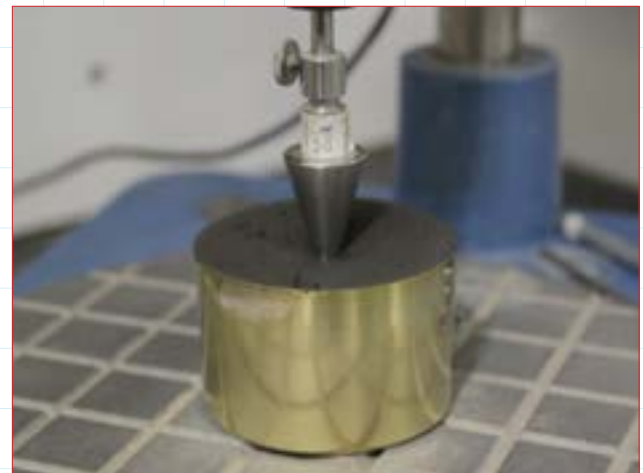
MTS offer an extensive range of physical, mechanical and chemical testing for all aggregates types.

The scope of our testing compliments requirements from the European aggregate product specifications and Transport Infrastructure Ireland, TII publications.

Our laboratory-based testing facility is located in Carlow; fully accredited by INAB to IS EN 17025, Testing and Calibration Laboratories. Our team of field technicians support a wide range of on-site testing.

We service Local Authorities, aggregate producers and end users meeting testing requirements and offering consultancy services.





Physical Testing

- Particle Size Distribution
- Percentage Crushed and Broken Surfaces
- Flakiness Index
- Particle Length
- Shell Content
- Shape Index

Chemical Testing

- Chloride
- Acid Soluble Sulphur
- Water Soluble Sulphur
- Total Soluble Sulphur

Mechanical Testing

- Aggregate Crushing Value
- Aggregate Impact Value
- Compaction Factor
- Laboratory Reference Density and Water Content
- Los Angeles Abrasion Value
- Methylene Blue Value
- Micro Deval
- Polished Stone Value
- Magnesium Sulphate Soundness
- Ten percent Fines Value
- Uniformity Coefficient
- Particle Density and Water Absorption
- Soundness
- Water Content

Concrete

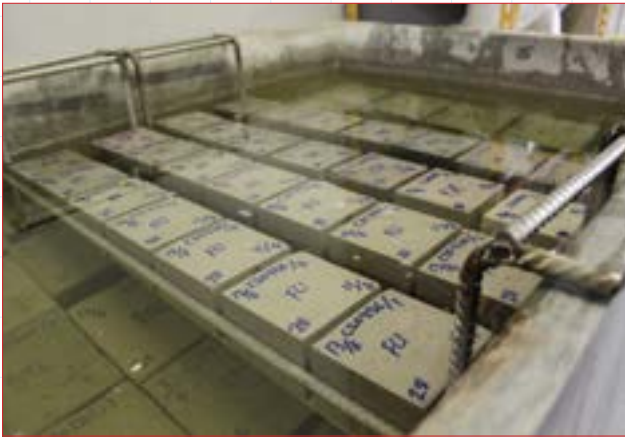
MTS Ltd. perform numerous services to support main and sub-contractors, engineers and concrete suppliers by monitoring and evaluating conformity through each stage of construction process.

We conduct laboratory and field testing from our fully accredited facility in Carlow. MTS Ltd. are fully independent and recognised leaders in concrete accredited laboratory services.

Our laboratory adheres to the highest standards of precision while remaining a dependable and responsive partner throughout the construction process. From our ISO 17025 accredited lab, we perform compressive strength testing, concrete coring services including sampling and testing, so our clients can always be sure they're placing concrete in accordance with the approved concrete design.

We also offer services for sampling and testing concrete building blocks with testing bundles available to satisfy requirements for CE Marking and product certification. Similar bundles are also presented for site QC checks .





MTS Ltd. pride ourselves with our unparalleled reputation as a leader in concrete & concrete block testing as well as coring & fresh concrete sampling services.

We endeavour to partner main and sub-contractors, engineers and concrete suppliers with concrete laboratory and field-testing services that offer the quality assurance to assure their concrete products and projects are successful.

BLOCKS

- Block Dimensions, Density and Strength
- Moisture Movement
- Water Absorbtion by Capillarity
- Flatness

CONCRETE

- Curing, Density & Compressive strength of Concrete Cubes/Cores
- Slump Testing

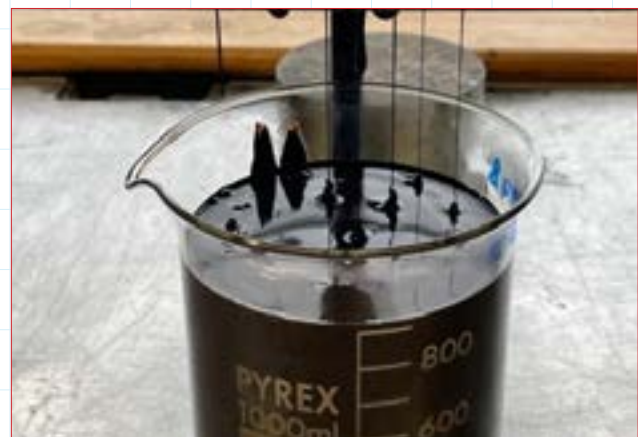
Emulsions

MTS Ltd. are the leading authority in Ireland for emulsion testing. Our specialist emulsion laboratory provides several combinations of testing that are then used to verify compliance with specification. Our lab can facilitate cationic emulsions, including polymer modified versions.

Results from laboratory tests provide valuable information for suppliers and users including:

- Key properties influencing transport, storage and performance.
- Quality control of product during manufacturing
- Adherence to specification

MTS Ltd. run seasonal programs for local & national government authorities providing on-site sampling services which support of laboratory testing facility.





Emulsion

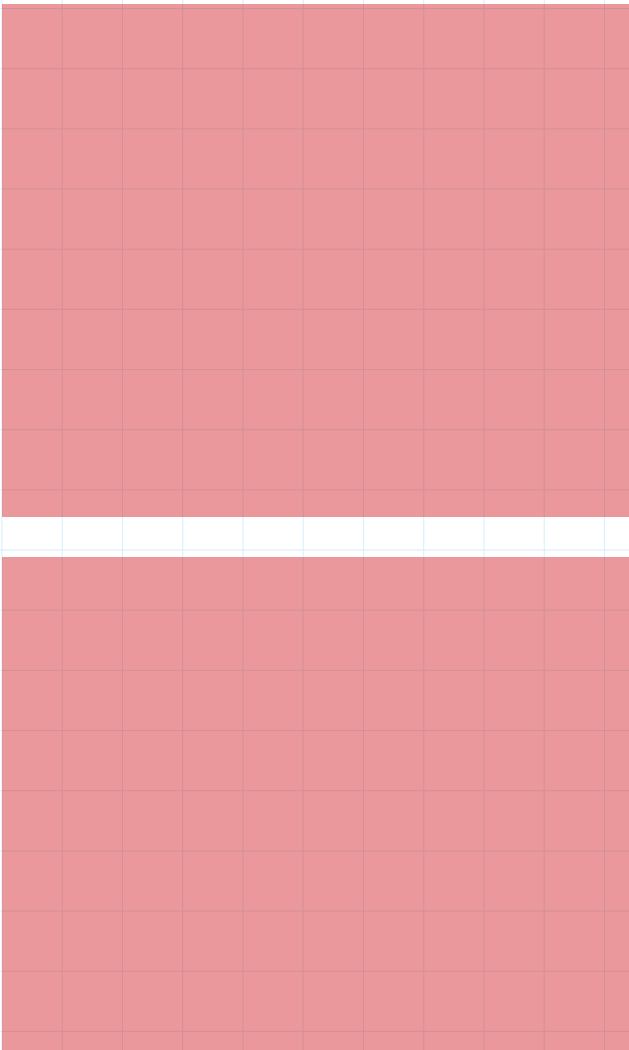
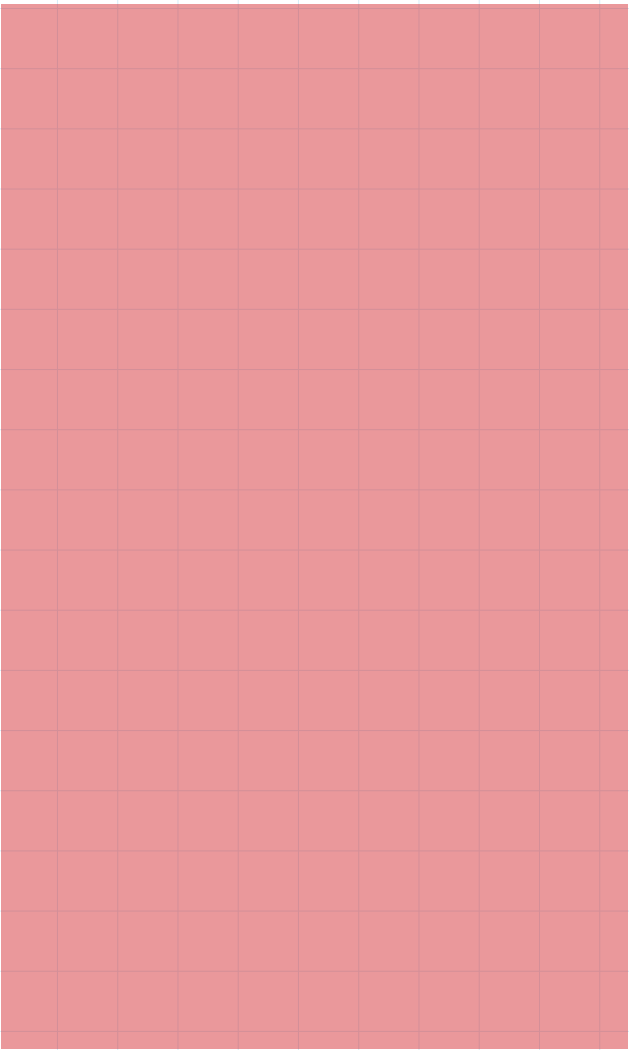
- Residual Binder after Distillation
- Breaking Value
- Residue on Sieving, 500µm
- Viscosity, Redwood No. II @ 85°C
- Penetration of Residue from Distillation
- Softening of Residue from Distillation
- Binder Content by Water content¹

¹ The binder content when determined by EN 1428 shall be defined as, 100 - (minus) water content.

Soils

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