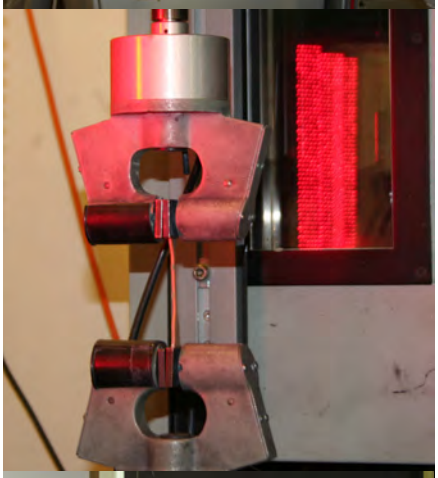

Physical Testing Services

Rubber Consultants offers a comprehensive range of rubber testing facilities in support of suppliers and manufacturers of elastomer materials and products. Routine testing is conducted to most of the International, European and National rubber standards using moulded standard test pieces.

Rubber Consultants can offer its expertise in rubber testing to advise and assist in the development of appropriate test methods where no standard test methods or specifications currently exist. This may involve the testing of rubber components or sample test pieces cut from rubber products.

Rubber Consultants can offer testing of latex products, medical examination gloves to the EN 455 and condoms (airburst and water leak) to the ISO 4074 standards.

Test facilities include:

Universal testing machines
Systems equipped with advanced video extensometers to determine the tensile properties of rubber *eg* tensile strength and elongation at break.

The equipment can also be programmed to perform complex cycles, in both tension and compression, to characterise changes in rubber properties that arise during the first few deformation cycles.

Dynamic Mechanical Thermal Analysis (DMTA) test equipment
DMTA test equipment is configured to determine the visco-elastic properties of materials; modulus and damping (tan δ). The response of a material to a sinusoidal oscillatory deformation is measured under controlled strain, temperature and frequency conditions. The equipment can be configured to determine the temperature, strain and frequency dependent properties of sample materials.

Hardness test equipment
A range of test equipment for measurement of hardness via the 'dead load' (IRHD) and Durometer (Shore A and D) methods.

Rapid plastimeter
Equipment for measurement of rapid plasticity and plasticity retention index of raw natural rubber.

Resilience test equipment
Equipment configured for measurement of resilience via the Dunlop tripsometer and Lupke pendulum methods.

Abrasion test equipment
Test equipment configured to measure abrasion properties by both the DIN and Akron methods

Fatigue test equipment
Test systems configured to measure ring, tensile or flex (De Mattia) fatigue

Ozone test chamber
A test facility for determining ozone resistance under static strain conditions.

For further information contact:
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TESTING • INNOVATION • SOLUTIONS
since 1984

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List of standard tests

ISO 37	**Rubber, vulcanized or thermoplastic. Determination of tensile stress-strainproperties**
ISO 48	**Rubber, vulcanized or thermoplastic. Determination of hardness (hardness between10 IRHD and 100 IRHD)**
ISO 7619-1	**Rubber, vulcanized or thermoplastic. Determination of indentation hardness.Durometer method (Shore hardness)**
ISO 34-1	**Rubber, vulcanized or thermoplastic. Determination of tear strength. Trouser, angle and crescent test pieces**
ISO 815-1	**Rubber, vulcanized or thermoplastic. Determination of compression set. At ambient or elevated temperatures**
ISO 2285	**Rubber, vulcanized or thermoplastic. Determination of tension set under constant elongation, and of tension set, elongation and creep under constant tensile load**
ISO 5603	**Rubber, vulcanized. Determination of adhesion to wire cord**
ISO 36	**Rubber, vulcanized or thermoplastic. Determination of adhesion to textile fabrics**
ISO 813	**Rubber, vulcanized or thermoplastic. Determination of adhesion to a rigid substrate. Peel method**
ISO 4649	**Rubber, vulcanized or thermoplastic. Determination of abrasion resistance using a rotating cylindrical drum device**
BS 903-A9	**Physical testing of rubber. Determination of abrasion resistance**
ISO 4662	**Rubber, vulcanized or thermoplastic. Determination of rebound resilience**
ISO 4666-3	**Rubber, vulcanized. Determination of temperature rise and resistance to fatigue in flexometer testing. Compression flexometer (constant-strain type)**
ISO 6943	**Rubber, vulcanized. Determination of tension fatigue**
ISO 1431-1	**Rubber, vulcanized or thermoplastic. Resistance to ozone cracking. Static and dynamic strain testing**
ISO 1817	**Rubber, vulcanized or thermoplastic. Determination of the effect of liquids**
ISO 2781	**Rubber, vulcanized or thermoplastic. Determination of density**
ISO 188	**Rubber, vulcanized or thermoplastic. Accelerated ageing and heat resistance tests**
ISO 812	**Rubber, vulcanized or thermoplastic. Determination of low-temperature brittleness**
ISO 2007	**Rubber, unvulcanized. Determination of plasticity. Rapid-plastimeter method**
ISO2930	**Rubber, raw natural -- Determination of plasticity retention index (PRI)**
ISO 14309	**Rubber, vulcanized or thermoplastic. Determination of volume and/or surface resistivity**
ISO 4074	**Natural latex rubber condoms -- Requirements and test methods**
EN455 Part 1	**Medical gloves for single use. Requirements and testing for freedom from holes**
EN455 Part 2	**Medical gloves for single use. Requirements and testing for physical properties**
ISO 14309	**Rubber, vulcanized or thermoplastic. Determination of volume and/or surface resistivity**

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