



RDM

TEST
eEQUIPMENT



heat
 bend burst
 friction
 sample
 crease
 resistance
 melt tear
 laboratory
 absorption
 permeation
 fibre material
 package
 production
 properties
 bubble leak

preparation
 disintergration
 physical flex
 strength creep
 sealability
 haze hot tack
 medical tensile
 testing
 adhesion
 roughness
 abrasion bond
 puncture
 lab clarity
 heat sealers
 equipment

Whenever you need **testing equipment** for your packaging lab, you'll find it at RDM. When material and process changes have to be made, you need reliable and **accurate test data** to get back on track with confidence. Whatever customisation or automation you need, we can design, prototype and produce **innovative solutions**. Combining British manufacturing traditions and respected global brands makes RDM your unique and **trusted supplier**.

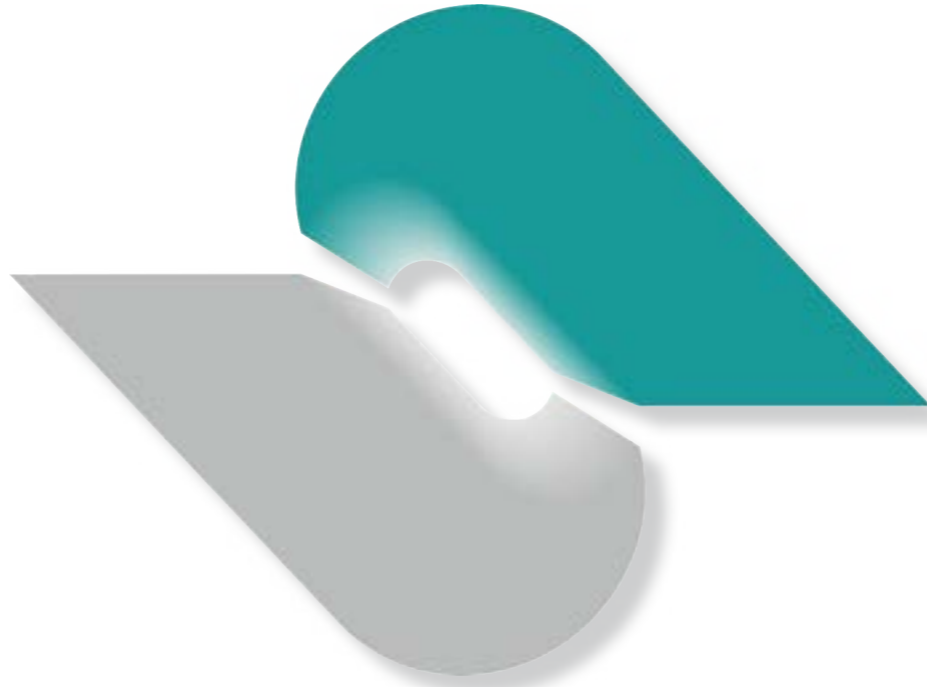
You know the performance needed from your products, processes and materials. We know how to **measure and control** them. Learning from others gives the confidence to move forward. Our **experienced team** are continuously learning and sharing. We are ASTM members and maintain access to all key **international specifications**. We'll work with you and with our demo equipment to figure out what you need.

From the moment new equipment arrives, **we've got you covered**. Installation, calibration, breakdown support and user training are always available. Our **locally based service team** are primed and ready to assist, at your site, remotely, or from our **testing lab** with your materials. We're Safe Contractor approved, traceable to National Standards, ISO9001 approved and combined **100+ years experience**.





our clients



our brands





international testing standards

heat sealability

ASTM F2029 Standard practices for making heat seals for determination of heat sealability of flexible webs as measured by seal strength.

medical pack heat sealing

ISO 11607-2 Packaging for terminally sterilised medical devices part 2 : validation requirements for forming, sealing and assembling processes.

friction testing

ASTM D1894 Standard test method for static and kinetic coefficients of friction of plastic film and sheeting

ISO 8295 Plastics - Film and sheeting - Determination of the coefficients of friction.

ISO 15359 Paper and board - Determination of the static and kinetic coefficients of friction -Horizontal plane method.

TAPPI T549 Coefficients of static and kinetic friction of uncoated writing and printing paper by use of the horizontal plane method.

ASTM D2534 Standard test method for coefficients of kinetic friction for wax coating.

hot tack

ASTM F1921 / F1921M Standard test methods for heat seal strength (hot tack) of the thermoplastic polymers and blends comprising the sealing surfaces of flexible webs.

DIN 55571 Hot tack - Part 1: Position measuring devices. Hot tack - Part 2: Peel strength measuring devices.

haze

ASTM D1003 Standard test method for haze and luminous transmittance of transparent plastic.

seal strength, tensile & tear

FINAT 1, 2, 3, 9 FINAT test methods for self-adhesive laminates and labels.

ASTM D3330 / D3330M Standard test method for peel adhesion of pressure-sensitive tape.

ASTM F88 / F88M Standard method for seal strength of flexible barrier material.

ASTM D6252 / D6252M Standard test method for peel adhesion of pressure-sensitive label stocks at a 90° Angle.

ISO 8510-2 Adhesives - Peel test for a flexible bonded to rigid test specimen assembly - Part 2: 180° peel.

BS EN 1939 Self adhesive tapes determination of peel adhesion properties.

BS EN 1895 Adhesives for paper and board, packaging and disposable sanitary products. 180° peel test for a flexible-to-flexible assembly.

BS EN 868-5 Packaging for terminally sterilised medical devices. sealable pouches and reels of porous and plastic film construction requirements and test methods.

ISO 6383-1 Plastics - Film and Sheetting - Determination of tear resistance - Part 1:Trouser tear method.

ASTM D1938-14 Standard test method for tear-propagation resistance (trouser tear) of plastic film and thin sheeting by the single-tear method.

ASTM D1004-13 Standard test method for tear resistance (graves tear) of plastic film and sheeting.

ISO 12625 Tissue paper and tissue products.

gelbo

ASTM F392 Standard practice for conditioning flexible barrier materials for flex durability.



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bend burst

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melt tear

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permeation

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roughness
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puncture
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heat sealability testing

Heat Seal parameters are easily measured; Heat Sealability = Temperature + Pressure + Time. Yet maintaining optimum heat sealing conditions in production and recognising the true cause of poor sealing remains a challenge. Measurement of heat sealing parameters is done by creating 'controlled seals' on a calibrated Laboratory Heat Sealer according to ASTM F2029, then peeling the seal apart with a Seal Strength Tester at a controlled rate to measure either Ultimate Seal Strength (after cooling, method ASTM F88) or Hot Tack Strength (peel tested within 150ms of the seal being formed, method ASTM F1921). By varying the sealing temperature, pressure and dwell time, optimum sealing conditions can be found.

Product packagers who regularly test heat seal parameters of incoming film as part of a well managed quality system, will transfer the measured parameters to the heat sealing process in production to optimise the sealing conditions. Variations in sealing parameters will be found from film supplier to supplier, roll to roll, and even within a roll. The introduction of new materials with functional and barrier layers has narrowed the tolerances for optimum sealing. Even small variations in sealing parameters can impact the quality of resulting seals, with typical poor quality shown as weak seals, channel leaks, edge leaks, back seal / end seal junction leaks, hardened brittle areas caused by overheating and unsealed areas caused by under-heating.



HS-2

Heat Sealability

ASTM F2029



HSG-3/5

Gradient Heat Sealability

ASTM F2029



HT-1XS

Hot Tack Strength

ASTM F1921



HT-2PC + HT-2 Cutter

Hot Tack Strength

ASTM F1912F2029, F88



HSM-4

Heat Sealability

ASTM F2029



HL-1/5

Low Pressure Heat Sealing

ASTM F2029



SST-3XS

Seal Strength

ASTM F88



SST 1000

Seal Strength

ASTM F88, D882, D638



heat
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sealability haze
hot tack medical
tensile
testing adhesion
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puncture lab
clarity

heat sealers
equipment



laboratory, pilot plant and production heat sealers

RDM Heat Sealers help you to achieve better sealing quality.

With a range of basic sealers,

touch-screen controlled semi-automated production sealers and custom made designs, we provide our experience and expertise to help optimise your heat sealing.

Suitable for all sizes of flexible pouches, lidded trays and pots, optionally with gas flush and / or vacuum, RDM Heat Sealers provide the flexibility and control to suit a wide range of needs in the lab, pilot plant or small volume manual production.

All models are available with Single or Dual heated sealing jaws, optionally with permanent Teflon coating for added durability.



HSB-1

Long Bar Heat Sealing
and Heat Sealability



HSE-3

Long Bar Heat Sealing
and Heat Sealability



HS 400/650/800

Very Long Bar Heat Sealing
and Heat Sealability



HSP-1 + HSP-2

Custom Tray Sealing



TS-1

Custom Tray Sealing



heat
bend burst
friction
sample crease
resistance
melt tear
laboratory
absorption

permeation

fibre material
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WVTR: ASTM F1249, E398, D6701, ISO 15106-2 & -3, TAPPI T557. 0.00005 to 100,000 gm / m² / day.



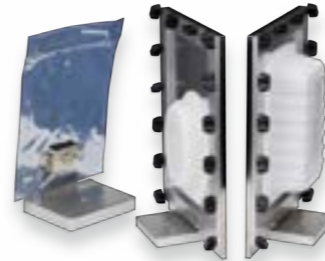
Film Testing Cartridge.

All testing accessories available to order

OTR: ASTM D3985, F1927, F1307, F2622, ISO 15105-2, DIN 53380. 0.0005 to 144,000 cc / m² / day.



CO²TR: ASTM F2476, DIN53380-4. 1 to 1,550,000 cc / m² / day.



Package and Tray Application



WVTR: ASTM F1249, E398, D6701, ISO 15106-2 & -3, TAPPI T557. 0.00005 to 100,000 gm / m² / day.

OTR: ASTM D3985, F1927, F1307, F2622, ISO 15105-2, DIN 53380. 0.0005 to 144,000 cc / m² / day.



CO²TR: ASTM F2476, DIN53380-4. 1 to 1,550,000 cc / m² / day.

Ametek Mocon are recognised as the global leader of quality permeation testing systems, fully supported in the UK and Ireland by RDM Test Equipment.



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heat sealers



package testing

Heat sealed packs are susceptible to leaks through pinholes, channel leaks or unsealed areas caused by product contamination, especially in powdery, seasoned, or flaky products.

Where seal integrity is vital to maintain product shelf life or sterility, quality control leak and burst testing provides instant feedback and traceability. Systematic production issues can be quickly discovered and resolved with confidence.

Tests are commonly destructive and conducted off-line. Non-destructive and in-line methods are sometimes possible, depending on the pack format. RDM provide systems for leak & burst tests with positive pressure decay, flow measurement, vacuum decay, and water bath bubble methods.

ASTM F2054, F2095, F2096, F1140, DIN55508-1, ISO11607



BLT

Bubble Leak
ASTM F2096



Check-A-Pack 600

Gas Analysis, Leak
and Burst



Check-A-Pack 200

Gas Analysis, Leak
and Burst



Lippke 5000

Leak, Creep and Burst

ASTM F1140, F2054,
F2095, F2096, ISO 11607



Lippke VC1400

Leak, Creep and Burst

ASTM D3078



Lippke MultiCheck 2

Gas, Leak, Creep and Burst

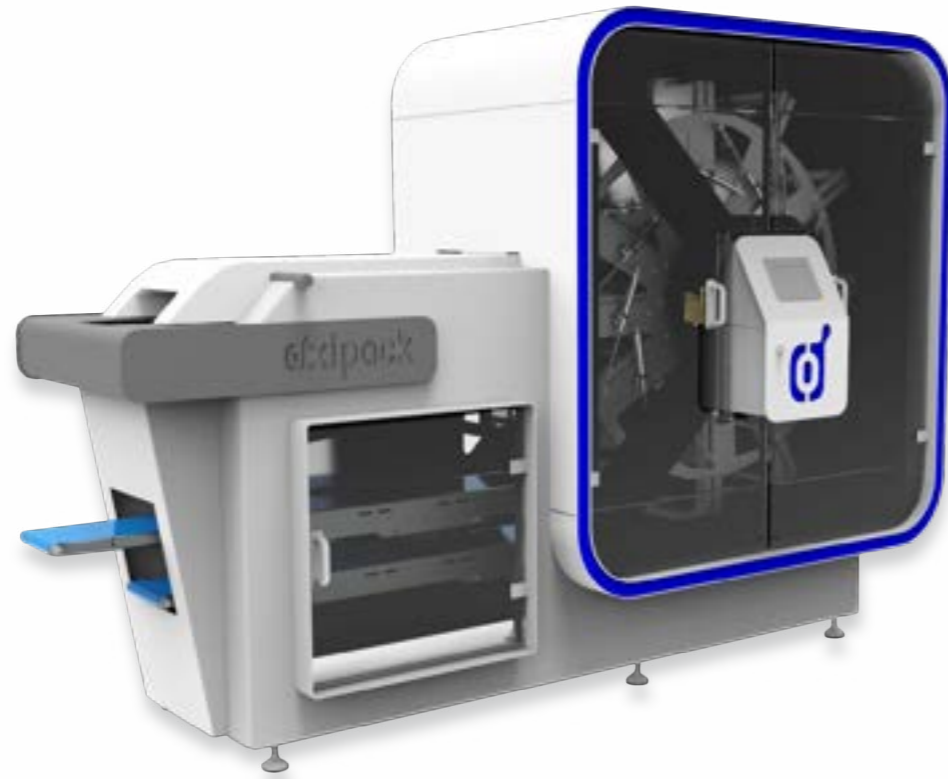
ASTM F1140, F2054,
F2095, F2096, ISO 11607



Oxipack CLT

Non-destructive Leak test

ASTM F2338



Oxipack Rotary

In Line Non-destructive Leak test

ASTM F2338



Oxipack XXL

Non-destructive Leak test

ASTM F2338



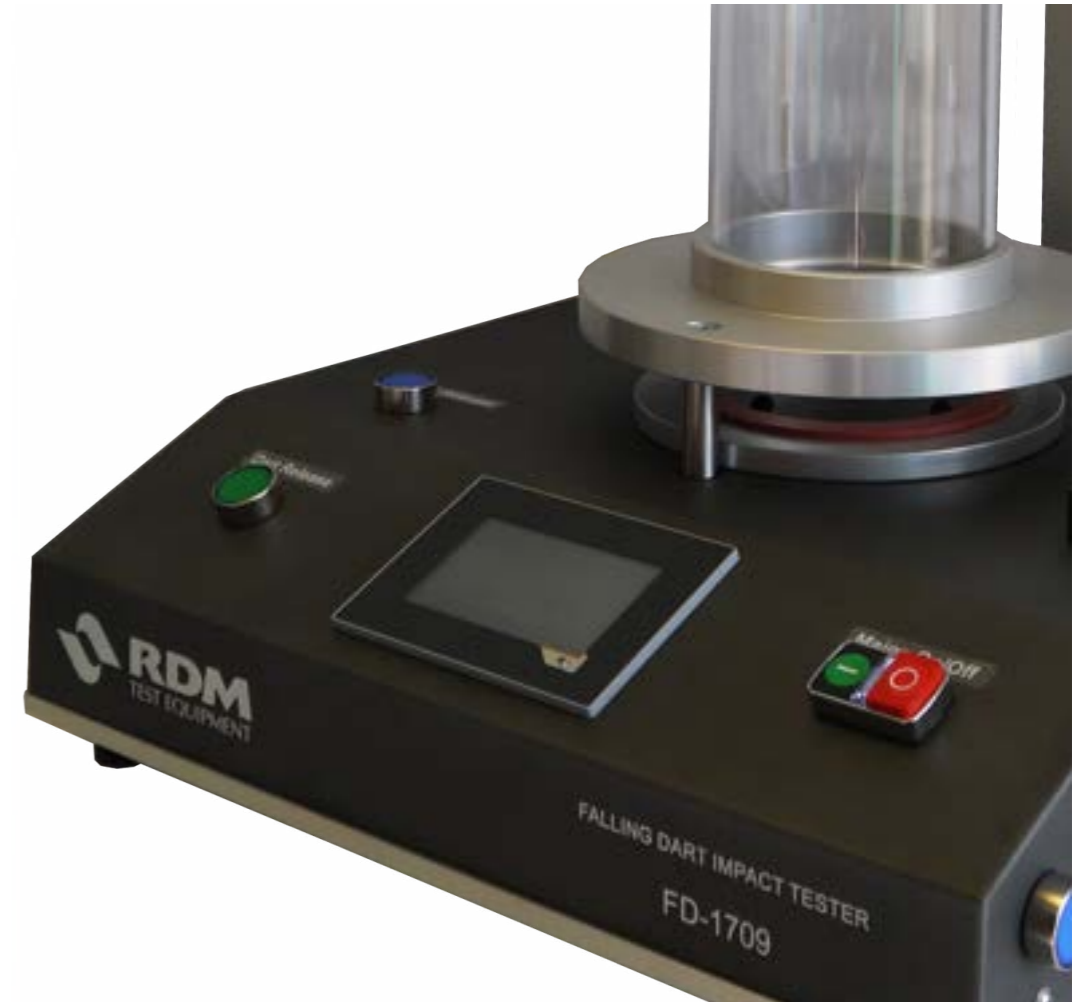
Oxipack 105L

Non-destructive Leak test

ASTM F2338

heat
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friction
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adhesion
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physical testing: fiber, paper, carton, corrugated and board

Materials possess a wide range of quantitative properties, such as physical strength or thickness. These may be a constant or a function of another property e.g.. Temperature. In most applications, specific properties will be critical to the performance of the material for the intended purpose. Measurement and control of these properties is therefore crucial.

Testing equipment is used to simulate conditions and measure the materials response. Properties may be used to compare the benefits of one material or supplier versus another, thereby aiding in material selection and ongoing quality control.

Properties can vary according to the way in which they are measured e.g. material direction, therefore many internationally recognised testing standards have been developed to help achieve standardisation, commonly ASTM, ISO, finat, bs, din, jis and tappi.

RDM Test Equipment can help you to select the most appropriate tests to define your materials and control your processes.



LCT

Carton Crease Stiffness



FD 1709

Falling Dart Impact

ASTM D1709, ISO 7765



SST-3XS

Seal Strength

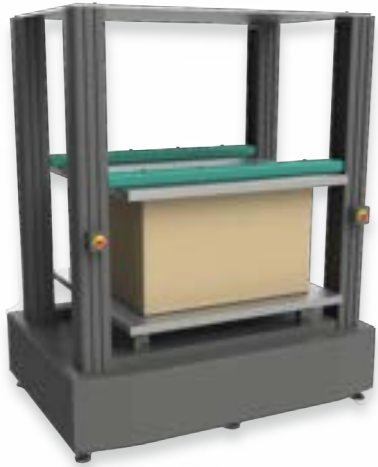
ASTM F88



SST-1000

Tensile, Crush and Seal Strength

DIN 51221 ASTM E4
ASTM D882, ASTM D638



BCT

Box Compression

DIN 51221, ASTM E4



10-20 Digital Ink Rub

Ink Rub/Transfer

ASTM D5264, F1571,
F2497, TAPPI T830



13-56 Burst Tester

Burst Testing

ISO 2758, 2759, 1328-2:1999,
2960, ASTM D3786, D774,
TAPPI T403, T807, T810



17-36 SCT

Short Span Compression

ISO 9895, SCAN P46,
TAPPI T826



17-56 Crush Tester

Crush Testing

ISO 12192, 7263, 3037, 13821,
3035 TAPPI T822, T809, T843, T821,
T811, T823, T838, T839, T825, T829



33-29 Schopper Riegler

Pulp Beating and Freeness

BS 6035/1, ISO 5267/1,
SCAN C19



58-05 Automatic Bekk

Smoothness Testing

ASTM F2029



58-06 Parker Print Surf

Surface Roughness

ASTM D 3786, ASTM D 774, BS 4768, ISO 1328-2:1999, ISO 2758, ISO 2759, ISO 2960



58-27 Bendtsen

Surface Roughness

ISO 5636/8791/2, BS 4420, DIN 53108/53120, SCAN P21



61-04 Cobb Sizing Tester

Water Absorption

TAPPI T 441



71-01 Chip Class

Chip Classification

TAPPI UM 21



72-15 PFI Beater

Pulp Performance



73-18 Pulp Disintegrator

Pulp Disintegration

TAPPI T-205, ISO 5263



73-19 Hot Disintegrator

Hot Pulp Disintegration

TAPPI 262



73-50 Sheet Press

Sheet pressing

ISO 5269, TAPPI T 205



75-08 Vertical Fluter

Vertical Fluter

ISO 7263, TAPPI T 809,
TAPPI T 824



79-15 Crease & Board Stiffness

Crease & Board Stiffness Testing

BS ISO 2493-1



79-56 Bending Resistance

Bending Resistance

ISO 2493 TAPPI T556



80-26 Internal Bond Tester

Internal Bond

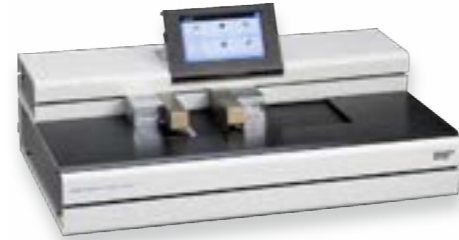
TAPPI T 569



83-76 Elmendorf

Tear Resistance

ASTM D1922, ISO 1974
TAPPI T414



84-56 Horizontal Tensile Tester

Horizontal Tensile

ISO 1924, TAPPI T 494



TQC PGX+

Contact Angle

TAPPI T458, ASTM
D724 D5946



Taber 1700 / 1750

Abrasion Tester



Chalmers DST

Torsional Stiffness of
Corrugated Board



heat
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bubble leak

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physical testing: flexibles, polymers, bio polymers, sheet materials, adhesives coatings

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RDM Test Equipment can help you to select the most appropriate tests to define your materials and control your processes.



GF 392

Gelbo Flex Durability

ASTM F392



PUNCTURE JIG

Puncture Resistance

ASTM F1306



FD 1709

Falling Dart Impact

ASTM D1709, ISO 7765



SST-3XS

Seal Strength

ASTM F88



SST-1000

Tensile

DIN 51221 ASTM E4
ASTM D882, ASTM D638



TQC PGX+

Contact Angle

TAPPI T458, ASTM
D724 D5946



10-20 Digital Ink Rub

Ink Rub / Transfer

ASTM D5264, F1571,
F2497, TAPPI T830



13-56 Burst tester

Burst Testing

ISO 2758, 2759, 1328-2:1999,
2960, ASTM D3786, D774,
TAPPI T403, T807, T810



17-77 Top Load Compression

Compression

ASTM D1238, ISO 1133,
BS 2782



46-02 Melt Flow System

Melt Flow Index

ASTM D1238, ISO 1133,
BS 2782



80-20 Internal Bond Tester

Internal Bond

TAPPI T 569



80-91 Lab Master

Release / Adhesion Strength

ASTM D 3330, FINAT
FTM 1, 2, 3, and 4



83-76 Elmendorf

Tear Resistance

ASTM D1922, ISO 1974
TAPPI T414



84-56 Horizontal Tensile Tester

Horizontal Tensile

ISO 1924, TAPPI T 494



Taber 1700 / 1750

Abrasion Tester

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material properties and lab equipment

Flat sheet materials require a range of surface and optical tests. Measuring their performance or interaction with other materials, such as the friction of a thin film over a metal former, or the haze through a transparent film used in point of sale packaging,



CF-800XS

Coefficient Of Friction

ASTM D1894, ISO 8295, BS 2782, TAPPI T549



CF-400

Coefficient Of Friction

ASTM D1894, ISO 8295, BS 2782, TAPPI T549



CF-200i

Incline Plane Friction

ASTM D4918, D202, G219, TAPPI T815, T548, T503



TH-1003M

Haze, Transmittance

ASTM D1003, D1044, E308, ISO 13468, 14782



HTC-1003

Haze, Transmittance, Clarity

ASTM D1003, D1044, ISO13468, 14782



BYK Micro Gloss

Gloss, Opacity, Shade

DIN 67530 ISO 2813, 7668
2178, 2360, 2808 ASTM
D523 B499, D1400



TBX 1000-2000

Optical Density

ISO 5 part 2,3



49-56 Digital Micrometer

Gauge, Grammage, Caliper

ASTM D374, D1777, D5729, D6988,
ISO 534, 3034, 4593:1993, 5084,
9073-2, 12625-3



PaperSchmidt
Roll Hardness Tester



Equotip 550 Leeb U
Roll Hardness Tester



PGW-M
Precision Balances



NE9 Series
Drying Ovens



DML3034
Digital Thickness Gauge



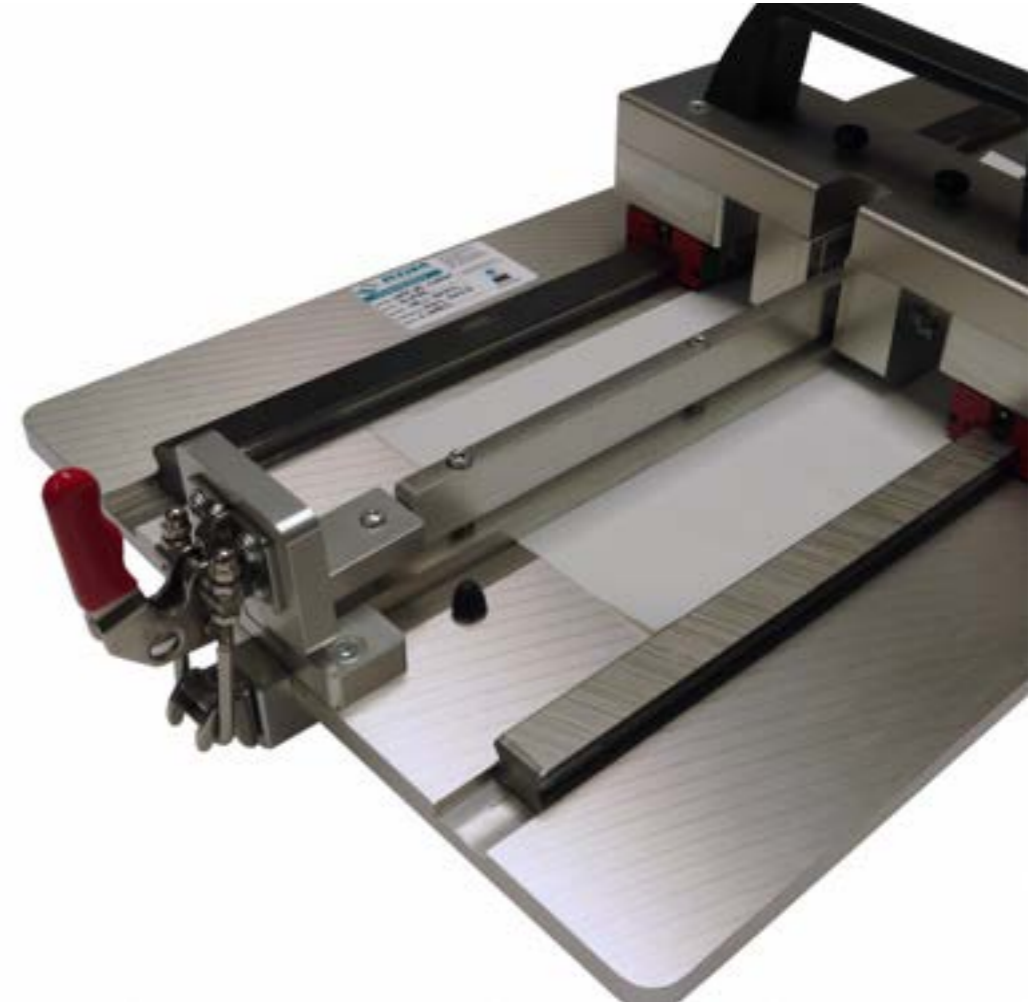
DML3032
Digital Thickness Gauge



DML3701P6
Bench Thickness Gauge

heat
bend burst
friction
sample
crease
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laboratory
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permeation
fibre material
package
production
properties

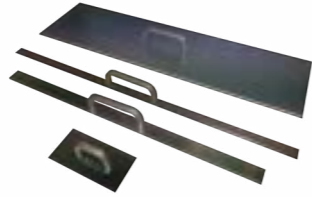
preparation
disintegration
physical flex
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sealability haze
hot tack medical
tensile
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roughness
abrasion bond
puncture
lab clarity
heat sealers
equipment



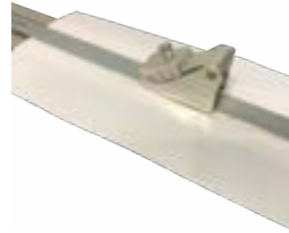


sample preparation equipment

A range of equipment designed to help save time in the sample preparation stage. Producing accurately sized samples to use with testing machines.



Sample cutting templates



GSC-1
Guided Strip Cutter



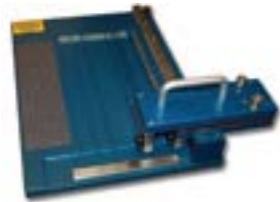
TMI 22-34
Twin Blade Cutter



FSC-2
Freehand Strip Cutter



HT-2PC
Strip Cutter



TMI 22-76
Corrugated Sample Cutter



22-48-01 ECT
Pneumatic Cutter



TMI 22-22
Sample Punch



TMI 22-42
Circular Sample Cutter



TMI 22-25
Circular Sample Cutters

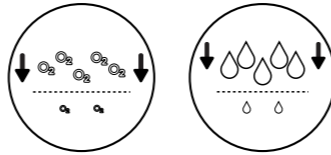


packaging testing lab

Our Packaging Testing Lab is equipped with many of the products needed for flexible film testing, including brands such as RDM, MOCON, TMI, Messmer Buchel and Adam. Sub-contracting your testing provides flexibility, and a cost effective solution for your specific project or for on-going quality control.

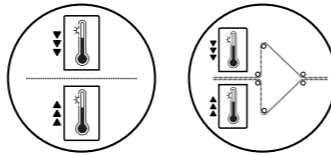
permeation

Oxygen, water vapour or carbon dioxide mocon permeation testing for films and packages.



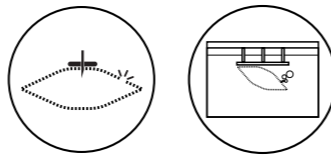
heat sealability studies

Laboratory heat sealing, Seal strength testing and Hot tack testing of flexible heat sealable materials.



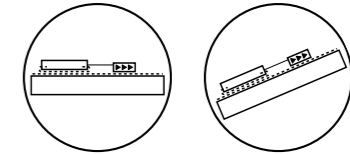
package integrity

Leak, creep and burst testing of finished packaging such as food and medical item pouches.



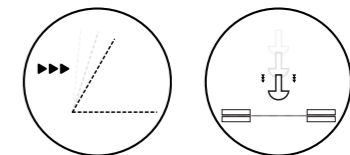
friction testing

Measuring slip of flat materials such as packaging films.



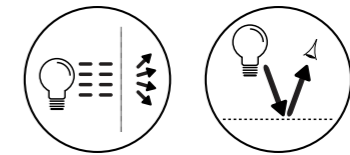
physical testing

Tensile, Crush, Bending, Tear, Impact and Penetration of all flexible materials and packages.



surface and optical testing

Friction, Haze, Opacity, Gloss and Transmittance of flat materials.





after care and support

With a wealth of knowledge and application expertise, our service team are here to assist you with any of your servicing needs.



IQ/OQ execution on-site



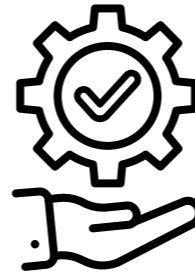
Installation & commissioning on-site



Ongoing annual service and maintenance



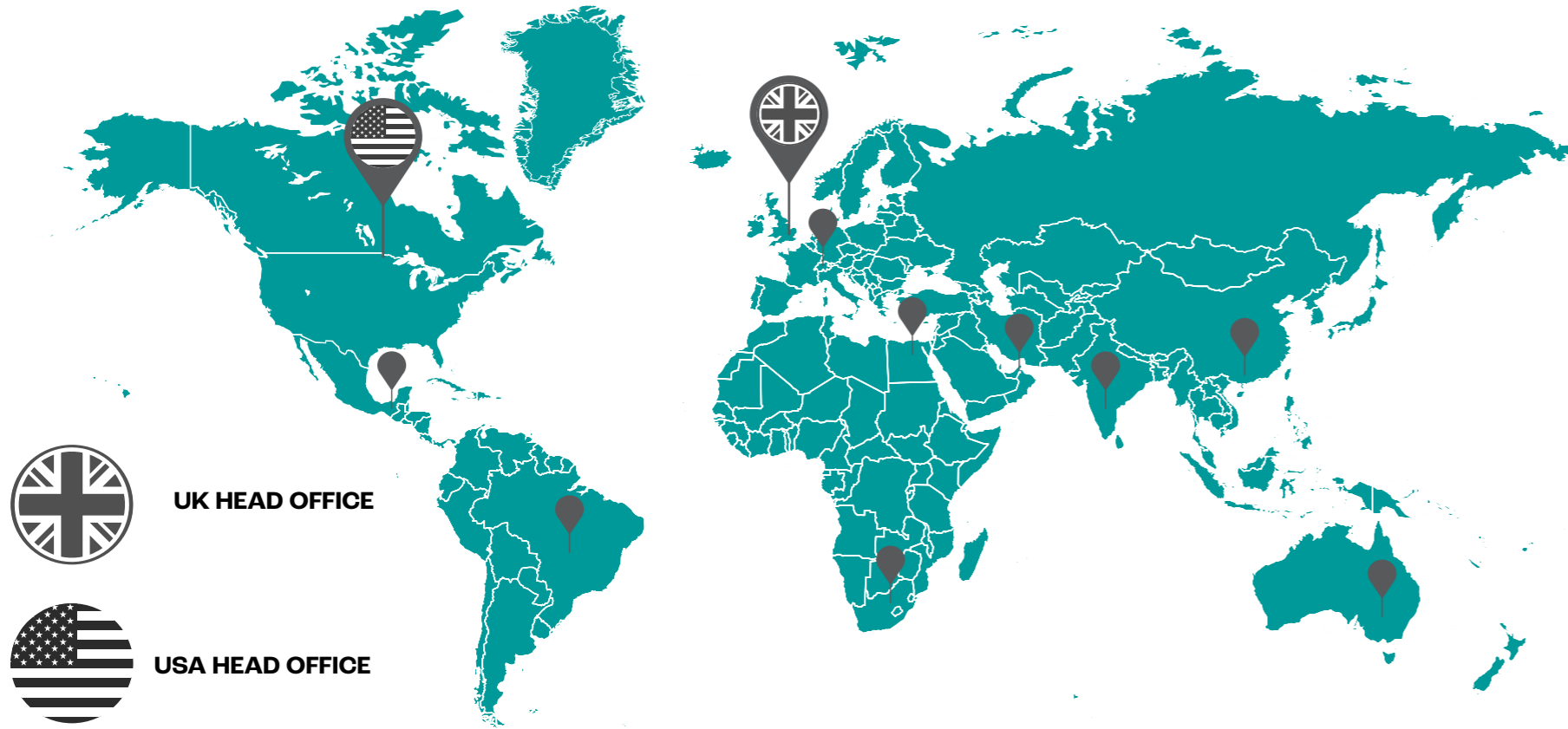
Factory acceptance testing



Full machine calibration with calibration certificate traceable to national standards



Operator training



after sales support

Our customers demand the highest levels of support and after sales service, Therefore our objective is to provide a no compromise back up for the life of the instruments we supply.

RDM engineers provide: Installation and commissioning Services, On-site / on-line user training, On-site breakdown repair service and Annual service with calibration.

ON-SITE SERVICE AND CALIBRATION

Our engineer comes to your site to carry out a comprehensive calibration service. This allows for short down times as the equipment will only be out of service during the engineers visit. In this time it will be serviced, calibrated and issued with a traceable UKAS certificate.

IN HOUSE SERVICE AND CALIBRATION

In our facility in Hertfordshire, UK, your equipment will be serviced and calibrated at a fraction of the cost.



Support agents

Belgium, France, Germany, Greece, Italy, Netherlands, Poland, Portugal, Spain, Argentina, Brazil, Canada, Colombia, Mexico, China, India, Indonesia, Malaysia, Pakistan, Singapore, South Korea, Thailand, Vietnam, Dubai + UEA, Israel, Turkey, Egypt, South Africa, Australia, New Zealand.

UK & INTERNATIONAL

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