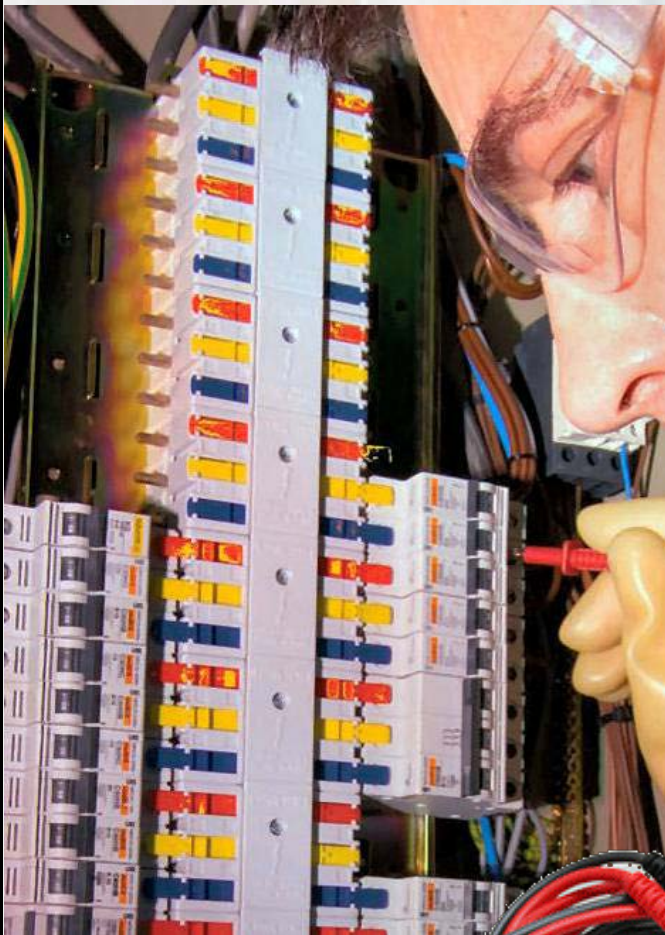
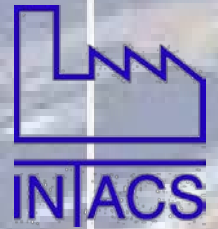


# Electrical Safety & Testing

## Safety Product Catalogue



# **We can also support you with our range of Electrical based Training Courses**

**Ask your training advisor  
for details**

- 1 day, **Duty Holder Safety of Electrical Systems**
- 1 day, **Electrical H&S, Resetting Trips, Overloads & Safe Isolation**
- 2 day, **Troubleshooting Live Electrical Systems More Safely**
- 2 day, **Electrical Fault Finding Techniques & Smart Practices**
- 5 day, **Industrial Electrics & Control Fundamentals Part 1**
- 5 day, **Industrial Electrics & Control Fundamentals Part 2**
- 1 day, **Industrial 17th Edition Wiring Regulations & Practical Implementation**
- 1 day, **16th to 17th Edition 2382-20 Wiring Regulations Update**
- 3 day, **17th Edition 2382-10 Wiring Regulations**
- 5 day, **C&G 2391 Testing, Inspection & Certification of Electrical Installations**
- 1 day, **Portable Appliance Testing**
- 1 day, **Electrical Machine Safety**
- 2 day, **C&G Regulations & Standards for Machinery Safety**
- 4 day, **C&G Machinery Safety**

We also provide Maintenance & Troubleshooting training courses covering PLC Automation Systems, Communications, Networking, Drives, Servo, HMI, SCADA, Hydraulics, Pneumatics & much more ...

# Electrical Safety Testing & Accessories

## Industrial Quality Test Lead set with fused leads & spring loaded clear shutters

**Did you know!**

see page 9



New Style  
spring loaded  
clear Shutters

- **GS 38 Compliant**
- **Screw fit probe with integral fuse holder & clear shutter**
- **Will take screw fit Crocodile Clips**
- **1.2 Metre Double Skin Silicone Cable**
- **Multistranded very flexible**
- **Temp. Rating -10°C to +150°C**
- **Burn proof leads (150°C)**
- **IEC 1010 Rating: 1000 Volts CAT III**
- **Fuse Rating 500mA/1000V/50kA**
- **Fuse supplied in each Lead**

Package & post extra

£27.95 + VAT  
for 1 to 9 pieces

£26.28 + VAT  
for 10 to 24 pieces

£25.16 + VAT  
for 25+ pieces

code GS38LSET

# Electrical Safety Testing & Accessories

## Industrial Quality Crocodile Clip Set



£12.60 + VAT  
price per set

- **Screw fit with integral fuse holder**
- **Suitable for the INTACS Industrial Test Lead set**
- **Supplied as a set consisting of 1 Black & 1 Red**
- **IEC 1010 Rating: 1000 Volts CAT III**

Package & post extra

code CROCSET38

# Electrical Safety Testing & Accessories

## Industrial Quality Lead & Fuse Tester



Simply clips  
to your  
Test Lead

£7.95 + VAT  
price each

- **Factory sealed battery powered lead/ fuse tester**
- **Suitable for use with any test lead**
- **Hooks onto any test lead ready to use**
- **Test lead & fuse by plugging in to one end & touching probe to metal collar**

Package & post extra

code LTEST38

# Electrical Safety Testing & Accessories

## GS38 Compliant Fuse 500mA HRC Fuses



**SPECIAL**  
Safety Fuses

**Did you know!**

see page 9

£5.80 + VAT

- **Supplied in pack of 3**
- **500mA 1000 Volt/ 50 kA HRC FF ceramic fuse**
- **(FF means fast acting)**
- **Suitable for INTACS Industrial Standard Test Lead set**
- **Fuse size 6mm x 32mm**

Package & post extra

code FUSEGS38

# Electrical Safety Testing & Accessories

## Test Mate PU100 Proving Unit

**Did you know!**

see page 10



As USED  
on our  
Training Courses

- *In our opinion this is one of the best Proving units available*
- *Provides a safe method of proving the operation of 2 pole Voltage Indicators*
- *Will prove the Drummond and other filament lamp Voltage Indicators*
- *Internal magnet will enable the unit to fix onto metal background for ease of use*
- *When the probe tips are applied to the PU100 the proving unit automatically goes into auto-test mode and the output voltage will ramp up from 50V up to 690V and then gradually return back to 50V and finally off – The Voltage output is clearly indicated on the 5 LED indicators on the front of the unit*
- *Not suitable for use with multi-meters*

£78.85 + VAT  
price each

Package & post extra

code PU100

# Electrical Safety Testing & Accessories

## Martindale VI 13700G Voltage Indicator

**Did you know!**

see page 10



As USED  
on our  
Training Courses



£46.80 + VAT  
price each

code VI13700G

- ***This is one of the simplest & most reliable units available***
- ***Provides a safe & clear method of safely identifying AC & DC voltages from 50V to 600V***
- ***Ideal for Electrician & competent Multi-skilled maintenance person as a Test for Dead or simple Voltage Indicator***
- ***Tough molded case with heavy duty, double insulated leads***
- ***The return lead incorporates an HRC fuse which, together with the retractable test prods & finder guards ensures the unit fully meets all the GS38, M15/4, HSE & EN61010 recommendations***
- ***CATIII/600V***

Package & post extra

# Did you know!

## Industrial Quality Test Leads

The first thing to remember about Test Leads is that they give the user the means of making an electrical connection between an item under test and the test instrument. The next most important point to note is you must consider the potential risk of injury that you might expose yourself to in the process of performing the testing task.

The following are a list of key points that you should know about test leads. The Test Leads we supply fully comply with GS38 & IEC1010 guidance

- The probes should have finger barriers or are shaped to guard against inadvertent hand contact with the live conductors under test.
- The probes should be insulated to leave an exposed metal tip **not exceeding 4 mm** measured across any surface of the tip. Where practicable it is strongly recommended that this is reduced to **2 mm or less**, or that spring loaded retractable screened probes are used.
- The leads should have suitable **High Breaking Capacity (HBC)**, sometimes known as **High Rupture Current (HRC)**, fuse, or fuses, with a low current rating (**usually not exceeding 500 mA**), or a current-limiting resistor and a fuse.
- The leads should be adequately insulated (choice of insulating material may be influenced by the environment in which the leads are to be used).
- The leads should be coloured so that one lead can be easily distinguished from the other, **typically RED & BLACK for test meters**.
- The leads should be flexible and of sufficient capacity for the duty expected of them.
- The leads should be sheathed to protect against mechanical damage.
- The leads should be long enough for the purpose, while not too long so that they are clumsy or unwieldy.
- The leads should not have accessible exposed conductors other than the probe tips, or have live conductors accessible to a person's finger if a lead becomes detached from a probe, indicator or instrument when in use.

**GS38** is a **Health & Safety Electrical Test Equipment Guidance Note** & it offers guidance in the safe selection of: **Test Probes, Leads, Fuse, Voltage Indicator devices**

You can download a **FREE** copy from the HSE website: -

<http://www.hse.gov.uk/pubns/priced/g38.pdf>

## 500mA Fuse, High Breaking Capacity or High Rupture

GS38 compliant Test Lead Fuses are not just an ordinary Fuse; they are High Breaking Capacity or High Rupture Capacity Fuses and are designed to **protect the user from injury**. They are relatively expensive compared to the standard range of Fuses and are designed to fail with the hole length of the fuse element disintegrating. This is slightly different to a standard Fuse where the Fuse link or wire may just break leaving a small gap where a high voltage could track across thus potentially resulting in injury if used in place of the correct Fuse. You must only use the correct Fuse for GS38 compliant Test Leads otherwise the leads will no longer provide the user with the protection as intended.

## Proving Units (Test Mate)

Proving units are designed primarily to enable the user of a simple Voltage Indicator or Voltage Detector to verify that the indicator or detector is able to detect an AC or DC voltage in the range for which it was designed.

Proving units generally operate from a 9 volt battery and as a result of suitable internal circuit design produces a synthesised voltage to test Voltage Indicator or Voltage Detector as specified in their user guide. Proving units are generally not recommended for use with multi-meters unless specifically stated.

The HSE guidance notes recommend you test your Voltage Indicator or Voltage Detector with a suitable Proving Unit before and directly after checking for dead.

## Voltage Indicators or Voltage Detectors

The **Health & Safety Executive (HSE)** recommends the use of **simple Voltage Indicator** or **Voltage Detector** because they do not have any switches or functions that could inadvertently be set selecting a range that could result in an accident.

**Voltage Indicators** or **Voltage Detectors** of the type recommended in the **HSE GS38** guidance notes are of the Neon or Bulb type simply illuminate to indicate the presence of a voltage. Other types of voltage measuring devices are mentioned but they tend to have a scale or readout to indicate an actual voltage and can have a selector to switch between different functions.

One of the most important tasks of a **simple Voltage Indicator** or **Voltage Detector** is to **check for Dead** (not electrically "LIVE" or "Charged"). This is a fundamental safety task and should be performed before attempting to work on any piece of plant or machinery that is powered by electricity and could give rise to danger or electrical shock. **Don't forget** to functionally test your Proving Unit as directed in the user instructions.

## Testing your Voltage Indicator or Voltage Detector

It is essential that you test your **Voltage Indicator** or **Voltage Detector** as recommended in the **HSE Guidance Notes**. You should test your Voltage Indicator or Voltage Detector with a suitable Proving Unit before and directly after checking for dead. You can then be sure that your Voltage Indicator or Voltage Detector is working and will indicate the presence or not of potentially dangerous voltage.

Always read the user guide for your Voltage Indicator or Voltage Detector and Proving Unit because for example the neon type can show 1 or more neon's illuminated if the long lead is connected to the switched socket whilst holding the display end of the unit. This will not happen if the Proving Unit and Voltage Indicator or Voltage Detector are test correctly and in accordance with the user guide.

# Popular training courses

## Scheduled or On-site courses

We run a regular programme of **Scheduled** Electrical Health and Safety courses at our Fully Equipped Wellingborough Training Centre. We also offer an **On-site** training option where we can deliver the benefits of the training course in the comfort of your Training Room and even focus on the key aspects that are important to your people and your company

## Electrical Health & Safety Resetting Trips Overloads and Safe Isolation

This course gives you the chance to get maintenance people or operators up to speed with the requirements of the **Law, Health & Safety Best Practices** and make sure they can **Reset Trips, Overloads** and perform **Safe Electrical Isolation**. *There is a legal requirement to provide training for such "high risk" activities. (this is requirement of the Health & Safety at Work Act section 2, & the Management of Health & Safety at Work Regulations 1992 regulation 11 & The Provision and Use of Work Equipment Regulations 1998 regulation 9 )*

**Duration:** 1 day course with practical exercises

**Scheduled course:** only £250 + VAT per person

**Materials:** we supply a CD-ROM with lots of useful H&S documents and many companies use this as resource material on their intranet system giving their staff access to a library of key information.

## Duty Holder training

This 1 day **Duty Holder** course should have serious appeal to **Managers, Team Leaders** and of course persons who have or are about to take on the **responsibility of managing safety** in the workplace. It's all about how to ensure you have **Safe Systems, Safe People** and **Safe Place of Work**.

**Duration:** 1 day course with practical exercises

**Scheduled course:** only £250 + VAT per person

**Materials:** we supply a CD-ROM with lots of useful H&S documents and many companies use this as resource material on their intranet system giving their staff access to a library of key information.

## Troubleshooting Live Electrical Systems more Safely

The two days are allocated to the **Troubleshooting Live Electrical Systems more Safely** course and this topic is a big issue for companies to make sure their maintenance people manage the high risk activities and perform their tasks within the guidelines of the **Health & Safety at Work Act** etc. The feedback we get from running this course tells us even experienced technicians and engineers need reminding about **ALTERNATIVE and SAFER ways to troubleshoot**.

**Duration:** 2 days course with practical exercises

**Scheduled course:** only £490 + VAT per person

**Materials:** we supply a CD-ROM with lots of useful H&S documents and many companies use this as resource material on their intranet system giving their staff access to a library of key information.

***See the full range of Electrical courses on the inside front cover***

# Industrial Maintenance & Troubleshooting Training

INTACS strives to work alongside leading manufacturers to offer a real alternative to manufacturers' own courses

## Working really closely with leading Equipment Manufacturers

### **INTACS wins the backing of brand leaders Bosch Rexroth, Festo & Pilz**

**In our 22<sup>nd</sup> year** as a specialist industrial controls training provider, INTACS continues to work with & support leading brand names in industry.

For some PLC & Drives manufacturers, we conduct a significant amount of training on their behalf with open courses & bespoke training, programmes, both of which can run on client sites if required with groups as small as only 3 delegates.

**Key Competencies** – a major focus for this year. We help you & your people understand the key knowledge & skills needed “to get the job done” & we give you the tools to help keep the knowledge & skills sharp.

Many of you know about our **Money Back Guarantee of Satisfaction**. This is our commitment to demonstrate to clients that they can rely on us to deliver the results they need.

## **INTACS, Industrial Training Centre**

Harbo Works, Harrowden Road, Wellingborough, Northants, NN8 5BJ

**Tel: 01933 440 679      Fax: 01933 229 744**

E-mail: [enquiries@intacs-training.co.uk](mailto:enquiries@intacs-training.co.uk)      Website: [www.intacs-training.co.uk](http://www.intacs-training.co.uk)