LAT100

TIRE TREAD COMPOUND TESTER
Highly accurate simulations of road conditions for fast and economical laboratory testing of rubber samples.
The VMI LAT100 (Laboratory Abrasion & skid Tester or Dr Grosch machine) tire tread compound tester, accurately simulates road conditions for fast and economical laboratory testing of rubber samples.

This way you can save time and money by evaluating tire properties before production starts. The multiple test machine can be employed for routine measurements as well as for scientific research, measuring both the abrasion resistance and the friction properties under a wide range of selectable conditions.

The LAT100 meets ISO 23233:2009 standard for the determination of resistance to abrasion of rubber compounds. Abrasion parameters like speed, load and slip angle can be set independently to offer maximum flexibility. Traction, dry or wet, is measured directly on a locked wheel, or through measuring side force while varying other parameters. The evaluation of wet traction properties with the LAT100 has proven to work very well, also for modern polymer systems where tan delta often fails as a predictor for wet grip. Rolling resistance and heat build-up can be studied over a wide range of loads and speeds. Depending on the main purpose of use, the system can be adapted and extended according to your requirements.
MINIMIZED COSTLY ROAD TESTING
Traditionally, the development of tires involves a lot of road testing. This however makes the process very expensive, long and complex and involves a lot of trial and error. With VMI's indoor compound testing, this road testing can be reduced to a minimum and you will obtain the results much easier and quicker and against predictable costs.

REDUCED TIME TO MARKET
Testing the compound using VMI's LAT100, gives you detailed information that you can act on with confidence. Its flexibility makes it ideal for testing the most advanced compounds, enabling you to innovate faster, more ambitiously and at much lower risk.

ROBOTIC HANDLING OF SAMPLES FOR A COMPLETE HANDS-OFF EYES-OFF PROCESS (OPTIONAL)
By adding VMI's unique MAXX automation technology for robotic handling, the process is automated, making sure that the test is always performed exactly the same way. The operator is no longer needed continuously near the machine, allowing the operator to spend their time on analysis, rather than supervision. The application of the robot furthermore enables the machine to be used 24/7, allowing you to considerably decrease the Total Cost of Ownership of the machine.

PERFORM FRICTION TESTS ON ICE (OPTIONAL)
An optional temperature controlled disk can be used to create an ice lane for evaluating the traction properties of rubber tread compounds on an icy road.

PRODUCT HIGHLIGHTS:
- Minimized costly road testing
- Reduced time to market
- Robotic handling of samples for a complete hands-off eyes-off process (optional)
- Perform friction test on ice (optional)