Victor Manufacturing
Tensile Machines

VICTOR MANUFACTURING SDN BHD
(1239671-P)
Supply & Distribution | Repair | Upgrade | Calibration
Universal Testing Machines / Tensile Machines & Accessories
www.victortestingmachine.com
INTRODUCTION

Victor Manufacturing Sdn Bhd is a manufacturing branch of Victor Equipments Resources Sdn Bhd, which specialised in Material Testing & Sample Preparation Equipment and Systems.

Both companies are under ObsnapGROUP of Companies, which was established since 1997 and focuses in the supply & distribution of Measuring, Analysis, Detection & Material Testing Equipment and System.

On 2017, Victor focused its production of Universal Testing Machines within Malaysia as an innovative force in the development and delivery of precision material testing instruments for all types of materials, locally. Eventually Victor began its’ manufacturing line and exported to various S.E.A countries (i.e. Australia, Dubai, Lome Africa, Vietnam, Singapore, Philippines, Indonesia, Thailand, etc).

Besides distribution of Material Testing Equipment. Victor is able to upgrade and customize tensile machine accordingly to customer's requirement with machines calibrated to ISO / IEC 17025.

VISION

To be the solution provider-of-choice for industrial and laboratory material testing equipment.

MISSION

To bring certainty in material research and reliability for testing to every laboratory in the world.
The growing demand for material testing in the educational institutions is driving the material testing market. The increasing necessity to meet manufacturing standards, such as ASTM, and ISO, have resulted in high demand for material testing equipment.

Among types, the universal testing machines segment led the material testing market in 2016. Universal testing machines is the largest segment of the material testing market, owing to its affordable availability and its wide usage in various industries.

The material testing market in Asia Pacific is projected to grow at the highest CAGR during the forecast period. Asia Pacific is the largest and the fastest-growing market for material testing. It is also a major market for construction, educational institution, and automotive globally. Countries in Asia Pacific are expanding their production capacities and investing in new projects due to increasing industrialization. Growing economies, increasing population, and standard of living are driving the automotive, construction, and aerospace & defense industries in the region. This, in turn, is fuelling the growth of the material testing market in Asia Pacific.

Materials Testing is performed for a variety of reasons and can provide a wealth of information about the tested materials, prototypes or product samples.

Here are some of the reasons material testing is important:

- Meeting requirements of regulatory agencies
- Selecting appropriate materials and treatments for an application
- Evaluating product design or improvement specifications
- Verifying a production process

Victor Manufacturing is an associate company of Obsnap Instruments that established in 1997. With a combined experience of nearly twenty-two years of practical consultation and professional solution provider for material testing, Victor Manufacturing is formed with a pure intention to serve Malaysia and S.E.A. countries as an innovative force in the development and delivery of precision material testing equipment for all types of materials.

Now, we are expanding our reach across the region to serve the market better. Currently, Victor Manufacturing are searching for enthusiastic and caliber business partners around South-East Asia. We knew that in order to reach each country market, we need extra hands in the country itself. Thus, we are eagerly finding a distributor in your region so that we could share and spread the importance of material testing and its benefits to the industries.
OUR PRODUCTS

VICTOR UNIVERSAL TESTING MACHINE

Victor Manufacturing manufactures Universal Testing Machine here locally in Malaysia. A universal testing machine is used to test the tensile stress and compressive strength of materials. It is named after the fact that it can perform many standard tensile and compression tests on materials, components, and structures. Also known as UTM, universal tester, material testing machine or tensile machine. UTMs specialize in providing material and engineering tests to determine tensile tests properties like:

- Ultimate tensile strength
- Breaking strength
- Maximum elongation and reduction in specific sample areas

Victor's computer-controlled Testing Machines are suitable for wide range of material for tension, compression, bending, shearing test etc. It is equipped with PC system for test control, test result analysis, data processing & printing. This broad portfolio of load frames, software and accessories delivers exceptional control, reliability, and ease-of-use to address a full range of monotonic test applications.

Victor UTMs are constructed with a variety of components & part from USA, JAPAN & MALAYSIA that ensures premium quality with high precision and reliability.
Victor test systems are compliant with international standards and designed to meet the requirements of all common testing standards such as ISO, JIS, ASTM, DIN and others. They provide an ideal balance between functionality and cost, and are able to satisfy common testing needs across a broad range of industries while offering an excellent return on investment.

Victor’s computer-controlled Testing Machines are suitable for a wide range of material for tension, compression, bending, shearing test etc. It has high precision, high stiffness as well as high stability, equipped with PC system for test control, test result analysis, data processing & printing. Complete with modulus for metal, spring, textile, rubber, plastic and other material testing & creep test. It is widely used in quality control and research & development such as manufacturing, oil & gas industries, testing & research laboratory, education, etc.

This broad portfolio of load frames, software and accessories delivers exceptional control, reliability, and ease-of-use to address a full range of monotonic test applications.

**APPLICATIONS**

- Compression
- Flex/bend
- Peel
- Shear
- Tear
- Tension

**MATERIALS & COMPONENTS**

- Adhesives and coatings
- Biomedical products
- Composites
- Construction materials
- Fibers and textiles
- Foam
- Metals
- Polymers
- Wood and paper products
Product Overview

Victor UTMs are constructed with a variety of components & parts from USA, JAPAN & MALAYSIA. To ensure you get the quality and precision of your testing procedures.

- Photoelectric encoder with high resolution 1um provide accurate crosshead position measurement
- Upper & Lower Safety limit switches for over-stroke protection
- Reliable & high precision ball screw provides smoother driving with no clearance. Reduce noise and transmission losses while increasing the transmission efficiency.
- High stiffness and precise crosshead guidance. Double steel columns provide highly accurate guidance for crosshead movement
- USA high-precision load cell that guarantees accuracy within ±0.5%
- Soft Pad Controller to adjust crosshead movement and start/stop test
- Emergency stop control to shut down equipment immediately for protection
- Japan Panasonic robust servo motor and control system ensure smoother operation and reduced vibration at stopping

Victor UTMs are constructed with a variety of components & parts from USA, JAPAN & MALAYSIA. To ensure you get the quality and precision of your testing procedures.
Universal Testing Machines - Electromechanical

Electromechanical Floor type VEW 2302 Series

**TECHNICAL SPECIFICATIONS (VEW 2302 Series)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>50kN or 100kN</td>
</tr>
<tr>
<td>Test speed</td>
<td>0.05 - 500 mm/min</td>
</tr>
<tr>
<td>Maximum load</td>
<td>5.10, 20 ton</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Class 0.5</td>
</tr>
<tr>
<td>Effective measuring range</td>
<td>0.2 - 100% Full Scale</td>
</tr>
<tr>
<td>Load accuracy</td>
<td>±0.5%</td>
</tr>
<tr>
<td>Load resolution</td>
<td>1/300000</td>
</tr>
<tr>
<td>Load sensor</td>
<td>Max 4</td>
</tr>
<tr>
<td>Effective test width</td>
<td>400 mm</td>
</tr>
<tr>
<td>Effective tensile stroke</td>
<td>1200 mm</td>
</tr>
<tr>
<td>Accuracy of displacement measurement</td>
<td>±0.5%</td>
</tr>
<tr>
<td>Accuracy of measured</td>
<td>Tolerance: ±0.5% (according to requirement of customer to choose the larger or small deformation)</td>
</tr>
<tr>
<td>deformation</td>
<td></td>
</tr>
<tr>
<td>Jog Controller</td>
<td>Fast/slow two speeds to control, can jog</td>
</tr>
<tr>
<td>Back to function of testing platform</td>
<td>Manual or automatic operation After the test, the moving iron return to initial position with the highest speed by manual or automatic operation</td>
</tr>
<tr>
<td>Overload protection</td>
<td>Overload 10%, automatic protection</td>
</tr>
<tr>
<td>Dimension</td>
<td>1070 x 560 x 2100 mm (L x W x H)</td>
</tr>
<tr>
<td>Power Supply</td>
<td>3 Phase 415V, 50HZ</td>
</tr>
<tr>
<td>Weight</td>
<td>Approx. 320 kg</td>
</tr>
</tbody>
</table>

Electromechanical Benchtop Type VEW 220 Series

**TECHNICAL SPECIFICATIONS (VEW 220 Series)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load capacity</td>
<td>40N, 100N, 200N, 500N, 1000N</td>
</tr>
<tr>
<td>Load resolution</td>
<td>1/300000</td>
</tr>
<tr>
<td>Load accuracy</td>
<td>±0.5% of reading down to 1/50 of full scale with ASTM E83 class B or ISO 9513 class 0.5 extensometer</td>
</tr>
<tr>
<td>Strain measurement accuracy</td>
<td>±0.5%</td>
</tr>
<tr>
<td>Power magnification</td>
<td>7 automatic switching</td>
</tr>
<tr>
<td>Displacement resolution</td>
<td>0.001 mm</td>
</tr>
<tr>
<td>Displacement accuracy</td>
<td>±0.5%</td>
</tr>
<tr>
<td>Extensometer resolution</td>
<td>0.001 mm</td>
</tr>
<tr>
<td>Extensometer accuracy</td>
<td>±0.5%</td>
</tr>
<tr>
<td>Speed range</td>
<td>0.01 – 500 mm/min or 1000 mm/min</td>
</tr>
<tr>
<td>Crosshead speed accuracy</td>
<td>Better than ±0.2% of set speed</td>
</tr>
<tr>
<td>Effective Tensile Stroke</td>
<td>Twin ball screw driven with closed-loop servo and motor control</td>
</tr>
<tr>
<td>Safety</td>
<td>Electronic Safety Limit Switch Protection</td>
</tr>
<tr>
<td>Auto or Manual Return</td>
<td>Auto/Manual Return after testing</td>
</tr>
<tr>
<td>Jog Controller</td>
<td>2 speed control mode</td>
</tr>
<tr>
<td>Overload Protection</td>
<td>Setting 5~10% Overload Protection, Automatic shutdown the system</td>
</tr>
<tr>
<td>Load unit</td>
<td>N, kN, kgr, lb, ton etc</td>
</tr>
<tr>
<td>Power Supply</td>
<td>Single Phase 220V 50Hz</td>
</tr>
<tr>
<td>Dimension</td>
<td>450mm x 580mm x 1350mm (LxWxH)</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>Approx. 35kg</td>
</tr>
</tbody>
</table>
## Universal Testing Machines - Electromechanical

### Electromechanical Floor type VEW 2308 Series

**TECHNICAL SPECIFICATIONS (VEW 2308 Series)**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load capacity</td>
<td>5kN, 10kN, 20kN</td>
</tr>
<tr>
<td>Load resolution</td>
<td>1/300000</td>
</tr>
<tr>
<td>Load accuracy</td>
<td>≤±0.5% from 0.2% - 100% full scale</td>
</tr>
<tr>
<td>Strain measurement accuracy</td>
<td>±0.5% of reading down to 1/50 of full scale with ASTM E 83 class B or ISO 9513 class 0.5 extensometer.</td>
</tr>
<tr>
<td>Power magnification</td>
<td>7 automatic switching</td>
</tr>
<tr>
<td>Displacement resolution</td>
<td>0.001 mm</td>
</tr>
<tr>
<td>Displacement accuracy</td>
<td>≤±0.5%</td>
</tr>
<tr>
<td>Extensometer resolution</td>
<td>0.001 mm</td>
</tr>
<tr>
<td>Extensometer accuracy</td>
<td>≤±0.5%</td>
</tr>
<tr>
<td>Speed range</td>
<td>0.01~500mm/min (Optional : 1000mm/min)</td>
</tr>
<tr>
<td>Crosshead speed accuracy</td>
<td>Better than ±0.2% of set speed Twin ball screw driven with close-loop servo and motor control.</td>
</tr>
<tr>
<td>Effective Tensile Stroke</td>
<td>800mm</td>
</tr>
<tr>
<td>Motor</td>
<td>Delta Servo Motor</td>
</tr>
<tr>
<td>Test width</td>
<td>400mm</td>
</tr>
<tr>
<td>Load unit</td>
<td>N, kN, kgf, lb, Ton etc</td>
</tr>
<tr>
<td>Power Supply</td>
<td>Single Phase 220V 50Hz</td>
</tr>
<tr>
<td>Dimension (L x W x H)</td>
<td>800 x 550 x 2200 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>250 kg</td>
</tr>
</tbody>
</table>

### Electromechanical Computer Type Carton Resist Compression Testing Machine VRC 601B

**TECHNICAL SPECIFICATIONS (VRC 601 Series)**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units</td>
<td>kgf, lbf, N, KN, kPa, MPa</td>
</tr>
<tr>
<td>Capacity</td>
<td>500kg, 1 ton, 2 ton, 5 ton, Ston</td>
</tr>
<tr>
<td>Resolution</td>
<td>1/50,000</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±1% ACCURACY</td>
</tr>
<tr>
<td>Compression space</td>
<td>1000<em>1000</em>1000mm; (or designated)</td>
</tr>
<tr>
<td>Motor</td>
<td>Panasonic AC Servo Motor + Driver</td>
</tr>
<tr>
<td>Test speed</td>
<td>12~350mm/min</td>
</tr>
<tr>
<td>Protector</td>
<td>Leakage protection, overload auto-shutdown, displacement limit protection</td>
</tr>
<tr>
<td>Volume</td>
<td>153<em>121</em>180cm</td>
</tr>
<tr>
<td>Power</td>
<td>1φ, AC 220V, 5A</td>
</tr>
</tbody>
</table>
REALTEST can be found with all of VICTOR’s Universal Testing Machines.

Choose Unit Setting

Various types of Unit Selection

More than 200 International Test Standards can be Set & Programmed
REALTEST Software Operation Interface

Test Curve Display

Customized Test Report for various type of products

Create Test Report in Microsoft, Excel or PDF format
Testing Accessories

Thanks to its extensometers, environmental simulation solutions and wide range of grips & fixtures. Victor Manufacturing offers high-performance or customised testing accessories to match the needs of your testing simulation & procedure to meet your various materials & components testing.

Grips & Fixtures

**Mechanical Wedge Grip**
These mechanical grips are designed to self-tighten as the tensile test progresses. Used for high strength tensile testing, suitable for flat & round specimen.

**Spring Loaded Wedge Grip (Center Action)**
This Spring Loaded grips are designed to self-tighten as the tensile test progresses. Easy & fast jaw opening. Used for high strength tensile testing, suitable for flat & round specimen.

**Eccentric Roller Grip**
Easy to use and self-tightening. Applicable for soft and flexible samples, foils, plastics, rubber, etc.

**Jaw Tension Grip**
Used to grab small areas of a sample for a tensile test. These fixtures are ideal for testing end-consumer products because the grip actuation resembles two fingers pinching together and pulling on something.

**Tensile Wedge Grip**
These mechanical grips are designed to self-tighten as the tensile test progresses. Used for high strength tensile testing, suitable for flat & round specimen.

**Pliers Grip**
Suitable to test rubber, plastic film, leather and fabric.

**Strapping Band Tensile Test Grip**
For PP Strapping, Web strap, belt, etc.

**Screw Side Action Grips**
Suitable to test fabric, textile webbing, metal, film, rubber and plastic.

**Spring Loaded Wedge Grip (Side Lift)**
Spring operated, easy and fast opening of jaw. Suitable for plastic and rubber material.
Testing Accessories

Grips & Fixtures

Capstan Grip
Suitable for wire, thread, yarn etc

Leather Tearing Test Grip
Suitable for tearing strength of leather

90 Degree Peel Test Fixture
To measure the adhesion strength. The sliding table provides a steady movement to maintain a constant peel angle. The peel point remains in the centre.

Puncture Test Fixture
General rules of plastic films for food packaging

Leather Puncture Resistance Test Fixture
Test fixture to determine distension and strength of surface of leather.

Spring Compression Platen
- For hard materials, steel, plastics, stone etc.
- Hardened steel 58 HRC, black phosphate coating
- Temperature range: 0°C - +350°C
- Nickel plated: -70°C - +350°C (on request)
- Max capacity depends on the size of coupling

Extensometers & Sample Cutter

Electronic Extensometer
To measure deformation of metallic materials.

Long Travel Extensometer
Long-travel contact extensometer designed to measure displacement in tensile tests of soft materials with considerable elongation

Dumbell Cutte
Our range of Dumbell Cutters is manufactured using high grade material. These are available in different sizes and varieties like tear cutters and straight cutters compliance with ASTM, DIN, and ISO standards.
Service & Support

Victor Manufacturing offers a variety of services to support your tensile machine needs.

Calibration

VICTOR offers calibration to ensure of the accuracy of the tensile machine's system whether its from our production line and even for other brands.

Material Testing

VICTOR can do material testing for Metal, Plastic, Rubber, Textile, Composites, Cement Parts, Components and Materials, etc.

We comply to standards i.e. ASTM, ISO, DIN etc. Along with various mechanical testing i.e. Adhesion, Abrasion and Wear Testing, Bend Testing, Break Strength, Bond Strength, Compressive Strength, Ductility, Durability, Elongation, Fatigue Testing, Tensile Strength, Tensile Stress, Stress Rupture, Yield Strength, etc.

Custom Modification & Upgrade

VICTOR's Upgrade Service can provide high-standard & quality accessories and other add-ons to old & outdated machines or customised your own unique tensile machine accordingly to your specs or requirements.

Whether it is an electromechanical or hydraulic machine – the upgrade / customisation process, will not be affected*.

*Within our expertise.

Repair & Maintenance

Victor Manufacturing has more than 20 years of installation, maintenance, servicing, repairing, wiring & fabrication and modifications experience while partnered with Obsnap Instruments Sdn Bhd, which was established, since 1997.

VICTOR can repair your material testing equipment confidently, along with any machine ordered from our upgrading or customised service.
Service & Support

Customised Grips, Jig & Fixtures

Victor Manufacturing can build, design and produce unique Grips / Fixtures accordingly to your requirement. View some of our samples below.

Customised Jigs for Automotive Components Testing

- Compression Jigs for Bottle / Jerry Can
- Strength Test Fixture for Steel Stud & Frame Wall system
- Customised ASTM D3574 Foam Compression Platen
- Compression Jig for PE/Steel Drums
- Customised Jig for Air Filter Adhesion Strength Test
CLIENTS’ TESTIMONIAL

HONDA AUTOPARTS
VEW 2308E 5kN

BOON PLASTIC
VEW 2307E 500N

POLITEKNIK SEBERANG PERAI
VDW 1000

UNIVERSITI MALAYSIA PAHANG
VEW 2302 50kN

KAYABA
VEW 2302 50kN

HELP UNIVERSITY COLLEGE
VEW 2302 50kN
Manufacturer of
Universal Testing Machine / Tensile Machines & Accessories

Textile Testing Machine | Furniture Testing Machine | Metallographic Sample Preparation
Metallographic Consumables | Industrial Lapping & Polishing Machine
Coating Test Equipment

Social Media

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