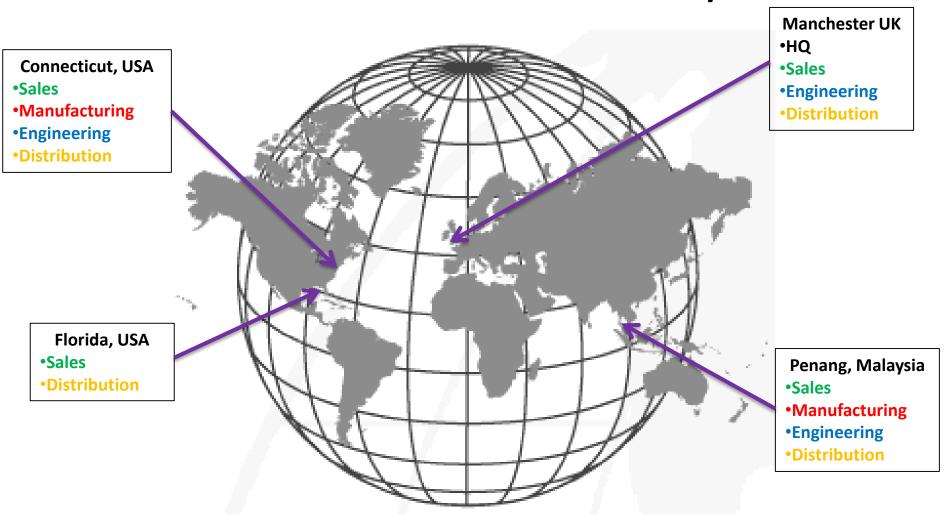


## **Authorised Distributor in Asia Pacific Region for Trumeter Products**



# A well funded growing profitable Global Group



Partners in more than 50 Countries

## **Company Evolution**

#### Old Co'

- 1937 Trumeter Company Started
- 1955 Opened Radcliffe Factory
- 1991 Acquire Trumeter Inc (USA)
- 1997 OEM Business starts
- 2004 Production starts in Malaysia
- 2007 Jaguar XF Console Production starts

#### New Co'

- Jan 2010 Company reformed as Trumeter Technologies Ltd New Investment, Strengthened Management Team
- July 2010 Company Moved to New HQ in Bury
- Sep 2010 Production Start up at modern newly constructed facility in Malaysia
- Aug 2011 Acquisition of Redington Counters in USA
- Nov 2011 ENTES Partnership signed
- Feb 2012 Relocate HQ to larger improved facility with storage area

# Mission £50 million sales in 5 years, £30million in 3

#### **TOTAL TEAM TRUMETER**

The Total Team Trumeter spirit is defined by one global team, driven by the best interest of our customers, investors and employees.

#### **COMMITMENT TO EXCELLENCE**

Through continuous improvement and working with integrity, and in true partnership with our customers and suppliers, we design and manufacture innovative products and services of world class quality, delivered on time.

#### **SUSTAINABILITY**

Our group will grow profitably and sustainably to ensure that we can continue to be the first choice supplier in our chosen markets for both core and special products.

## A Performance Culture

- Monthly briefings and reviews ensure common global objectives and standards
- Annual appraisals with pro-active training plan
- Performance appraisals form the basis of Director pay
- Manufacturing scorecard ensures key objectives flow through the production teams to each individual operator
- Innovation and Continuous Improvement are in everything we do
- •A listening company that is customer focussed





#### INNOVATIVE DESIGN TECNOLOGIES SDN BHD

Telephone: + 60 (0) 4-5015700 Email: info@idtworld.com Lot 5881, Lorong IKS Bukit Minyak 1, Taman Perindustrian IKS, 14000 Bukit Tengah, Penang, Malaysia



## **Innovative Design Technologies Sdn. Bhd.**

(IDT) started its Incorporation in September 2010 as one of specializes measuring products and automotive lighting designer and manufacturer in Penang, Malaysia with an area of 21,000sq. feet and total amount of investment up to 5 million Ringgit Malaysia. With over 200 skilled employees and a monthly capacity of 250,000 pcs of various model of Light Fittings.

Currently IDT is acknowledging as one of the quality export suppliers of counting instrument in US, Europe and other Asia Pacific countries.

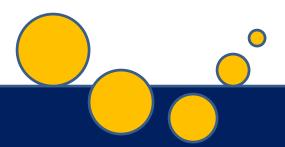
In line with our company's stringent quality control, we are certified with ISO 9001:2000 Quality Management System. Our products are developed to exceed expectations and international standards.



#### About Us.

Innovative Design Technologies Sdn. Bhd. is a global manufacturer and distributor of sophisticated measurement instruments (Core Products) and LED lighting products, fluid dispensing measuring and metering products, for a diverse range of applications, (Special Products).

Innovative Electronic Measurement devices and LED Lighting Systems
Turnkey EMS with ODM capabilities
ASIC Design and electronic miniaturization
Ultra low power circuitry
Automotive • Industrial • Consumer





## **Facilities & Capacities.**

The production facilities operates with 150 people.

- \*Die attach and wire bond (Capacity 250 million pa)
- \*Surface Mount (Capacity 200 million pa)
- \*Through hole and multi-task assembly
- \*Ultrasonic Welding
- \*Mouldings and metal work
- \*Multiple Assembly processes
- \*Test and validation



Fuji automated SMT Machine



**Clean Assembly Line** 





## **Quality Policy**

Innovative Design Technologies Sdn Bhd. operates an effective Quality Management System that ensures the products and services we provide fully meet our customer's exact requirements. We have adopted a continuous improvement culture to drive our performance higher, ensuring our ongoing achievement of increasing standards in customer satisfaction through:

- Outstanding Customer Service
- > High Quality Products
- **>** On Time Delivery
- **A** Competitive Cost



## **An ISO Certified Company**





## **Accreditation Summary**

ISO9002 accreditation since 1993

ISO9001 accreditation since May 2002

ISO9001:2008 accreditation re-accreditation in

March 2011

ISO TS16949 - In progress

# Trumeter Control and Measurement Product-Distance





## **Product Features**

- \*Robust Construction
- \*Reliable
- \*Choice of Professionals
- \*World Class Quality

## **Customer Sectors**

- \*Land Surveying
- \*Cable Laying
- \*Police, Accident Investigation
- \*Building Contractors / Suppliers
- \*Golf Courses
- \*Sports Pitches

## 5000 Road Measurer







## Product Features

- \*Economical
- \*Mechanical & Electronic Versions
- \*Easy to Carry
- \*Adjustable Handle Length

## Customer Sectors

- \*Domestic
- \*Toolkit Product
- \*Surveyors
- \*Accident investigators
- \*Health authorities

## 5500 Measuremeter







# Land Measurer 5041-511

## Product Features

- \*Super Robust Construction
- \*Large Wheel, Heavy Duty Tyre
- \*Ideal for Rough Terrain
- \*Large Counter Display

## Customer Sectors

- \*Farmers
- \*Sports Pitches (Olympics)
- \*Military
- \*Land Agencies







# Rail Track Measurer 5061-511

## Product Features

- \*Super Robust Construction
- \*Non Slip Wheel
- \*Side Plates for Stability
- \*Dual Reading Available
- \*Designed with British Rail

## Customer Sectors

- \*Rail Companies
- \*Rail Contractors
- \*Maintenance







# Model 07 Heavy-Duty

Figures: 5 figures, .19" high

**Reset:** Rotary knob **Warranty:** Lifetime

Weight: 3.6 lbs. with stand

3.0 lbs. without stand (3 ft. or 1 m. models

only)

**Extended Size:** 40"

Storage Size: 3 ft. & 1 m: 26"; 4 ft: 24" Wheel Size: Wheels are identified by

their circumference.

4 ft. wheel has a diameter of ~15.3 in.

3 ft. wheel has a diameter of ~11.5 in.

1 m. wheel has a diameter of ~32 cm.





# Model 07 - Medium-Duty

Figures: 5 figures, .20" high

**Reset:** Push Button **Warranty:** Lifetime

Weight: 1.2/1.4lbs (Single/Double) Extended Size: 44"(curved handle),

39"(straight handle)

Storage Size: 28" (curved handle),

17"(straight handle)

Wheel Size: Wheels are identified by

their circumference

1 ft. wheel has a diameter of ~3.8 in.

30 cm. wheel has a diameter of ~9.5 cm.



# Trumeter Control and Measurement Product-Electronics





## 951/ 952 3 1/2 digit LCD digital panel meter

#### **Features**

Low power consumption
10mm black character high contrast LCD display
Backlit version DPM951-T
24mm X 48mm bezel
5 or 9VDC operation
200mV full scale
Scaleable

# Digital Panel Meter





# **Totalising Counters**

## 7000 / 7000AS

6 digit LCD electronic totalising counter



#### **7016**

6 digit LCD electronic totalising counter



#### **HED251**

4 Digit panel mount counter 24 x 48mm



#### **HED261**

8 Digit panel mount counter 24 x 48mm





# **Totalising Counters**

## 7000 / 7000AS

6 digit LCD electronic totalising counter



#### 7111

8 digit self powered electronic LCD counter



#### 7111HV

8 digit self powered electronic LCD counter with high voltage input





# **Totalising Counters**

#### 7400AS

8 digit LCD bi-directional totalising counter for PCB mounting with push button reset.



8 digit LCD bi-directional totalising counter for PCB mounting







# **Predetermining Counters**

#### 7922

6 Digit supertwist LCD programmable preset counter with 2 prescaler, quadrature input and EEPROM data storage in an IP65 Din case.



#### **7932**

6 Digit supertwist LCD programmable preset counter with 1 prescaler, quadrature input and EEPROM data storage in an IP65 Din case.



#### 9100

Multi-function instrument is a multi-preset, totalising counter/ratemeter



#### 878X

6 Digit predeterming counter with a 5 digit rate meter.





## **Electronics Timers**

#### **7511**

8 Digit self-powered LCD electronic timer



#### **7511HV**

8 Digit self-powered LCD electronic timer with high voltage input



#### 877X

5 Digit rate meter and process time indicator





# Time Relays

#### **7956**

Digital LCD Din-rail mountable multi-function time relay with 8 operating modes and 8 timing ranges.





# **Multi Purpose Counter**

#### **Features**

Reflective LCD Display with 8 large (8mm) digits Wide array of available functions

#### Choice of one or two inputs

- \*Switch Input (No voltage)
- \*Low DC Voltage (3-30VDC)
- \*High Voltage (20-300VAC or 10-300VDC)

#### **Choice of control inputs**

- \*External Electronic Reset
- \*Front Panel Reset Enable

Discrete Output (Open-Drain MOSFET)

#### **Power Options**

- \*External with EEPROM
- \*internal 15+ yr lithium battery

## **Optional Front Panel Programming**

- \*3 Redi-Alerts
- \*Preset functionality

#### **Available factory programming**

- \*4 Redi-Alerts
- \*Preset functionality

Tachometer measures up to 30,000 RPM



Model 63

- \*Frequency measurements for 50, 60, and 400 Hz applications
- \*Programmable scale factors for engine interfacing
- \*NEMA 4/4X, 12, and IP66 rated
- \*EMC Compliant to EN61326:2001 for industrial environments
- \*CE compliant, UL and cUL recognized
- \*European WEEE & RoHS Compliant



## **Maintenance Meter**

#### **Features**

- \*Totally sealed from moisture and dirt
- \*AC or DC voltage input in the same unit
- \*Compact depth
- \*Programmable output thresholds (MOSFET)
- \*Preset Count value/Hour Meter
- \*Up to 3 Redi-Alerts/7 icons
- \*Fits in existing panel openings
- \*Always on display
- \*A choice of 8 housings
- \*A choice of reset modes
- \*Front panel programmable
- \*Preset Functions with output
- \*Can be programmed with starting time
- \*15+ Year Battery Life

Model 34



# Trumeter Control and Measurement Product-Electromechanical





## Electromechanical Hour Meter

The model 710 AC hour meters and minute meters are widely used in panel applications where number size and visibility are critical. Its tough, Lexan bezel and distinctive styling enhance appearance and durability. Available in 5 figure reset or 6 figure non-reset versions.



**Model 710** 

A 5 figure (reset) or 6 figure (non-reset), AC hour meter encased in a rugged steel housing. The non-reset models are completely sealed. Reset models are available, as are both wire lead and terminal block versions



**Model 720** 

# Trumeter Control and Measurement Product-Length Measuring





# **Measuring Systems**

# **Model 3602 Mechanical Totalising Counter**

6 digit 6.4mm (0.25in) readout
Up to 3000 counts per minute with 1:1 gear ratio
1:1, 1:10, 2:1, 3:1, 4:1 gearings as standard
Front viewing
Reset to zero
Reset by lever
Customer Configurable Reset



#### **Model 2300**

Heavy duty measuring unit, dual measuring wheels for better stability and contact, frame/bulkhead mounted

## Model 2401/2701

Heavy duty measuring unit, twin/single unit, stay rod mounted.





# Fabric & Carpet Measurement

## Model 3900B Robust, durable & accurate length measurement

# TRUMEAJURE 3900

- US Weights & Measures Approval
- •Measures material up to 24mm (0.94in) thick
- Accommodates easily marked and/or abrasive materials (with special wheels)
- Accuracy 0.25%
- Accommodates pile up or no pile materials
- Optional encoder output
- •Can be built into manufacturing & finishing processes





## Cable & Wire Measurement

#### **Model 2600**

## Cable, Wire & Rope Measuring Machine

Heavy duty, multi-purpose measuring machine which measures the length of cable, wire, rope, hose, extrusions or continuous strip from 6mm (0.24in) to 76mm (3.0in) diameter.



#### **Model 2620**

### Multi Purpose Surface Length Measuring Machine

This is pivot arm assembly only that rests on the "guided" materials to be measured. As well as cable it is suitable many materials such as steel, plastic and board



#### **Model 2630**

## Multi Purpose Surface Length Measuring Machine

This is pivot arm assembly only that rests on the "guided" materials to be measured. As well as cable it is suitable many materials such as steel, plastic and board





## **Power Quality and Energy Products**

- Network Analysers designed to measure electrical parameters of networks in industrial plants
- 27 products



- Power and Energy Meters are designed to measure the active, reactive and apparent power values and active and reactive energy values of a network
- 8 products





## Electrical Measurement Products (1)

- Multimeters designed to measure the electrical parameters: current, voltage, frequency and cosф in industrial plants
- 16 products



- Ammeters designed to measure the current values of networks
- 14 products



- Voltmeters designed to measure the voltage values of networks
- 14 products





## **Electrical Measurement Products (2)**

- Cosφ Meter designed to measure the cosφ of the networks, and Frequency Meter designed to measure the frequency value of the networks
- 6 products



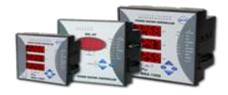
- Transducers convert the electrical signals on their input to analogue signals, and used with control and automation devices
- 3 products





# **Power Factor Correction (1)**

- Reactive Power Factor Controllers designed to match the system's power factor which is defined as the ratio of the active power to the apparent power to the user defined power factor value by controlling the facility's reactive power using capacitor banks
- 13 products



- LV power capacitors are circuit elements which compensate the inductive reactive loads on a system
- 34 products
- Shunt Reactors designed to meet the inductive load demands
- 19 products





# **Power Factor Correction (2)**

 Harmonic Filter Reactors used in serial connection with capacitor banks in power factor correction units

78 products

- Capacitor Duty Contactors designed for the control of capacitors in compensation panels
- 10 products
- LV Current Transformers are measuring transformers which transform the primary current by a specified ratio to its secondary side with a phase difference of 0 degrees. They provide isolation of the relays and measuring devices from the HV side of the network
- 23 products



# Remote Monitoring

 ENTES Ethernet Modbus Gateway is an Ethernet / RS-485 MODBUS network gateway, designed to enable communication with a PC via Internet(WAN) and Intranet(LAN)





## **Protection and Control**

- Phase Failure(Motor Protection) Relays 11 products
- Thermistor Relays 2 products
- Phase Sequence Relays 4 products
- Current Monitoring Relays 4 products
- Voltage Monitoring Relays 11 products
- Liquid Level Controller Relay 1 products
- Time Relays 15 products
- Astronomic Time Relays 7 products
- Overcurrent Protection Relays 2 products
- Photocell Relays 5 products





## **Production Facility - Asia**

Modern manufacturing facility in Malaysia New modern purpose designed factory SOP Sept 2010 150 people manufacturing millions of electronic products

- Die attach and wire bond (Capacity 250 million pa)
- Surface Mount (Capacity 200 million pa)
- Through hole and multi-task assembly
- Ultrasonic Welding
- Mouldings and metal work
- Multiple Assembly processes
- Test and validation



Clean Assembly Line



Wire Bonding



Fuji automated SMT machine



# **Quality Process**

- ISO9002 accreditation since 1993
- ISO9001:2008 accreditation since May 2002
  - Successful audits July 2010, March 2011, October 2011
  - Factory, Design & Engineering
- Sub-contractor and supplier control process
- International OEM Factory Audits
  - Brita , Flextronics, Hayco etc



## **Trumeter Group Summary**

- An innovative design partner with unique engineering and design capabilities
- Comprehensive product offering
- Low cost manufacturing with world class quality systems
- Financially sound growing business, with global sales across multiple business sectors



