



**Much  
Asphalt**

*TOGETHER WE CAN*



R300, Cape Town

**Hot mix asphalt (HMA) comprises aggregate, bitumen and mineral filler in different proportions depending on the application. HMA is mixed and paved at high temperatures in order to achieve the required compaction.**

Strength and durability have made HMA the road paving material of choice around the world for well over 100 years. This is still the case today, although new technologies using lower production temperatures are gaining popularity with their reduced emissions and energy and cost saving attributes.

#### HMA MIXES

Much Asphalt supplies a wide variety of specialist and differentiated hot mix asphalt products including Micropave, UTFCS, UTLAs, Much Mix and many other products with highly modified binders, as well as the support coat for Salphalt. From airport runways to heavy-duty highways and freeways, from motorways to racing tracks, from factory yards to pedestrian walkways, there is a hot mix asphalt for all applications.

# HOT MIX ASPHALT (HMA)



OR Tambo International Airport



*Benoni plant*

The manufacture of HMA involves drying and heating of aggregate from stockpiles, followed by mixing of accurately predetermined quantities of aggregate, filler (rock-flour, cement or lime) and bituminous binder at high temperatures to ensure thorough coating of the aggregate. The HMA is then transported to site by either the producer, the paving contractor or his haulage agent, with as little cooling of the mixture as possible to ensure that the correct consistency is maintained for successful compaction on the road surface.

Appropriate, individualised solutions are offered to clients depending on factors such as traffic frequency and type of road use, safety, weather conditions and noise. The size and quality of aggregates, as well as the grades and types of bituminous binders, influence strength, durability and texture of the road surface. In general terms, new and rehabilitated roads using HMA have a design life of about 20 years until major rehabilitation interventions are needed.

The milling out of existing HMA road layers prior to refurbishment results in the availability of reclaimed asphalt (RA), which can be included in new HMA mixes in differing quantities depending on the mix composition and application.

Much Asphalt's HMA products are supplied from static asphalt mixing plants in all South Africa's major centres as well as from several mobile plants designed to supply quality product to remote projects.

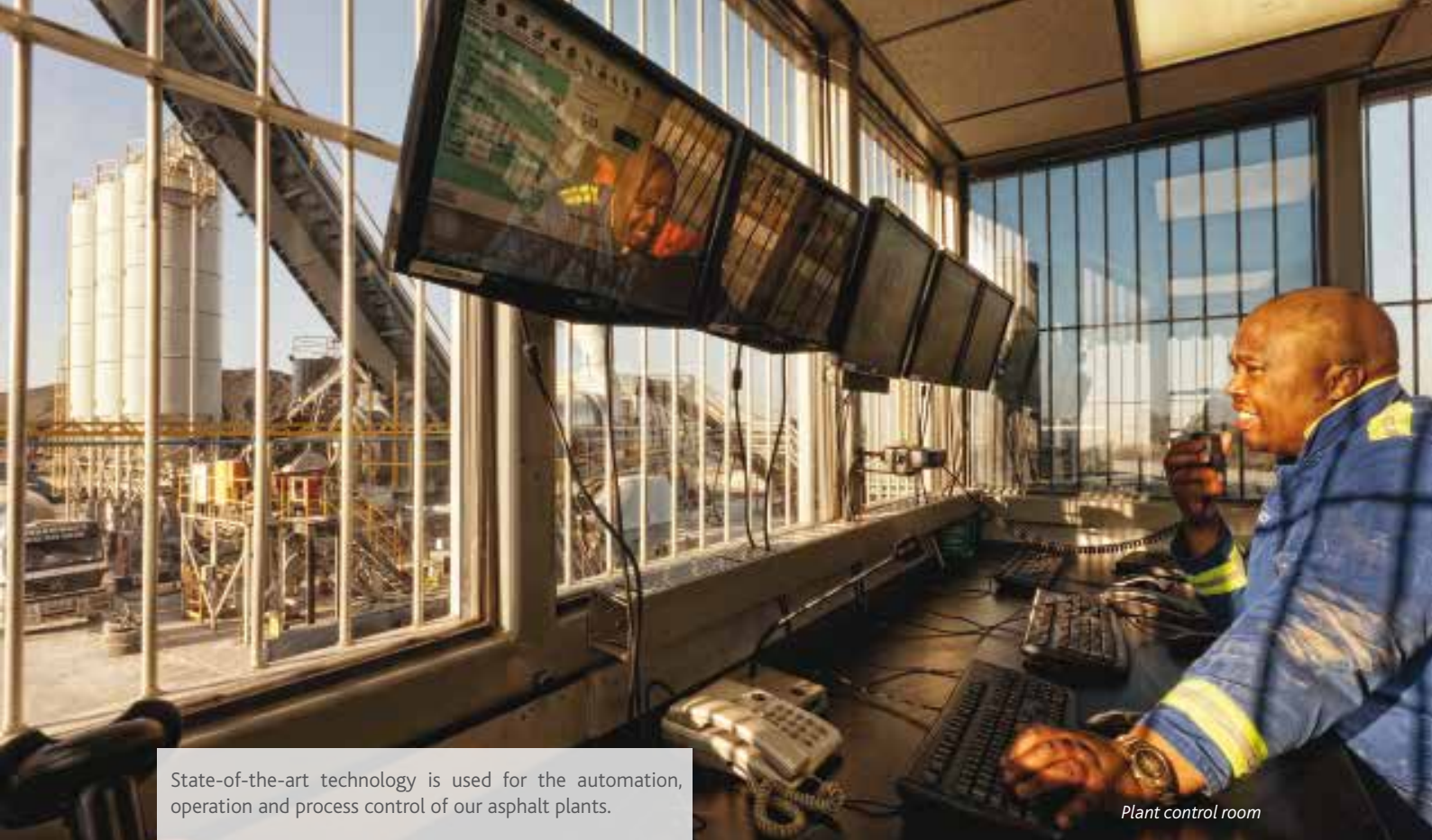


*N2 Mthatha, Eastern Cape*



*Nomad 1 mobile plant*





State-of-the-art technology is used for the automation, operation and process control of our asphalt plants.

Plant control room

### QUALITY TESTING

Quality testing of the raw material components of HMA, the mix itself and the finished product on site is essential. Various tests are carried out from production to paving as part of a comprehensive quality control plan for each project to determine road surface performance, fatigue life and susceptibility to moisture damage.

Tests include aggregate packing and shape, binder tests, plant control of mixtures and field control of placement, which depends on making corrections while the mix is still hot.

Much Asphalt's SANAS accredited Central Laboratory in Cape Town affords us the opportunity to develop new products, control test products, calibrate plant and offer testing services to our clients. All our static and mobile plants also have their own dedicated process control laboratories.

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Quality testing





*Hand asphalt training, George*

#### **BEST PRACTICE IN HAND LAID ASPHALT**

Much Asphalt offers small contractors, as well as local and provincial authorities, best practice workshops on hand laid hot mix asphalt. The workshops are offered as a technically enhancing, value-added service to customers and delegates are not charged attendance fees.

The aim is to establish a uniform, industry-wide standard for high quality hand laid hot mix asphalt so that small to medium contractors, as well as government contractors, deliver durable and cost effective asphalt surfaces to their clients. The course provides best practice guidance on the selection, use and application of our many different products.

With relatively minor but urgent interventions such as pothole repairs becoming necessary on a more frequent basis to keep older roads in a usable and safe condition, a good technical knowledge of what HMA products to use and how to apply them has become increasingly critical.

Delegates receive a printed manual that is useful as a reference for specifications and quality of finished surfaces.

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