# SERVICES MATERIALS TESTINGSERVICES

# Evaluations

Materials testing services encompass a wide range of evaluations to assess the quality, properties, and performance of rubber and rubber-like materials.



#### FOR STEEL-CORD TYPE RUBBER MATERIALS:

#### COVER TYPE

- Abrasion
- Specific gravity
- Shore a hardness
- Fabric adhesion t-peel methodology
- Cure rate (mdr rheometer method)
- Compatibility with specific conveyor belt

#### TIE GUM TYPE

- Fabric adhesion t-peel methodology
- Cure rate (mdr rheometer method)
- Steel adhesion (h-block method)
- Tensile strength
- Modulus (100% 200% 300%)
- Compatibility with specific conveyor belt

#### NOODLE TYPE

- Cure rate (mdr rheometer method)
- Tensile strength
- Modulus (100% 200% 300%)



### FOR FABRIC TYPE RUBBER MATERIALS:

#### COVER TYPE

- Abrasion
- Specific gravity
- Shore a hardness
- Fabric adhesion t-peel methodology
- Cure rate (mdr rheometer method)
- Compatibility with specific conveyor belt

#### TIE GUM TYPE

- Fabric adhesion t-peel methodology
- Cure rate (mdr rheometer method)
- Tensile strength
- Modulus (100% 200% 300%)
- $\bullet$  Compatibility with specific
- conveyor belt

#### NOODLE TYPE

- Cure rate (mdr rheometer method)
- Tensile strength
- Modulus (100% 200% 300%)



#### FOR CEMENT/PRIMER ADHESIVE MATERIALS:

#### COLD BOND

- Polymerization development
- Pot life
- Time to gel (splicer pot life)
- Viscosity
- Density
- Adhesion steel-rubber, fabric-rubber
  & rubber-rubber

#### HOT BOND

- Viscosity
- Density
- Steel-rubber adhesion
- (h-block method)
- Adhesion t-peel methodology
  Compatibility test with specific
- conveyor belts





# SERVICES MATERIALS TESTING SERVICES

# **Our Testing Equipment**

# **ABRASION TESTER:**

An abrasion tester is a type of equipment used to assess the wear and abrasion resistance of materials. It simulates abrasive conditions that materials may experience during use, helping to evaluate their durability and performance over time. Din abrasion testers play a crucial role in quality control and product development by providing valuable data on the abrasion resistance and durability of materials, helping manufacturers ensure the longevity and reliability of their products.

# MOTORIZED MARK-10:

Mark-10 is a manufacturer of force and torque measurement equipment used in various industries for quality control, research, and testing purposes. Force gauges from mark-10 are used to measure tension and compression forces in a wide range of applications, such as testing the strength of materials, assembly line testing, and product quality control. Overall, mark-10 equipment is known for its accuracy, reliability, and versatility, making it a popular choice for professionals in industries such as manufacturing, automotive, aerospace, medical devices, and more.

### H-BLOCK:

The h-block rubber test is a standard method used to evaluate the compression set of rubber materials in interaction with steel cords. This test is crucial for assessing the ability of rubber materials to recover their original shape and properties after being subjected to compressive forces, which is important for applications where dimensional stability is critical. This test provides valuable information about the resilience and elastic properties of rubber materials under compression, helping manufacturers determine the suitability of a particular rubber material for specific applications and ensuring product quality and performance.

# MDR VULCANIZATION DATA:

A moving die rheometer (mdr) is a type of rheometer used to measure the curing characteristics of rubber compounds. This movement simulates the dynamic conditions encountered during actual processing and use of rubber materials. By measuring parameters such as torque, temperature, and time, mdr equipment provides valuable insights into the curing behavior, viscoelastic properties, and vulcanization kinetics of rubber compounds. This information is crucial for optimizing rubber formulations and ensuring the quality and performance of rubber products in various applications.

# BROOKFIELD VISCOSIMETER:

These instruments are used to measure the viscosity of fluids, which describes the resistance to flow. These instruments are widely used in various industries where precise control of viscosity is critical for product quality and consistency.

# LAB UBR-ALMEX PRESS:

A lab curing press is a device used in materials science and manufacturing to apply pressure and heat to materials like rubber or polymers, accelerating their curing process. It's typically used in research or quality control to simulate industrial curing conditions on a smaller scale. These presses often have precise controls for temperature, pressure, and curing time to ensure consistent results.

If you need an unbiased party to test a sample of your belt to ensure you know your belt and your splice materials, contact us to today to see how we can help.

