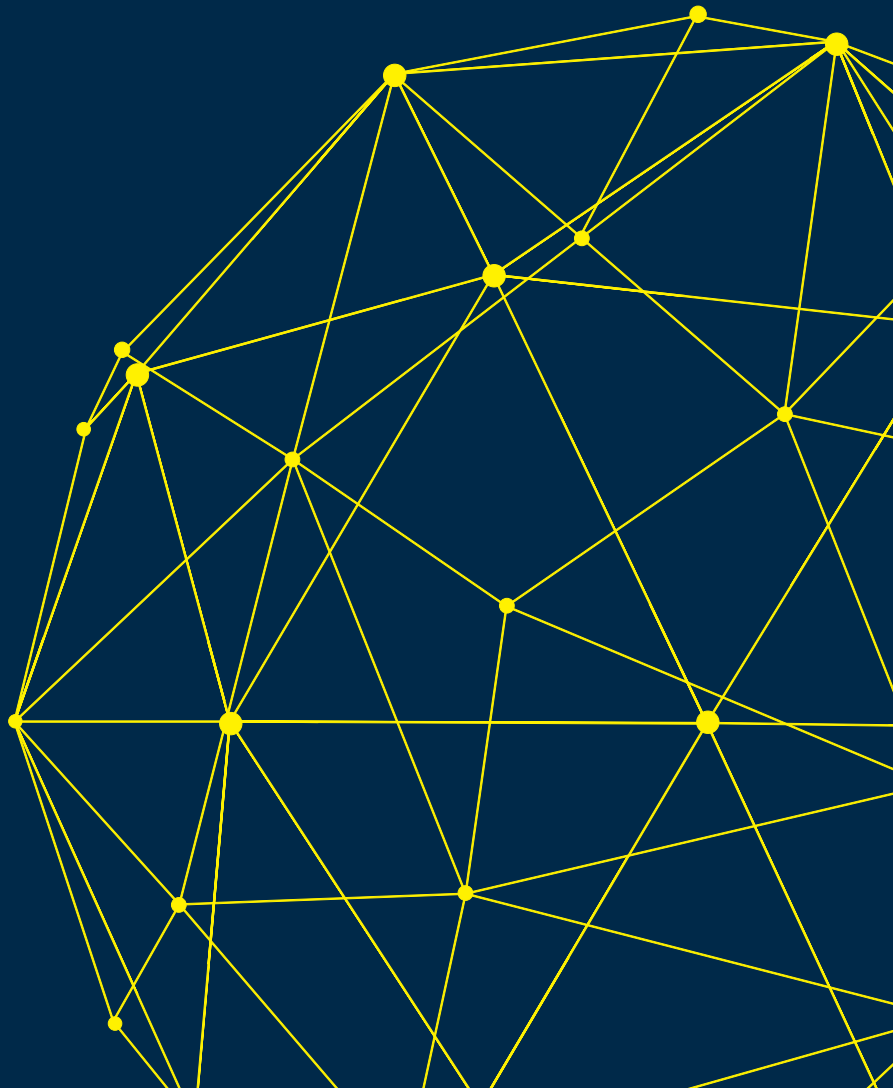


Testing. Research. Innovation.

Advanced Bitumen & Asphalt Testing and Research

The SAMI Technical Centre (STC) is a dedicated independent facility supporting the **development, testing and optimisation** of bitumen and asphalt materials for infrastructure projects worldwide.





About **SAMI** Technical Centre

The SAMI Technical Centre (STC) is a purpose-built research and independent testing facility designed to support the development and performance of bitumen and asphalt materials used in road infrastructure.

Located within a two-storey facility covering approximately **700 m²**, the centre combines laboratory testing, product development and collaborative research in one integrated environment.

One floor houses the central **R&D and testing laboratory**, while the second floor provides workstations, meeting and training rooms, and a dedicated area for technical collaboration and showcasing innovation.

The centre supports the development, testing and optimisation of:

- ▼ Bitumen
- ▼ Polymer modified binders bitumen (PMB)
- ▼ Crumb rubber modified binders bitumen (CRMB)
- ▼ Emulsions
- ▼ Hot mix asphalt
- ▼ Cold mix asphalt
- ▼ Microsurfacing
- ▼ Sprayed seals



All laboratory testing is
NATA accredited.

STC

Technical Expertise & Industry Collaboration

The SAMI Technical Centre is powered by a team of highly qualified chemists and engineers with extensive expertise in binder and asphalt technologies.

The team specialises in:

- ▼ Designing binder and asphalt products
- ▼ Solving complex pavement material challenges
- ▼ Conducting specialised laboratory testing
- ▼ Supporting performance evaluation of materials

The centre also collaborates with universities and research institutions, supporting ongoing innovation within the road infrastructure sector. As part of this collaboration, PhD research project is currently underway within the centre.

This combination of industry experience, academic collaboration and practical problem solving enables the STC to deliver advanced testing and technical insight to industry partners.



Supported by a Global R&D Network

The research and development activities at the SAMI Technical Centre are supported by a broader international network of expertise.

This includes collaboration with:

- ▶ The Colas Core Centre in France
- ▶ Tipco's advanced R&D laboratory in Thailand
- ▶ The Colas Core Centre in USA
- ▶ McAsphalt advanced bitumen and asphalt research centre in Canada

These international partnerships provide access to additional technical knowledge, research collaboration and innovation in bitumen technologies.

As part of the global Colas group, SAMI benefits from the experience of one of the largest road construction and maintenance companies in the world and one of the largest consumers of bitumen globally.

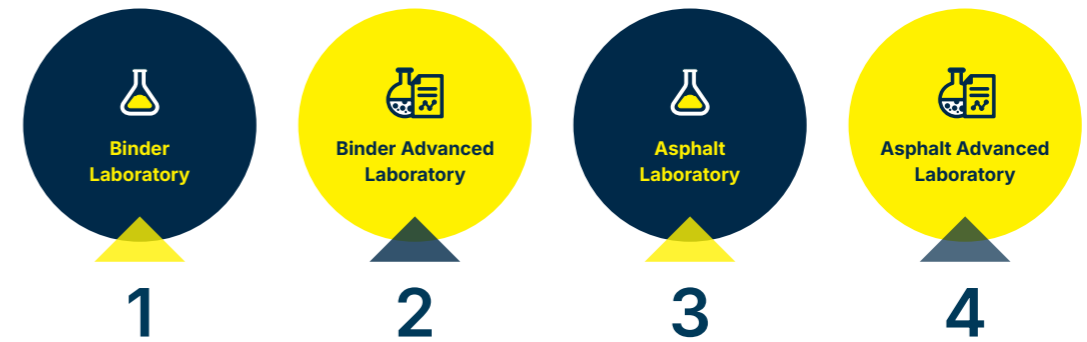
This global connection strengthens the centre's ability to develop and test advanced materials for modern road infrastructure.





Laboratory Testing Capabilities

The SAMI Technical Centre laboratory is organised into four main sections:



The facility is equipped to perform conventional and advanced laboratory testing across a wide range of bituminous materials and asphalt products.

Testing capabilities support:

- ✓ Product development
- ✓ Quality control
- ✓ Performance evaluation
- ✓ Research and innovation



All testing is conducted within a NATA accredited laboratory environment, ensuring reliable and recognised testing results.

Binder Laboratory

The binder laboratory is equipped with advanced instrumentation designed for detailed analysis and testing of bituminous materials.

Key equipment includes:

- ▼ Dynamic Shear Rheometers (DSR)
- ▼ Bending Beam Rheometer (BBR)
- ▼ Energy Dispersive X-Ray Fluorescence (EDXRF)
- ▼ Rotational and kinematic viscosity testing equipment
- ▼ Elastometer
- ▼ Ductility testing equipment
- ▼ Softening point and penetration testing equipment
- ▼ Torsional and elastic recovery testing

Additional testing capabilities include:

- ▼ RTFO, PAV and VDO aging simulations
- ▼ Bitumen emulsion manufacturing laboratory mills
- ▼ Foaming machine and mixer
- ▼ Particle size analyser
- ▼ Microscope analysis

The laboratory also supports testing related to:

- ▼ Evaluation of rheological behaviour
- ▼ Bitumen emulsions
- ▼ Spray sealing applications
- ▼ Microsurfacing materials

Asphalt Laboratory

The asphalt laboratory is designed to support testing and evaluation of asphalt mixtures and pavement materials.

Equipment includes:

- ▼ Four-point beam fatigue testing equipment
- ▼ Cooper wheel tracking tester
- ▼ Indirect tensile testing machines for TSR and resilient modulus testing
- ▼ Asphalt mixers
- ▼ Slab compactors
- ▼ Gyrotory compactors
- ▼ Hamburg Wheel Track tester
- ▼ IDEAL-CT

Additional testing capabilities include:

- ▼ Binder recovery equipment
- ▼ Asphalt volumetric measurements
- ▼ Marshall stability testing
- ▼ Interface shear strength testing (Leutner and NCAT jigs)
- ▼ Aggregate grading and density testing

These capabilities allow the STC to evaluate the performance and behaviour of asphalt mixtures under a variety of testing conditions.



Why the SAMI Technical Centre

SAMI Technical Centre combines advanced laboratory testing with deep product knowledge and practical industry experience.

As a major producer and supplier of bituminous products worldwide, SAMI is uniquely positioned to understand both laboratory performance and real-world application.

The STC operates with a strong commitment to **technical integrity, independence and professional confidentiality**, ensuring that all work is conducted with discretion and in accordance with recognised industry standards.

Key advantages include:

- ▼ Advanced laboratory testing capability
- ▼ Experienced chemists and engineers
- ▼ NATA accredited testing
- ▼ Product development expertise
- ▼ Global R&D collaboration
- ▼ Industry and academic partnerships

The SAMI Technical Centre supports infrastructure partners through testing, research and technical insight aimed at improving pavement performance and material reliability.






STC





For more information about the SAMI Technical Centre and laboratory capabilities, please contact the SAMI team.

-  26 Powers Rd, Seven Hills, NSW 2147 - Australia
-  stc@sami.com.au
-  sami.com.au

