



World's leading manufacturer  
of packaging and material  
testing equipment.

## Pharma & medical device packaging testing



**INDUSTRIAL  
PHYSICS**

Our brands  
protect your brand

Gauges for dimensional measurement, and testers for package integrity and failure analysis. Manual and semi-automatic solutions for ensuring quality in food, beverage, and aerosol cans, ends and sheets. Online vision solutions for complete production control.

2

### About Industrial Physics

Industrial Physics is one of the world's leading manufacturer of test, measurement and inspection equipment focused on the food and beverage, metal cans, flexible packaging, paper and plastics, paint and coatings, medical device, materials testing and consumer electronics markets. With sales

presence in more than 75 countries, our brands are helping customers meet the ever-increasing test and quality standards required by demanding regulators, consumers and manufacturers. Our best-in-class products help companies the world over protect their brand integrity.



## 2 Station Heat Distortion & Vicat Softening Point Apparatus

The HDT/Vicat Apparatus is used to determine the Deflection and softening point characteristics of all types of thermo plastic specimens. The 2 station device will test two samples simultaneously

### Applications

- Failure analysis
- Heat distortion temperature
- Vicat softening Temperature (VST)

[More information](#)

Ray/Ran



## 4 Station Heat Distortion & Vicat Softening Point Apparatus

The HDT/Vicat Apparatus is used to determine the Deflection and softening point characteristics of all types of thermo plastic specimens. The 4 station device will test four samples simultaneously

### Applications

- Failure analysis
- Heat distortion temperature
- Vicat softening Temperature (VST)

[More information](#)

Ray/Ran

3



## 6 Station Heat Distortion & Vicat Softening Point Apparatus

The HDT/Vicat Apparatus is used to determine the Deflection and softening point characteristics of all types of thermo plastic specimens. The 6 station device will test six samples simultaneously

### Applications

- Failure analysis
- Heat distortion temperature
- Vicat softening Temperature (VST)

[More information](#)

Ray/Ran



## 6MBA Advanced Melt Flow System

Molten Polymer is extruded through a controlled Die and using the time taken to extrude the Melt Flow Rate or Melt Mass Flow rate in g/10 minutes can be determined

### Applications

- Melt flow

[More information](#)

**Ray'Ran**



## 6MPCA Advanced Melt Flow System

A more advanced model than the 6MBA, with the addition of the microprocessor, the results displayed are MFI, Shear Stress, Shear Rate, Viscosity and the Melt Volume Rate. It can also be used to determine the density at melt temperature of the material being tested.

### Applications

- Melt flow

[More information](#)

**Ray'Ran**

4



## 7000 Water Vapor Permeation Analyser

Modular systems for precision water vapor permeability testing of packaging film barriers. Range of 0.002-1000 g/m<sup>2</sup>/day with precision temperature, humidity and flow control

### Applications

- Permeation rate determination

[More information](#)

**SYSTECH**  
Illinois  
Manufacturers of Gas Analysis Equipment

## 8001 Oxygen Permeation Analyzer



The 8001 is a versatile and easy to operate oxygen permeation analyzer with 2 stations for testing films or packages. Fast purge times and accurate readings at lowest levels. Film range 0.008-432,000 cc/m<sup>2</sup>/day. Package range 0.0004-2,2000 cc/pack/day

### Applications

- Permeation rate determination



[More information](#)

## 8200 Oxygen Permeation Analyzer



Simple, cost effective oxygen permeation testing for packages and bottle with two stations. Film range 0.04-100,000 cc/m<sup>2</sup>/day. Package range 0.00004 to 2,000 cc/pack/day

### Applications

- Permeation rate determination



[More information](#)

5

## Advanced Pendulum Impact System



The Pendulum Tester uses microprocessor technology to determine the energy required to break or rupture specimens in plastic or ceramics. The apparatus can test Izod, Charpy or Tension Impact, as well as carry out small diameter pipe testing and component Impact &...

### Applications

- Failure analysis

**Ray Ran**

[More information](#)

## Advanced Static & Dynamic Friction System



The Static & Dynamic Friction Tester measures the frictional properties of flexible packaging, foils, paper, board, rubber linoleum, textiles and leather.

### Applications

- Coefficient of friction-Horizontal

Ray'Ran

[More information](#)

## Apparent Bulk Density Apparatus



These instruments are used in the measurement of apparent density, bulk factor and the pourability of plastic materials such as molding powders etc. different instruments are required for the various forms of materials from fine powders and granules to large flakes...

Ray'Ran

## Auto Cycle Test Sample Notching Cutter



The Auto cycle Notching Cutter produce precise stress concentrated profiles in Izod and Charpy specimen bars. The profiles conform to the ISO 179, ISO 180 & ASTM D256 International Standards

### Applications

- Failure analysis
- Impact strength

Ray'Ran

[More information](#)



## Auto Density Measurement System

Using the Gradient Column Method, the Ray-Ran Density Gradient Apparatus can calculate the density of a specimen to 6 decimal places and become the worlds benchmark fore accurate density measurement

### Applications

- Density

Ray/Ran

[More information](#)



## CNC Test Sample Profile Cutter

The CNC Sample Profile Cutter used for Test Sample Preparation and 3D prototyping, and is recommended for use with thicker sheet materials or pipe sections as it can cut up to 100mm thick

Ray/Ran

7

## Coefficient of Friction-Slide Angle

Slide Angle Friction is a measurement of a sheet like substrate such as paper, corrugated, plastic film or paperboard which determines the angle of inclination at which one substrate affixed to a sled will begin to slide/slip against another substrate of a similar...

### Applications

- Coefficient of friction-Slide Angle

**TMI**  
TESTING MACHINES, INC.

[More information](#)

## Compression Tester



Designed in close cooperation with the corrugated industry, the 17-76 Compression Tester is rugged enough for any production testing environment. Utilizing intuitive hardware features and menu-driven software, the 17-76 is designed to provide highly accurate...

### Applications

- Compression testing



[More information](#)

## DualPerm Permeation Station



OTR and WVTR combined station offering substantial cost savings compared to the purchase of two separate permeation analyzers. This package allows the sharing of one computer/tablet interface and results, saving time and space on the work bench.

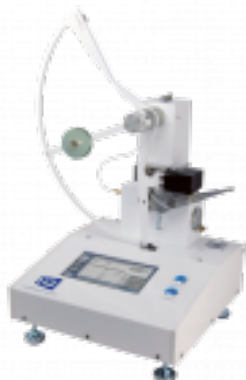
### Applications

- Permeation rate determination



[More information](#)

## Elmendorf TearTester



Elmendorf Tear testing determines the force required to continue the tearing of an initial cut in sheet materials such as paper, plastic film, textile and non-woven. The Elmendorf Tear Tester is an automated tear tester equipped with an optical encoder for measuring...







## Falling Weight Impact Tester

The Falling Weight Tester is used to determine the energy required to break or rupture test specimens from Pipe, Sheet, Laminates, Composites, Ceramics, and can comply to various international standards such as ISO6603, ISO3127, ASTM D2444 to name a few.

### Applications

- Failure analysis
- Impact strength

Ray'Ran

[More information](#)



## Gaspace Advance Micro

Carbon dioxide (CO<sub>2</sub>) and oxygen (O<sub>2</sub>) headspace analyzer. Fast, accurate MAP Analyzer for testing low volumes of O<sub>2</sub> and CO<sub>2</sub> in gas flushed food and pharmaceutical products

### Applications

- Gas Headspace analysis

**SYSTECH**  
Illinois  
Manufacturers of Gas Analysis Equipment

9

[More information](#)



## Gaspace Advantage

Carbon dioxide (CO<sub>2</sub>) and oxygen (O<sub>2</sub>) headspace analyzer. These MAP analyzers can test all pack sizes and very low volumes and can test rigid cans and jars. Analysis can be timed tests, Autosense, Peak/valley, Syringe direct injection or continuous testing

### Applications

- Gas Headspace analysis

**SYSTECH**  
Illinois  
Manufacturers of Gas Analysis Equipment

[More information](#)

## GS6000 Headspace Analysers

Oxygen and Carbon Dioxide headspace measurement for modified atmosphere packaged (MAP) product. Response is typically less than five seconds for oxygen and ten seconds for carbon dioxide. Can piercing station available



### Applications

- Gas Headspace analysis



[More information](#)

## Heat Sealer

The TS-12 is one of the most precise and consistent table top sealers available. The heat sealer is designed to produce heated crimp seals for flexible packaging materials. The digitally controlled heat sealer allows independent upper and lower seal jaw temperature...



10

## Heat Sealer

The model TS-4 laboratory heat seal tester is used to prepare heat seal samples for the measurement of sealing strength of flexible packaging films, film foil laminates, nonwovens and other substrates. The TS-4 Heat Seal tester produces consistent and accurate seals...



## Ink Rub



The Digital Ink Rub Tester is designed to measure scuffing or rubbing resistance. Several tests can be performed including dry rub-the amount of transfer ink from one dry surface to another, wet rub-the amount of transfer of ink from wetted surface to another, wet...



## LabMaster Coefficient of Friction



The 32-91 Lab Master® Slip and Friction Tester with Elevator System is designed to precisely determine the friction characteristics of a variety of materials. The instrument removes operator variability from the test procedure with specially designed features to...

### Applications

- Coefficient of friction-Horizontal



[More information](#)

## Lyssy L80-5000



Easy and reliable permeation of water vapor in applications such as non-woven materials. Range 0.03-10,000 g/m<sup>2</sup>/day. Successfully for decades in many laboratories. Simple to use with a reliable testing principle and low maintenance this instrument is a cost effective...

### Applications

- Permeation rate determination



[More information](#)

## OxySense 325I



One click oxygen measurements for conducting non-invasive or invasive measurements in oil, water or air. Including packages, bottle, blister packs, package material and design evaluation, closure design and evaluation. Requires computer

### Applications

- Gas Headspace analysis



[More information](#)

## Pneumatically Operated Test Sample Cutting Press



The Pneumatic cutting press is an effortless and safe way to cut samples from materials such as plastics, boards and paper, and generates a cutting force of up to 50KN to cut materials up to 8mm thick

### Applications

- Coefficient of friction-Horizontal

**Ray**'Ran

[More information](#)

## Precision Micrometer



The model 49-86 Digital Micrometer combines a precision digital linear encoder measuring system with an ultra-clear, easy-to-read digital display. The unit has a measurement range: 0-0.050 in. (0-1.27 mm). The micrometer is designed for materials such as thin plastic...

### Applications

- Thickness measurement



[More information](#)



## Test Sample Injection Moulding Apparatus

The Test Sample Moulding Apparatus has been specifically designed to produce colour plaques, tensile & impact test specimens for mechanical testing.

Ray'Ran



## TME BT Integra-Pack™

BT Integra-Pack is a bench-top high-resolution (0.001 psig) for burst tests, creep, creep-to-failure and leak integrity testing. Applications cover a range of flexible or rigid, porous and non-porous, open or sealed packages

### Applications

- Burst strength-package
- Leak detection
- Seal integrity
- Seal strength



13

[More information](#)



## United Earing Cup Measurement

United's DAT-18-CUP Series Tester automatically tracks the ductility properties of sheet metals and aluminum. Calculating the ductility properties in all directions of the material.

### Applications

- Burst strength-sheet-Test
- Can inspection
- Coefficient of friction-Slide Angle
- Coefficient of friction-Horizontal
- Compression testing
- ... and more



[More information](#)



## United DSTM 2.5KN Table Top UTM

United's DSTM-2.5KN test frame is ideal for testing samples up to 2.5kN (550lb.). From basic tension and compression testing to advanced materials testing the DSTM-2.5kN is a versatile test system used across virtually all industries.

### Applications

- Coefficient of friction-Slide Angle
- Coefficient of friction-Horizontal
- Component integrity testing
- Compression testing
- Creep Detection test
- ... and more

[More information](#)



## United DSTM 20KN Table Top UTM

United's DSTM-20KN test frame is ideal for testing samples up to 20kN (4,500 lbf.). From basic tension and compression testing to advanced materials testing the DSTM-20kN is a versatile test system used across virtually all industries.

### Applications

- Burst strength-sheet-Test
- Can inspection
- Coefficient of friction-Slide Angle
- Compression testing
- Creep Detection test
- ... and more

[More information](#)



14



## United DTM 50KN Table Top UTM

United's DSTM-50KN test frame is ideal for testing samples up to 50kN (11,200 lbf.). From basic tension and compression testing to advanced materials testing the DSTM-50kN is a versatile test system used across virtually all industries.

### Applications

- Burst strength-sheet-Test
- Can inspection
- Coefficient of friction-Slide Angle
- Compression testing
- Creep Detection test
- ... and more

[More information](#)



# United Fatigue To Failure System



United's Computer-controlled rubber testing system FTF-48 performs fatigue-to-failure test on up to 48 samples at one time. The United FTF offers strokes from 0 to 4 inches at speeds up to 100 strokes per min. United acquisition software automatically records...

## Applications

- Burst strength-sheet-Test
- Compression testing
- Can inspection
- Creep Detection test
- Coefficient of friction-Slide Angle
- ... and more

[More information](#)



# Our Brands

With our nine portfolio companies, Industrial Physics is one of the world's largest manufacturer of packaging and material testing equipment.

