

## Instruments and Safety

## Accurate CATALOGUE

## FREEPHONE 0800 500 380

www.accurate.kiwi www.safety.kiwi





# Accurate (\*) (\*) (\*)

Accurate Instruments offers some of the world's best renown, professional trade instrumentation available, yet the pricing is often highly competitive. Many of the leveling, measuring, technical safety and inspection products required for use in today's industry are highly technical. Finding knowledgeable people to answer the questions, advise models applicable and suggest best practice operation is near impossible.

Our industry experienced sales and advisory team provide you, the tradesperson, operator, consultant or consumer, with the correct instrument, product information and support backup to meet your demands.

We have two showroom branches with full service and calibration facilities, in Auckland and Christchurch, where many of our products can be viewed and purchased.







### Instruments and Safety

Accurate Instruments has been supplying the New Zealand surveying, infrastructure, inspection and technical safety markets since 1994.

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## Introduction

## Be compliant, be safe

#### The right equipment and the right advice every time.

Accurate prides itself on keeping you and your workplace compliant and safe in your operation, by using the correct equipment that is tested, calibrated and certified - every time.

As an ISO9001 certified company for technology solutions and support, Accurate is a trusted partner to many of the industries' biggest (and smallest) operators.



We have New Zealand and the South Pacific covered. With showrooms, training facilities and full service calibration centres in Auckland and Christchurch. Both showrooms have many of our products on display for demonstration and purchase. Products are also available online with shipping throughout the Pacific.

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### **Health & Safety Compliance**

One of Accurate's key goals is to provide a safe workplace and return its employees home each day - safely. We actively promote and practice safety within our business by recognising, minimising and mitigating our risks, administering PPE and ensuring compliance with our company responsibility under the Health and Safety at Work Act 2015.

#### A proud Kiwi Company

Accurate Instruments (NZ) Ltd is a 100% New Zealand owned company.

Celebrating 25 years in operation in 2019, Accurate is proud to be owned by kiwi's and run by kiwi's.

Carrying significant experience in the industry, the owners actively work in the business and keep their finger on the pulse in this ever changing dynamic world.

Passionate about the industry and the staff, it is important to maintain great relationships with not only our team and customers, but also our suppliers, to ensure we can bring to market the best equipment and technology available.

## Service & Calibration Centres

**Calibration, QA testing and support** 

Operating one of the largest technical service departments for survey, leveling and technical safety in Australasia, Accurate's Service Technicians provide the backup and support of our products, with calibration, certification and repairs of our equipment when required.

We have the computer software programmes, specialised tooling, vibration/shock analysis, digital calibration machines, collimator jigs and baselines that allow us to test, calibrate instruments, all within an acceptable industry time period.

Many of Accurate's Service Engineers are trained internationally at our manufacturers' facilities. They have the most current updates on all products, which include both hardware and firmware upgrades, modifications or factory changes.





## Industry Training Courses

Accurate offers a wide range of training options starting from basic product knowledge, right through to extensive theory and practical training.

Our training caters to a wide variety of industry sectors. The content we provide is recognised and relevant. We regularly update all our content and keep our trainer's knowledge up to date. The courses all focus strongly on Health & Safety procedures and guidelines, so you are working confidently and safely. We make every effort to assist you with any of your applications and answer any questions you have.

Our Industry trainers are based nationwide and training is available anywhere in New Zealand or we can utilise our training centres in either Auckland or Christchurch.

#### NZ INDUSTRY AND ACADEMIA LEVELS 3 & 4 STATEMENT OF ATTAINMENT CERTIFICATION\*

Accurate is proud to share a partnership with the ARA Institute of Canterbury. Together we can provide Skills for Industry Statement of Attainment Certificate Courses.

\*Attainment is only available on some courses.



#### STANDARD COURSES > NOT LIMITED TO

- Cable Location
- Ground Penetrating Radar GPR
- Gas Detection
- Moisture Inspection
- Soil Testing
- Leveling & Setout

#### INDUSTRY STAGE 1

**Product Training** 

Demonstrate

and detail key functions

of the instrument.

### STAGE 2

#### Theoretical Training

In addition to product training, we include theory on the founding sciences and methodologies that relate to the instrument's main application.

**INDUSTRY** 

We can customise our courses to suit with combination courses also available.

#### INDUSTRY STAGE 3

#### Theory and Practical Training

This comprehensive module contains a combination of product and theory training but also incorporates practical training for on-site procedures.

#### **OUR TRAINERS**

#### **BILL GYDE**

#### **Cable Location / GPR**

Bill has wide experience with radar and electrical networks. He has been trained by IDS GeoRadar and also holds a Certificate of Competency in Opera Duo & GPR Theory. Bill also trains on the Zip Level model for Accurate.

#### MARK GEMMELL

#### **Moisture / CCTV**

A Level 1 Certified Thermographer and trained by Trotec on moisture measurement in Germany. With training from Pearpoint in United Kingdom and Australia. Mark delivers our moisture and CCTV content to the industry.

#### DAVID OPENSHAW

#### **Cable Location / Setout**

With a double honours in Geology and Physical Geography, David oversees our Soil Testing, Site Leveling and Setout and Cable Location courses. He has also spent time as a land surveyor and teacher.

#### **JONO MILLAR**

#### CCTV

Jono oversees our push rod and tractor CCTV pipe cameras for underground pipe surveying. He has been factory trained by CUES Inc in Florida, USA on sewer and manhole inspection.

## **World's Trusted Brands**

Accurate offer only most trusted professional equipment. As the New Zealand approved suppliers for these manufacturer's equipment, we handle all the sales, support and backup in house.

We back this with knowledgeable factory trained staff to correctly advise on the best suited equipment to meet your application, modes of operation, best practice and technical support.



MSA Safety is the global leader in the development, manufacture and supply of safety products that protect people and facility infrastructures. MSA's core products include portable and fixed gas detection instruments, flame detection systems, self-contained breathing apparatus and industrial head protection products.

PRO SHOT —*laser*— Pro Shot lasers are iconic in New Zealand, being found on nearly every building or civil project in the past 25 years. Trusted by contractors and builders for their accuracy, reliability and performance, Pro Shot are designed and manufactured in California, U.S.A.

#### RADIODETECTION<sup>®</sup>

Founded in 1970 in Bristol, United Kingdom, Radiodetection has gone on to be one of the global leaders in the Utility locating and cable avoidance sector. There wide range of products include the industry standard Cat & Genny cable avoidance locator.



Spectra Precision is one of the biggest and most trusted names in the laser levelling and civil construction industries.

Owned by Trimble Navigation. Spectra can trace it's roots back to the introduction of the first automatic laser level in the 1950's. Spectra equipment is a constant on construction, drainage and civil sites through out NZ.

## IKAR

Founded in 1978 in Germany, IKAR GmbH has a long and successful tradition in the innovation, development and production of personal fall protection systems. Products include confined space entry tripod's, recovery winches and blocks, fall arresters, harnesses and davit arms.

## TROTEC

From small beginnings in the late 1980's to a powerhouse today in Europe, Trotec offers diverse solutions in climate and measurement condition monitoring.

From dehumidifiers to moisture meters, Accurate are proud to have represented Trotec in New Zealand for the past 15 years.



The company that started it all, when they developed and produced the very first compact plumb, level and square laser level - the PLS 5, back in the early 1990's.

Today, owned by Fluke Corporation, PLS continue to set the standard in the industry for performance, quality and accuracy.



Popular with Engineers and consultants across the country, IDS Geo Radar, based in Italy, is a world leading provider of high-tech ground penetrating radar solutions, concrete and structural scanning and locating equipment in engineering and civil market sectors.

### PEARPOINT 77

One of the world's leading manufacturers of commercial pipe inspection equipment, Pearpoint's range of fully modular camera systems delivers pipeline inspection capabilities from 32mm pipes up to 1500mm. From simple plumbers push rod systems to the motorized tractor pan and tilt, Pearpoint is also fully serviced by Accurate.

### Honeywell

Honeywell Industrial Safety offer personal protection and technical safety equipment with key established brands Howard Leight for hearing protection, Sperian for safety eyewear, Miller for height safety and North for respiration.

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#### **NEW SECTIONS COMING SOON**





MOISTURE, CLIMATE & INSPECTION EQUIPMENT



### GEOTECHNICAL & UNDERGROUND INVESTIGATION



## Laser Levels

## Rotating, Grade, Pipe, Dot and Line Lasers

Site, construction, internal fitout leveling and alignment solutions from the world's best laser brands, all supported and serviced in New Zealand.





### PRO SHOT ALPHA

#### HIGH ACCURACY AUTOMATIC HORIZONTAL LASER WITH SLOPE MATCHING

Accurate's No.1 selling laser level. Made in the USA, the Alpha is a robust automatic self-leveling laser level, designed for builders, concrete placers, landscapers, commercial and civil contractors.

Simply mount the laser on a tripod, press power, and the laser automatically levels itself. The Alpha is powered by 4xC size alkaline batteries that are easy to replace - no worries about recharging.

With a high accuracy of +/- 1.5mm per 30 metres and an operating diameter of over 600 metrees, the Alpha covers even the largest construction sites.

Choose the package that includes the **HL700**, a 'mm' display digital laser receiver, and your height elevation is displayed numerically along with the arrows on the backlit LCD, down to +/- 0.5mm!

For extra large civil projects, the long range Alpha XD model with >1000 metres operational range is available. Waterproof, reliable and with the best standard warranty in the business.

Pro Shot lasers have been trusted by New Zealand trade professionals for 25 years. There yesterday - here today - around tomorrow.



+/- 1.5mm ACCURACY @ 30M

## AR SEA

#### PACKAGES



- Made in the USA Highest Quality
- High-Accuracy Automatic Self-Leveling
- 610 Metre Operating Range
- Manual Slope Matching Mode
- IP56 Water and Dustproof
- 5 Year Warranty
- 5 Year Knockdown Damage Protection Warranty
- Optional XD Model for >1000m Long-Range

#### **POPULAR ACCESSORIES**



PRO SHOT ALPHA WITH R9 RECEIVER, BATTERIES AND HARD CASE (INCLUDES TRIPOD)



PRO SHOT ALPHA WITH HL700 DIGITAL RECEIVER, BATTERIES AND HARD CASE (INCLUDES TRIPOD)



## SPECTRA PRECISION LL300S

#### HIGH ACCURACY SELF LEVELING LASER WITH REMOTE CONTROL SLOPE MATCHING CAPABILITY

Backed by a 5 Year Manufacturer's Warranty, the Spectra Precision LL300S is a high accuracy durable electronic self levelling laser with remote control slope matching capability and digital receiver technology.

It is well suited for commercial construction and civil horizontal levelling applications.

From world pioneer of the first rotating laser level -Spectra Precision, the LL300S features fast automatic horizontal self-leveling. Rugged and waterproof to IP66 specification, the LL300S is ideally suited for high accuracy levelling applications up to a long distance of 800 metres.

The LL300S also features fast Slope Matching. This can be easily controlled from the laser (with up/down arrows) or from the optional RC402N remote control or android based Spectra Laser App, paired with the smart ST805 transmitter.

The ST805 also extends the remote control operation of the laser out to over 100 metres! The LL300S can also be used for vertical leveling and string-line setout using the tripod.



+/- 1.6mm ACCURACY @ 30M

#### WEBSIT SEARC Y LL300

#### PACKAGES



SPECTRA LL300S WITH HL700 RECEIVER, BATTERIES AND HARD CASE (INCLUDES TRIPOD)



SPECTRA LL300S WITH HL760 SMART RECEIVER, RC402N REMOTE AND HARD CASE (INCLUDES TRIPOD)





**KEY FEATURES** 

- High accuracy +/- 1.6mm per 30 metres
- Long 800 metre operating range
- Manual vertical leveling ability
- Digital Receiver and fingerprint technology
- Manual Slope Matching mode with remote function
- Android Laser Remote APP capability
- IP66 water and dustproof
- 5 Year Warranty

#### **POPULAR ACCESSORIES**

**SPECTRA ST805 TRANSMITTER** 





## SPECTRA PRECISION HV302

#### AUTOMATIC HORIZONTAL & VERTICAL SELF LEVELING VISIBLE LASER LEVEL WITH SMART TECHNOLOGY

Available in either red beam or highly visible green beam models, the HV302 is one of the most advanced smart rotating lasers available on today's market.

High accuracy - check. Automatic horizontal and vertical self-leveling - check. Mutli-speed rotating beam with scanning and squaring - check. Remote control operation - check. All backed by a 5 Year Manufacturers Warranty.

Where the HV302 lifts the game is in its smart technologies, allowing for automated slope matching, fixed elevation laser beam locking, individual beam detection and smart connectivity. HV302 features and capabilities include;

- Automatic Grade Match
- PlaneLok
- Axis Masking
- Fingerprint Receiver Technology
- Android Laser APP

Even in brightly lit interior conditions, the high visibility green beam of the HV302G delivers consistently reliable and accurate performance, enabling you to work faster and smarter. The Spectra Precision HV302G laser level is covered by a 3 Year Manufacturers Warranty.

#### **KEY FEATURES**

- Precision horizontal and vertical self-leveling
- Choose either red or highly visible green beams
- Scanning, squaring and remote operation
- Automatic Grade Match for fast slopes
- PlaneLok eliminates beam drift by locking the laser Axis Masking
- Digital Receiver and fingerprint technology
- Android Laser Remote APP capability



+/- 1.6mm accuracy @ 30M

YEAR WARRANTY



+/- 1.6mm ACCURACY @ 30M







### PLS H2

### ONE BUTTON ELECTRONIC HORIZONTAL SELF LEVELING

The PLS H2 is a rugged heavy-duty automatic rotating horizontal laser, designed for the construction job site. For ease and speed of use, the H2 model features a simple one-button operation.

Supplied with both alkaline and rechargeable battery packs, the user is never short on power. The H2 is also supplied with the XLD digital laser receiver, which displays the conventional up/down and on level arrows but also a digital readout of millimetres on the LCD display.

LASER LEVELS

- Accuracy +/- 2.2mm per 30 Metres
- 300 Metre Operating Range
- Self-Leveling Range: ± 5 Degrees
- IP67 Water and Dustproof



#### **BUILDING & CONSTRUCTION LASERS**



#### THE SPECTRA PRECISION LT52 IS THE TOOL FOR ALL TRADES

The HV2 from PLS is a multi-speed visible rugged rotating laser level featuring BOTH automatic horizontal and vertical self leveling. It is available in either red beam (HV2R) or highly visible green beam (HV2G) models.

Scanning, 90 degree squaring in laydown, remote operation and dual alkaline and rechargeable power packs makes the HV2 a universal laser system. The HV2 is also supplied with the XLD digital laser receiver.

- Electronic Horizontal & Vertical Self-Leveling
- Choose either Red or Highly-Visible Green Beams
- Scanning, Squaring and Remote Operation
- 300 metre Operating Range
- IP67 Water and Dustproof





### PRO SHOT Alpha V

#### SPECIALISED HIGHLY VISIBLE LONG RANGE AUTOMATIC PLUMB LASER

The Pro Shot Alpha V is a specialised plumb laser with a high accuracy of +/-0.7mm at 30meters.

Visible in optimum conditions up to nearly 100 meters, the large precise visible red dot projects upwards with the powerful laser and high quality optics creating precision accuracy for commercial applications.

To aid plumbing down applications, the Alpha V also has the option of either a solid or flashing plumb down beam.

- Operating Range up to 100m (optimum conditions)
- Accuracy (Up Beam) +/- 0.7mm per 30 Metres
- Accuracy (Down Beam) +/- 0.3mm per Metre

LASER LEVELS

• Alkaline Battery Life of 65 Hours



OPTIONAL FINE ADJUSTMENT 1.7% CONE HEAD AVAILABLE



AUTOMATIC CONING GRADE LASERS



#### UNIQUE CONING AUTOMATIC GRADE LASER WITH FINE +/- CONING ADJUSTMENT

The Pro Shot Alpha C is a specialised automatic grade laser designed for coning grade applications where a cone or laser light is required.

This unique, adjustable, cone projecting head lets you set-up with the laser tool at the high point, or low point of a conical sloping reference of laser light.

The Alpha C can project as much as a 4% sloped cone of laser light either up or down, with increments of 0.25%.

- High Accuracy +/- 1.6mm per 30 metres
- 610 Metre Operating Range
- Coning Grade Range of +/- 4%
- Coning Increments of 0.5%



+/- 1.5mm ACCURACY @ 30M







#### DIAL-IN AUTOMATIC SELF LEVELING SINGLE GRADE LASER LEVEL

One of New Zealand's most popular grade lasers. The Pro Shot AS2 is an economical yet performance driven dial-in fully automatic single grade laser.

Compared to many lasers in this price point which are simply slope matching or dial-in MANUAL grade lasers, the AS2 models are FULLY automatic. Designed for simple operation, the AS2 is ideal for civil construction, drainage, earthmoving and machine control applications.

Simply mount the laser in the direction of the required slope and dial-in the grade, with fine incriments of 0.01%.

A grade of up to 25% can be dialled into the AS2. For long range and higher accuracy applications, the AS2 Magnum has a 1000m working range and a compound dual grade slope kit.



**KEY FEATURES** 

- Accuracy +/- 2mm per 30 metres
- 610 metre Operating Range
- Fully Automatic Dial-in Self-Leveling Single Grade
- 0-25% Single Grade Range
- 0.01% Dial-in Grade Increments
- Automatic Cross Axis self-leveling with Height Alert
- IP56 Water and Dustproof
- Dual Slope, 1000m operating range (AS2 Magnum)

#### LOOKING FOR BOOM MOUNTED RECEIVERS?

**CR700 DIGITAL BOOM RECEIVER** 





+/- 2.0mm ACCURACY @ 30M

#### B EAR S RANTY

#### PACKAGES



PRO SHOT AS2 WITH R9 RECEIVER, BATTERIES AND HARD CASE (INCLUDES TRIPOD)



PRO SHOT AS2 WITH HL700 DIGITAL RECEIVER, BATTERIES AND HARD CASE (INCLUDES TRIPOD)







## SPECTRA PRECISION GL422N

### DIAL-IN AUTOMATIC DUAL GRADE LASER LEVEL WITH SMART TECHNOLOGY

The GL422N from Spectra is one of the most featured packed fully automatic dual grade lasers available in its price bracket.

Compared to many stripped back basic dual grade lasers available, the GL422N is packed with features designed for efficiency, accuracy and performance.

GL422N smart features and capabilities include:

- Automatic Grade Match
- PlaneLok
- Axis Masking
- Fingerprint Receiver Technology
- Vertical Smart Alignment
- Android Laser APP





#### **KEY FEATURES**

- Accuracy +/- 1.6mm per 30 Metres
- Long 800 Metre Operating Range
- -10 to +15% Dual Grade Range
- Automatic Grade Match for Fast Slopes
- PlaneLok Eliminates Beam Drift by Locking the Laser Axis Masking
- Digital Receiver and Fingerprint Technology
- Android Laser Remote APP capability

#### **POPULAR ACCESSORIES**



+/- 1.6mm ACCURACY @ 30M

#### YEAR WARRANTY

#### PACKAGES



SPECTRA GL422N WITH HL700 RECEIVER, BATTERIES AND HARD CASE



SPECTRA GL422N WITH HL760 SMART RECEIVER, BATTERIES, RC402N REMOTE AND HARD CASE



## SPECTRA PRECISION GL622N

#### DIAL-IN AUTOMATIC DUAL GRADE LASER LEVEL WITH SMART TECHNOLOGY & AXIS ALIGNMENT

The GL622N is a high precision dial-in self-leveling dual grade laser level with smart technology for performance critical civil construction, drainage, sports/tennis turf fields, parking lots and earthmoving contractors.

The Automatic Grade Match, PlaneLok and Automatic Axis Alignment features all add up to efficient time and accuracy gains on the job site. The RC602N remote control features a large backlit LCD enabling control of all of the GL622N functions. A Class1 GL622IR model is also available.

- Wide +/25% Dual Grade Range Capability
- Auto Axis Alignment for Exact Receiver Positioning
- Automatic Grade Matching & PlaneLok
- Axis Masking & Fingerprint Receiver Technology



MACHINE CONTROL DUAL GRADE LASERS

## SPECTRA PRECISION GL700 SERIES

LASER LEVELS

#### EXTRA HIGH PRECISION DUAL GRADE LASER FOR FINE GRADING AND MACHINE CONTROL

For machine fine grading control and finishing, the GL700 series from Spectra are one of the most accurate dual grade laser systems available.

Compared with the GL422N and GL622N, the GL720 models feature a different detection system that is designed to work with machine control receivers as well as a long range radio remote control, with an operation range of up to 230 metres. Standard features include Automatic Grade Match, PlaneLok and Automatic Axis Alignment.

- Precision Machine Detection System
- Rugged Heavy-duty Aluminium Housing
- Long-range Remote Operation of 230 metres
- Auto Axis Alignment, Grade Matching & PlaneLok

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ACCURACY @ 30M





## SPECTRA PRECISION UL633N

### AUTOMATIC DIAL-IN DUAL GRADE UP TO 25% WITH SELF LEVELING GRADE COMPENSATION

The world's first construction laser allowing total automatic control of all three axes. The Spectra Precision UL633N combines dual grade functionality, automatic dual grade axis alignment with trench and pipe laying setout.

Packed with smart technologies, the UL633N is truly an all-round high performance laser leveling system. UL633N features and capabilities include:

- Automatic Spot Align
- Spot Search
- Dual Automatic Axis Alignment
- Automatic Grade Match
- PlaneLok
- Axis Masking
- Electronic Leveling Vibration Filter

All features can be controlled from the intuitive RC603N remote. The UL633N is supplied standard with two HL760 digital laser receivers that can communicate with each other.

- Wide +/25% Dual Grade Range Capability
- Z Axis Pipe Laser Mode with Automatic Targeting
- Led Sf601 Spot Finder for Pipe Laying
- Auto Axis Alignment for Exact Receiver Positioning
- Automatic Grade Match For Fast Slopes
  Planelok Eliminates Beam Drift by
- Locking the Laser Axis Masking
- 2x Digital Receivers With Fingerprint Technology



#### +/- 1.6mm ACCURACY @ 30M

## AR S

#### PACKAGE



SPECTRA ULG22N WITH TWO HL760 RECEIVERS, LED SF601 SPOT FINDER, RC603N REMOTE CONTROL, MOUNTS AND HARD CARRY CASE



#### **POPULAR ACCESSORIES**





LED SPOT FINDER

TARGET

0

А

CST 3.8M HEIGHT ELEVATING COMPOSITE TRIPOD

## **Pipe Lasers**

Unsurpassed in the field of drainage, and with over 50 years experience in the development and production of pipe and drainage lasers, the latest Spectra Precision Dial-grade pipe lasers combine world leading technology and features with the accuracy, performance, reliability and robustness renown to the brand. LASER LEVELS

### SPECTRA PRECISION DG613 & DG813

#### PRECISION DIAL-IN GRADE PIPE LASERS WITH SMART ALIGNMENT & TARGETING

Performance and featured packed, the Spectra Precision pipe lasers are also intuitive to use. With a -12% to +40% dial-in grade range, all models feature Line-Set/Check for quick manhole 100% alignment – Line Scan, which provides a quick alignment to the centre of the target and Line Alert, which notifies the user if the set-up is disturbed. The DG813 also comes with the SF803 spot finder which automatically centres the laser dot to the target. The DG613 is also available in the DG613G specification, featuring a highly visible green beam.

- Extra bright Red or Green Beam Models
- Line Alert Notification of Laser Datum Changes
- Line Scan Beam Centreing
- SF803 Automatic Beam Targeting (DG813)



+/- 4.8mm ACCURACY @ 100M





#### **RELATED PRODUCTS**

PORTABLE GAS DETECTION COMING SOON



CONFINED SPACE TRIPOD & WINCHES COMING SOON







### GEOMAX ZETA Arrow4 series

#### **ECONOMICAL RED BEAM DIAL-IN PIPE LASERS**

The Arrow4 pipe lasers have been designed with simplicity in mind. Economical in price but not performance.

The Arrow4 features a durable and rugged design and construction. The heavy duty cast aluminium pipe laser features a grade input range of -10 to +40%, with self leveling in both the main and cross axis.

The Arrow4S model has the additional feature of a rotating vertical beam for out of the trenchline alignment using a handheld digital laser receiver.

- Compact Durable easy-to-use Pipe Laser
- Large -10 to +40% Grade Range
- One Button 'Stake Alignment' Function
- Out of Trench Receiver Alignment Mode (Arrow4s)

#### PIPE LASER ACCESSORIES

## PIPE LASER Trivet set

Made in New Zealand and specifically designed to be used with a wide variety of pipe lasers, this heavy duty universal trivet is manufactured from stainless steel.

With a solid trivet base with adjustable feet, the concave design of the cradle is designed for various dimension pipe lasers to sit level. The attachable rubber connecting rings fit over the laser to fit it firmly in place.

Both the cradle and pole are height adjustable to suit the dimension of pipes being installed.



### 12V PIPE BLOWER

Using pipe lasers inside pipes often ends up with movement of the laser beam. Every drainage contractor somewhere, sometime has experienced this. This is referred to as refraction.

Refraction happens due to varying temperature and humidity inside the pipe as the laser light passes through it.

This 12V pipe blower helps alleviate the problem of refraction by increasing the air distribution in the pipe which in turn reduces the temperature fluctuation.



HOSE DUCTING: SPIRAL RIBBED VENTILATION GRADE 80MM HOSE - 5 METERS

### PIPE LASER Targets & Plates

Accurate offer a wide array of pipe targets and plates, both small and large, to suit not only the Spectra Precision and QBL/Geomax pipe lasers, but many other well known brands. Red or green, small or large, plates or complete target sets are usually readily available for supply.



#### PLUMB & LEVEL DOT LASERS

### PLS 3G & 3R

#### **SELF LEVELING PLUMB & LEVEL DOT LASER**

The PLS 3G and 3R models are the ideal laser tool for the contractor searching for a professional trade quality plumb dot laser.

Built on the reputation of 25+ years as a market leader in dot and line lasers, the PLS 3 is available as a standard red beam or highly visible green beam laser.

The PLS 3 models are ideally suited to HVAC, steel framers, electrical, interior fit out and general contractors who require the need to transfer floor to ceiling points.

- Accuracy +/- 3mm per 10 Metres
- Self Levelling Range of +/- 4°
- Operating Visibility Range Typically 15-20 Metres
- Alkaline or Rechargeable Battery Systems

LASER LEVELS



#### PLUMB, LEVEL, SQUARE DOT LASERS

### PLS 5G & 5R

#### **SELF LEVELING PLUMB, LEVEL & SQUARE DOT LASER**

From the company that brought you the original plumb, level and square compact alignment tool, comes the latest generation PLS 5 models.

Available in the standard red or extra bright green laser diodes, the PLS 5 models are designed for general construction, boat builders, electricians, glaziers and commercial interior fit out contractors.

Exclusive to the PLS 5 models, the unique pendulum target transfers to the laser dot directly to the floor so your plumb and square layout can be correctly marked.

- Self Levelling Range of +/- 4°
- Operating Visibility Range Typically 20 metres
- Pendulum Target for Exact Point Markout
- Alkaline or Rechargeable Battery Systems



+/- 3.0mm 3 ACCURACY @ 10M WARRANTY

## PLS 6G & 6R

#### COMBINATION PLUMB, LEVEL, SQUARE DOT AND CROSS LINE LASER

Available in either red or green beam, the PLS 6 lasers are a combination of the popular PLS 5 dot and PLS 180 cross line lasers. The PLS 6 eliminates the need for two separate laser tools. It is a five beam point and a crossline laser combined into one easy to use convenient laser product.

The optional SLD receivers for either PLS 6 lasers extend the range of operation for internal or outdoor use.

SLD LINE RECEIVER PAGE XX

- Accuracy +/- 3mm per 10 Metres
- Self Levelling Range of +/- 4°
- Operating Visibility Range Typically 15-20 Metres
- Optional Outdoor SLD Receivers Available



+/- 3.0mm ACCURACY @ 10M	<b>B</b> YEAR WARRANTY	Q WEBSITE SEARCH PLS6	
		SEARCH	

LASER LEVELS

#### **CROSS LINE LASERS**

### PLS 180G & 180R

#### **SELF LEVELING PLUMB & LEVEL CROSS LINE LASER**

Always a popular choice among internal fit out contractors, the PLS 180 models are available in the standard red or extra bright green laser diodes. Compared with lower cost models, the spread of the beam width is greater. The PLS 180 models can be placed on the floor, tripod mounted or magnetically mounted.

The optional SLD receivers for either PLS 180 lasers extend the range of operation for internal or outdoor use.



- Accuracy +/- 3mm per 10 Metres
- Self Levelling Range of +/- 4°
- Operating Visibility Range Typically 15-20 Metres
- Optional Outdoor SLD Receivers Available



+/- 3.0mm ACCURACY @ 10M





## SPECTRA PRECISION **QML800G**

#### WIRELESS TABLET CONTROLLED INTERIOR LASER LAYOUT SYSTEM

The Spectra Precision QML800G QuickMark Layout system is composed of two bright, green beam lasers that mark a highly visible 'X' at the desired point location.

The system communicates via Wi-Fi with an Android tablet controller. Architectural files can be loaded directly onto the tablet and the floor plan can be viewed in the BuildView field software.

The system set up consists of aligning the two lasers together and defining an origin point and a scale. It is fast, efficient and very easy to use. Complicated shapes, arcs and curves are now easy to layout with no calculations required. Columns can be worked around with a software function. The unique Clutter Buster allows layout crews to work above clutter on the job site floor. Days of layout now become hours. Accuracy is improved and errors are not compounded from point-to-point. As a result, layout can be completed before other trades arrive.

The QML800G system is useful for drywall contractors, MEP contractors, general contractors, construction managers and architects.

#### **BuildView Field Software**

With the QML800G, architectural files can now be loaded directly onto the tablet. The floor plan can be viewed in the BuildView field software. Locating a point on the floor is as simple as tapping on the desired intersection or point on the drawing. The optional QML-XT app increases field software versatility allowing onsite edits and status reports.

#### **BuildView Office**

Architectural drawings can be or and viewed in this software on your PC. Job files can be reviewed for completeness - issues addressed with the architects, general contractors and contract managers before arriving at the job site. A more productive first day of layout will follow.



AVAILABLE WITH EITHER A RED OR HIGHLY VISIBLE GREEN LASER DIODE

+/- 3.0mm ACCURACY @ 10M	<b>3</b> Year Warranty	Q WEBSITE SEARCH QML800



## SPECTRA PRECISION LP51

#### **SELF LEVELING PLUMB, LEVEL & SQUARE DOT LASER**

Available in either red or extra bright green laser diodes, the Spectra LP51 is an economical plumb, level and square dot laser.

It is ideal for transferring points from floor to ceiling, wall to wall or to reference a 90 degree square.

The LP51 will self-level up to 4 degrees. If the surface is too far from level the laser beams will flash twice a second to indicate the user. Package is supplied with a universal magnetic base and either a green or red target.

- Self Levelling Range of +/- 4°
- Operating Visibility Range Typically 20 Metres

LASER LEVELS

- Universal Magnetic Base
- 3 Year Warranty





#### COMBINATION DOT & LINE LASERS

## SPECTRA PRECISION LT52G & LT52R

#### COMBINATION PLUMB, LEVEL, SQUARE DOT AND CROSS LINE LASER

One of our most popular line and dot lasers, the LT52 from Spectra Precision is available in either standard red or extra bright green beam. This combination plumb, level, square dot and a horizontal cross line laser, eliminates the need for two separate laser tools.

The optional HR220 receiver extends the range of operation for long-range internal or outdoor use.



- Combination Plumb Level, Square, Dot and Line
- Self Levelling Range of +/- 3°
- Rechargeable Battery System
- Optional Outdoor Laser Line Receiver



## SPECTRA PRECISION LT20G

#### **GREEN BEAM SELF LEVELING CROSS LINE LASER**

The Spectra Precision LT20G Cross Line Laser Tool is an automatic self-levelling green beam laser that projects ultra-bright horizontal and vertical green laser lines. The laser beam fan angle is wide to allow maximum coverage.

The standard package includes a universal magnetic wall and ceiling mount so the laser can be used for suspended ceiling and partitioning. The LT20G has a pendulum lock to help protect the internal leveling mechanism during transport and non-use.

- Two Bright Highly-visible Green Laser Lines
- Accuracy +/- 3mm per 10 metres
- Pendulum Lock
- Operating Visibility Range Typically 15-20 Metres



LASER LEVELS

#### **CROSS LINE LASERS**

## SPECTRA PRECISION LT58G

#### 360 DEGREE GREEN BEAM SELF LEVELING CROSS AND SQUARE LINE LASER

The ultimate internal laser tool. The LT58G features three extra bright 360 degree laser lines, providing plumb, level and square from the one laser tool. The standard package includes a universal magnetic wall and ceiling mount so the laser can be used for suspended ceiling and partitioning.

The optional HR220 receiver extends the range of operation for long-range internal or outdoor use.



- Three Highly-visible Green 360 Degree Laser Lines
- Accuracy +/- 2mm per 10 metres
- Rechargeable Battery System
- Optional Outdoor Laser Line Receiver





## SPECTRA PRECISION **HL700**

#### ADVANCED SUPERCELL DIGITAL MM LASER RECEIVER

Using the same patented technology as the world renown Apache Storm, the HL700 displays the exact amount of millimetres (high or low) to level on an easy to read backlit dual sided LCD display.

The HL700 is different to all the basic conventional laser receivers AND simple digital receivers on the market. With 'light bar' technology, laser detection resolution is nearly infinite allowing greater accuracy and consistency when compared to basic receivers, as fine as +/- 0.5mm! The heavy-duty clamp includes a circular vial for accuracy.

• Patented SuperCell™ Receiving Technology

LASER LEVELS

- Laser Detection Height of 127mm
- Backlit LCD Display
- Automatic Height Capture Function



#### HANDHELD DIGITAL LASER RECEIVERS

## SPECTRA PRECISION HL760

#### ADVANCED SUPERCELL DIGITAL MM ROTATING LASER RECEIVER WITH SMART COMMUNICATION

The HL760 is a smart communication 'mm digital readout' rotating laser receiver.

The built-in radio communication can be used for long range remote display and monitoring capability when paired with the Spectra Precision radio enabled lasers (HV302, GL422N, GL622N and UL633N) for PlaneLok, Auto Axis alignment and Grade Matching capabilities.

The HL760U model features a special light bar photocell that can detect BOTH red and green beam rotating lasers.

- Patented SuperCell<sup>™</sup> Receiving Technology
- Smart Communication with Spectra Model Lasers
- 2-way Connectivity with other HL760 Receivers
- Detects BOTH Red and Green Lasers (HL760U)



127mm DETECTION WINDOW

### SPECTRA PRECISION **HR1220**

#### **SPECIALISED PULSING LASER LINE DETECTOR**

The Spectra Precision HR1220 Laser Receiver features a universal photocell, that detects BOTH red and green laser beams, generated from Spectra Precision crossline lasers including;

- LT52R & LT52G
- LT56 & LT58G

The HR1220 receiver can extend the indoor working range of these crossline lasers as well as increasing versatility by allowing outdoor use..

- Detects Both Red & Green Line Lasers
- Integrated Horizontal and Vertical Vials
- Volume Control
- Variable Accuracy Settings





**WORKS WITH BOTH RED AND GREEN BEAM SPECTRA LINE LASERS** 



#### **CROSS LINE LASER RECEIVERS**



#### LASER LEVELS



#### SPECIALISED PULSING LASER LINE DETECTOR

The PLS SLD receivers are available in either red or green (SLD-G) models, a unique laser receiver intended for use with PLS cross line lasers which feature a 'pulsing mode'.

They are designed to be used where the laser line cannot been seen by the user, typically outdoors after five metres. Two mounting points for the clamp on the back of the SLD allow for either horizontal or vertical detection.

A bubble on the clamp allows the user to ensure they are as plumb or level as possible when detecting the laser line.

- Dual-sided LCD Display
- Dual Horizontal and Vertical Mounting Points
- Volume Control
- Integrated Circular Bubble Vial on Clamp



## Machine Control

2D and 3D Systems for Excavators, Dozers, Box Graders and Pavers.
From simple manual elevation control using magnetic boom receivers through to the latest in GNSS and onboard 3D positioning control we've got you covered.



## Boom Mounted Laser Receivers

Choose from a range of compact digital magnetic receivers, such as the advanced Spectra Precision CR700, or the heavy duty 360° machine mounted laser receivers **MACHINE CONTROL** 

### SPECTRA PRECISION CR700

#### ADVANCED COMBINATION MAGNETIC BOOM/ HANDHELD SMART LASER RECEIVER

The best of both worlds - a magnetic boom mounted laser receiver with a digital 'mm' display for precise hand and machine leveling.

The Spectra Precision CR700 combination Laser Receiver is a machine mounted display receiver used on small grading and excavating equipment as well as a traditional laser receiver mounted to a grade rod or staff. The standard delivery package includes BOTH the magnetic mount for quick machine mounting and a grade rod clamp.

With super bright directional LEDs, the CR700 is ideal for entry-level machine grade display, specifically on miniexcavators and backhoes. This provides instant grade information to the operator and eliminates the need for a rod man in the trench.

The CR700 uses Spectra's patented SuperCell digital readout technology incorporated in the HL700 and HL760 laser receivers. This unique technology provides much more accurate and more consistent readings than traditional methods.

If you are using the CR700 with a Spectra Precision laser that already has an HL760 normal hand held recevier, the HL760 can be configured as an in cab display when paired with the CR700!

The LEDs are visible at long range and a vertical drift alarm warns if the laser is disturbed.

- Combination Hand/Magnetic Magnetic Receiver
- Super-Bright Coloured LED Elevation Indicators
- Smart Communication with Spectra Model Lasers
- Two-Way Connectivity with Other HL760 Receivers
- 200 Degrees Angle Detection Range
- 127mm Vertical Detection Range

#### **POPULAR CR700 LASER COMBOS**













#### 360 DEGREE LASER RECEIVERS







Q WEBSITE SEARCH LR



#### SPECTRA PRECISION LR20

The LR20 360° machine mounted laser receiver allows compact machines to achieve tighter tolerances without the need for a grade checker. Designed specifically for the costconscious site prep contractor, the LR20 provides simple depth and slope display elevation information and is very easily moved between compact machines. Includes Mini magnetic mount.



The LR30 is a 5-channel heavy duty 360° machine mounted laser receiver designed primarily for earthmoving equipment including: dozers, backhoes, excavators, scrapers, and box blades. It works with all types of red beam rotating lasers for fast, no-hassle setup. Withstands all weather environments. The wireless LR30W model is designed to work with the in cab RD20 Remote Display. SPECTRA PRECISION LR50

The LR50 is a 5-channel mutli-purpose 360° machine mounted laser receiver Compared with the LR30, the LR50 has the added Blade Tilt and Excavator Boom Plumb Indicator functionality. The LR50 display the status of the receiver relating to plumb and tilt direction. It also allows proportional valve control through the optional CB30 dual control box. Optional wireless model available.



With 8-channels and a larger vertical detection range compared to the LR30 and LR50, the LR60 is an advanced 360° machine mounted laser receiver which also includes patented angle compensation. This allows the operator to check levels with the dipper arm extended or retracted up to 30°. It features the same Blade Tilt and Excavator Boom Plumb Indicator functionality as the LR50.

LR SERIES COMPARISON	LR20	LR30	LR50	LR60	
OPERATING RANGE	Typically 300m+ Radius	Up to 460m Radius	Up to 460m Radius	Up to 460m Radius	
RECEPTION ANGLE	360°	360°	360°	360°	
VERTICAL DETECTION HEIGHT	200mm	170mm	170mm	220mm	
ANGLE COMPENSATION	-	-	-	Yes, Up to 30°	
PLUMB INDICATION	•	-	•	•	
WIRELESS/BLUETOOTH	-	Optional (LR30W)	Optional (LR50W)	Optional (LR60W)	
REMOTE IN CAB DISPLAY	-	Optional RD20 display	Optional RD20 display	Optional RD20 display	
CONTROL BOX COMPATIBILITY	-	Optional CB30 Control Box	Optional CB30 Control Box	Optional CB30 Control Box	
MOUNTING TYPE	Mini Magnetic Mount	Clamping 38 - 50mm	Clamping 38 - 50mm	Clamping 38 - 50mm	
MAGNETIC MOUNTING	•	Optional MM-1 Mount	Optional MM-1 Mount	Optional MM-1 Mount	

Product specifications are subject to change, please confirm at time of purchase.

#### **MACHINE CONTROL**

#### MAGNETIC LASER RECEIVERS



#### MCE **R45 BM**

Manufactured in Australia, the R45 BM from MCE is a robust cost effective 220° magnetic boom laser receiver for the smaller digger. Economical and compact, the R45 BM has built-in magnets and a vertical detection range of 95mm.





The R45 TC magnetic laser receiver is ideal for earthmoving equipment such as excavators, backhoe, trenchers and dozers. The R45 TC has the additional functionality of tilt compensation, up to 30°. In this mode, automatically compensate for the error introduced by deviations from a vertical position by adjusting the centre band automatically.

#### MCE R45 TC PRO

A popular seller, the R45TC Pro model is a Bluetooth equipped magnetic laser receiver. Used in conjunction with an Android device in enabled app, the operator can see everything from the cab of the machine. The Pro model also features CAN communication, working in conjunction with the optional DB Uni Pro display. The R45 TC Pro also includes the Angle Compensation functionality found in the R45 TC, with tilt compensation, up to 30°. In this mode, automatically compensate for the error introduced by deviations from a vertical position by adjusting the centre band automatically.

R45 SERIES COMPARISON	R45 BM	R45 TC	R45 TC PRO
OPERATING RANGE	Up to 500m Radius	Up to 500m Radius	Up to 500m Radius
RECEPTION ANGLE	220°	220°	220°
VERTICAL DETECTION HEIGHT	95mm	190mm	190mm
ANGLE COMPENSATION	-	•	٠
WIRELESS/BLUETOOTH	-	-	•
REMOTE IN CAB DISPLAY	-	-	Optional Android Device with APP
CONTROL BOX COMPATIBILITY	-	-	Optional DB UNI PRO display
MOUNTING TYPE	Magnetic (built in)	Magnetic (built in)	Magnetic (built in)

Product specifications are subject to change, please confirm at time of purchase.

# Excavators & Dozers

From simple blade control through to fully integrated 3D GNSS, Moba/MCE and Spectra offer solutions for any budget, every application and novice to expert level knowledge skill.

2D EXCAVATOR & DOZER CONTROL

#### **MACHINE CONTROL**

### MOBA XSITE EASY

#### AFFORDABLE 2D SYSTEM FOR PRECISION EXCAVATING WITH OPTIONAL LASER CONTROL

Looking to improve the use of your excavator, digger or backhoe? Do you require the next step up from manual indicate boom mounted laser receivers? Then the Xsite<sup>®</sup> EASY 2D automatic excavation control system is the ideal solution for true one-man automatic control without breaking the budget.

From Moba, a world leader and pioneer in machine control development, the Xsite® EASY 2D excavator control system measures depth, range and incline of the bucket, as well as depicts the bucket position graphically and numerically on the display.

Using this information, the machine operator always knows the exact position, and machine work progress. This allows the operator to work exactly according to plan, design and precisely implementing the specifications.

Adding the Moba EL2 machine laser receiver allows the user to perform automatic grade and height control by laser, with a height detection range of 160mm.

An additional LED display shows at first glance whether the target height has already been reached, or if needs to be raised, further.

The Xsite<sup>®</sup> EASY system even works under water, allowing the excavator operator to always maintains an overview of the job. The system is ideally suited for use in foundation, trench or slope construction, leveling or underwater excavation.

The Xsite<sup>®</sup> EASY 2D will allow you to tender for a wider array of civil, infrastructure and earthmoving job tasks, without having to worry about additional human resources and the associated costs.

#### OPTIONALLY MEASURES THE INCLINE OF THE BUCKET WITH AN ADDITIONAL SENSOR-ANGLE MEASUREMENT

- Graphical & Numerical Display of Bucket Position
- Shows all Data and Bucket Position on Display
- Height Alarm Provides Overhead Cable Protection
- Laser Control Compatible for Height Detection
- Retro-Fittable for easy Machine Changing
- Optionally Measure the Bucket Incline (Sensor)





**2D** EXCAVATING SYSTEM

### MOBA XSITE PRO

#### DEPTH, INCLINE AND RANGE OF THE EXCAVATOR BUCKET, DEPICTING THE POSITION ON THE GRAPHIC

3D Excavation control is currently one of the most in demand systems in the Civil Infrastructure Industry and MOBA Mobile Automation AG has been an established name for more than 40 years.

With Xsite<sup>®</sup> PRO excavator control system, Moba offer a state of the art feature packed system, with simplicity that even a novice user can operate.

The large clear to view 8.4 inch graphic display indicates depth, incline and range of the excavator bucket, depicting the near exact position. The machine operator can then work to implement the specifications, without corrective work. This saves time, fuel, material and increases the efficiency during machine use.

Choosing from either a 2D or 3D GNSS controlled system (Xsite® PRO ADVANCED), the PRO ADVANCED system includes dual GNSS receivers, adding extensive 3D functionality.

Create simple 3D profiles with terrain models, which can be imported via common file formats, used without timeconsuming conversion.

With the two GNSS sensors mounted on the machine, both the position and the alignment of the machine, are known at all times so that precise working is possible.

The possibility to save points allows to document the working process. The work log is sent to the office via an Internet connection or USB stick.

Staking out and manual surveying can be reduced. This saves time, money and personnel, while accelerating the workflow.

This system can be used during pipe or cabling installation, documenting competed layers, dredging or slope

- Choose from either a 2D or 3D System
- Creation of 2D Profiles directly on the system
- Display shows all the data and bucket position
- Enables efficient work underwater or for blind cuts
- Large graphic 8.4 inch touch-screen display
- CAN Interface







#### **MACHINE CONTROL**

### MCE CB.D2

### BASIC AUTOMATIC DUAL CHANNEL/RECEIVER BLADE CONTROL

Manufactured in Australia, the CB.D2 from MCE is a simple to operate single or dual channel valve control system, designed for a wide array of earthmoving machinery, from box graders and drag along blade to agricultural land levellers, loaders or even mall graders.

Supporting both proportional or bang bang valve configurations, it is used to control the machine's hydraulics according to the output from the laser receiver. Choose to either automatically control machine's hydraulics or override and manually control the machine via the switches on the control panel.

The CB.D2 also works as an in cab display by replicating the display from the MCE R.ULS.CAN laser receiver inside the machine's cabin. The CB.D2 can also be integrated with an optional elevating mast.



### MCE **RS007**

#### BASIC AUTOMATIC SINGLE CHANNEL/RECEIVER BLADE CONTROL

The RS007 Laser machine control system from MCE is a simple single channel system with an electric output to control the PT solenoids of machinery. It consists of the CB.2001 control box, connecting cables and the R.3CHS. MC 360° laser receiver.

The CB.2001 features three grade accuracies and the user can choose from automatic control with override facility or manual control.

Simple to use and set-up, the rugged construction of the control box, connecting cables and R.3CHS laser receiver make it able to withstand harsh operating environments.

The R.3CHS.MC laser receiver features highly visible and adjustable LED's indicating the position of the laser beam, with user selectable accuracy and automatic compensation of errors induced by vibration.







# SPECTRA PRECISION CB30

#### AUTOMATIC DUAL CHANNEL/RECEIVER BLADE CONTROL

The CB30 from Spectra Precision, is a in cab control box with dual channel proportional valve control, suitable for dozers, box graders, skidsteer loaders or small graders.

Used in conjuction with either the LR50 or LR60 Spectra machine receivers, it is designed for simple elevation display to more complex grading jobs, that require automatic elevation and slope blade control

The CB30 allows automatic or manual control of the blade, with a temporary offset for large elevation differences or change of heights. Accuracy can be set between 0 and 50mm.

Hydraulic and electric kits are available for installation on different types, brands and sizes of earthmoving equipment.





# SPECTRA PRECISION CB25

#### BASIC AUTOMATIC DUAL CHANNEL/RECEIVER BLADE CONTROL

The CB25 from Spectra Precision, is a economical lower cost alternative to the CB30 system above, whilst still utilising proportional valve control.

Used in conjuction with either the LR50 or LR60 Spectra machine receivers, it is designed for simple elevation display to more complex grading jobs, that require automatic elevation and slope blade control

Switch from automatic to manual control with the quick flip of one switch, so there's no need to stop or change settings.

Hydraulic and electric kits are available for installation on different types, brands and sizes of earthmoving equipment.

OPTIONAL CB20 SINGLE CHANNEL HEIGHT ONLY SYSTEM AVAILABLE.



# Paving

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Modular Sonic Sensor system for non-contact Surface Scanning.



**MACHINE CONTROL** 

### MOBA Matic 2 System

#### DIGITAL LEVELLING & SLOPE CONTROLLER FOR PRECISION PAVING

This modular system enables a flexible choice of sensors, depending upon the application. It achieves a high planarity during asphalt paving.

This system is easy to install and simple to operate. Using just four main buttons, all important functions can be controlled, as well as the height and slope of the paver screed, adjusted.

This increases the paving output of the machine, preventing the paving of too little or too much material, thus increasing the paving quality and planarity. The MOBA-matic II has firmly established itself as the world's leading and most flexible leveling system for pavers.

This modular system enables a flexible choice of sensors, depending upon the application. It achieves a high planarity during asphalt paving.

This system is easy to install and simple to operate. Using just four main buttons, all important functions can be controlled, as well as the height and slope of the paver screed, adjusted. This increases the paving output of the machine, preventing the paving of too little or too much material, thus increasing the paving quality and planarity.

With the MOBA-matic II control panel, screed control is even easier. Operation of the basic functions is extremely simple, through the use of just four buttons and a clearly understandable symbolic representation. In the 3.5 inch colour display, all connected sensors and system status are displayed for the operator.

In addition, slope and height values are displayed. Both sides of the screed can be conveniently operated using a MOBA-matic II, making it unnecessary to change sides. The night design makes it possible for the user to clearly see all details, even in darkness.

- Control the Height & Slope of the Paving Screed
- Flexible Selection of Leveling Sensors Available
- High Precision Paving Results
- Simple Intuitive Icon Driven Operation
- Colour Graphic LCD Display
- Durable Construction made to Handle Paving



COLOUR GRAPHIC DISPLAY WITH CLEAR INDICATION OF ALL SENSORS AND CLEAR, VISUAL ICON DRIVEN INSTRUCTIONS



**MACHINE CONTROL** 

### MOBA Big Sonic-Ski

#### MODULAR SONIC SENSOR SYSTEM FOR NON CONTACT SURFACE SCANNING

The Big Sonic-Ski from Moba kit exists of an up to 13-metre long mechanic assembly with dismountable swing arms and a respective electronic kit of up to four ultrasonic sensors. Four sensors achieve the most precise and even results, in particular, with respect to road renovation works of large areas. The use of individually adjustable components within the mechanical construction further guarantees highest flexibility, e.g. in curves and over large distances.

The Big Sonic-Ski<sup>®</sup> extends the advantages of a single ultrasonic sensor. With up to four sensors, even large area unevenness, such as road waves, are compensated for. Through combining several sensors, the sensing of an extremely long range is made possible. With these measurements, the system calculates an average, and provides a virtual reference level.

The Big Sonic-Ski<sup>®</sup> achieves maximum planarity during asphalt paving, making it unrivalled in its precision. With four sensors, long unevenness that occur in regular intervals of five to seven meters, can be detected. Such unevenness often occurs during resurfacing, and can not be detected by less sensors. The individual sensors can each be positioned separately.

This increases the manoeuvrability of the machine, allowing work to be performed on even curvy roads, without problem.

The Big Sonic-Ski also features real-time temperature compensation with flexible scanning at freely selectable measurement points.

If you operate paving systems in New Zealand, call our FREEPHONE on 0800 500 380 to discuss this high precision paving solution.

- Functions with up to Four Sensors
- Temperature Compensation in Real-Time
- Best Possible Planarity
- · Compensates for long stretches of unevenness
- No Artificial Reference Required
- Records the Reference over 13 Metres



13 METER LONG MECHANIC ASSEMBLY WITH DISMOUNTABLE SWING ARMS AND A KIT OF UP TO FOUR ULTRASONIC SENSORS



**2D** Sonic Paver Leveling Q VEBSITE SEARCH DNIC-SKI



### MOBA Matic 3D Paving

#### 3D GNSS REAL-TIME SYSTEM FOR PAVING AND MILLING MACHINERY

Absolute smoothness with every paver.

With the MOBA 3D-matic levelling system, pavers achieve highly precise results. This system is easy to operate and use. The work process is accelerated making surveying and manual control measurement work no longer necessary.

On the well-organised 7-inch touch-screen display, the driver sees the position and height values for the project. If no project data is available, simple profiles can also be created with the system. The colour display is optimised for use in harsh conditions whilst the software was specialised for a particularly user-friendly handling and ease of operation. As such, the split screen mode for example allows the operator to have different values in just one overview.

Utilising an open data format, 3D Terrain models can be easily imported or created on the machine itself.

Both GPS and Total Station control can be used with the 3D-Matic dependant on the customer's needs for vertical accuracy.

As an add-on leveling system for pavers and milling machines, it is the perfect upgrade for any type of machine and can be retrofitted at any time. MOBA's many years of expertise in levelling technologies will pay off for you, too.

Thanks to an exceptional range of compatible sensors and CANbus-based communication, the modular system can be adapted to your individual requirements at any time. Choose between a GNSS antenna or a total station with prism for your personal project.

- Precision 3d Paving Sensor Technology
- · Increased smoothness of finished Roading
- 7" Large Visual Touchscreen Display
- 3D Design File Uploading for Target Height and Slope
- Open Platform Data Format
- GNSS and Total Station Compatible







#### **MACHINE CONTROL**

### MOBA Pave-ir

### INTELLIGENT THERMAL REAL-TIME VISUALISATION FOR THE ASPHALT PAVING

The optimal temperature of the installation material is a decisive factor in road construction, on which the quality of the road significantly depends. A thermal visualization of the installation process provides important insights into the quality of the material and opens up completely new optimization potentials.

PAVE-IR is the first system to simply and clearly create a thermal profile of the road - in real-time! The high-precision IR temperature scanner MTPS-100 provides a wide thermal profile of the built-in layer over a total width of up to 13m, which can optionally be used as evidence for all installation and supply temperatures. The fully automatic visualization of the temperature thus offers the possibility to detect individual points which might be affected by thermal segregation, and to react immediately!

Up to four further freely positionable high-performance sensors (IR spots) additionally measure material temperatures exactly at all points where temperature is critical, whether at the hopper, above the ground or at the screw.

This multiple measurement provides extensive, highprecision values. It thus is possible to assess the temperature of the delivered material in real time and, if necessary, to document it. Differences in the temperature of the installation material thus are visible during the entire process. As a result, measures can immediately be taken if necessary.

The unique IR technology of the scanner offers the decisive advantage of being able to accurately determine the temperature of the asphalt surface and the material.

The acquisition over a width of up to 13m is technically superior to camera-based solutions on the market.

- IR Thermal segregation detection
- Detailed thermal profile of the asphalt layer
- Real-time detection and temperature analysis
- Extensive high precision measurement
- Up to 13 meter width operation
- Cloud computing data handling





VISUALISATION AND DOCUMENTATION OF THERMAL PROFILE AND ADDITIONAL DATA.



# Measuring Equipment

**Distance, Forestry and Angle Measurement** 

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25 + years of experience in the New Zealand market supplying precision laser tape measures, angle and range finders has made Accurate the one knowledge centre for measurement.



#### ACCURATE HAS BEEN THE ONE-STOP SHOP FOR LASER TAPE MEASURES IN NEW ZEALAND FOR NEARLY 25 YEARS

Bluetooth low energy (LE, BLE), is marketed as Bluetooth Smart.





### LEICA DISTO

Low cost, yet high quality reliable laser tape measure. Designed for simple point and shoot non-critical accurate measuring.



#### LEICA DISTO D110

Compact and simple operation +/- 1.5mm accuracy laser measurement. With area calculation and Bluetooth Smart with free apps.



### LEICA DISTO

Our biggest seller, +/- 1.5mm accuracy laser with area, volume, setout, memory recall and Bluetooth Smart with free apps.



### LEICA DISTO

High accuracy 1mm laser with angle compensation. IP65 rugged construction and area, volume and setout calculations with timer.



### LEICA DISTO

1mm laser tape measure with Bluetooth Smart. IP65 design and digital viewfinder with zoom for outdoor measuring where laser dot cannot be seen. Point-to-point capability.



## LEICA DISTO

Outdoor 1mm laser tape measure with Smart features. Bluetooth and a real-time digital viewfinder with zoom for outdoor measuring where laser dot cannot be seen.



#### LEICA DISTO D810

1mm laser measure with camera capture, USB connectivity with dxf download, Bluetooth Smart, touchscreen and zoom digital viewfinder for outdoor measuring.



LEICA DISTO **S910** 

Point-to-point measuring between 2-points from a 3rd location! Smart Base enables you to stand back from and measure distances and angles between multiple points.

X3, X4, D810 TOUCH AND S910 MODELS ARE ALSO AVAILABLE AS A PACKAGE KIT INCLUDING FTA ADAPTOR, TRIPOD & HARD CASE.

WEBSITE SEARCH DISTO

#### LASER TAPE MEASURES

### TOP MEASURE **DLT DUAL**

#### MEASURES FROM BOTH THE TOP AND BOTTOM - AT THE SAME TIME!

The DLT Dual laser tape measure is a unique, compact, two-way laser tape measure that can measure both directions simultaneously!

It is ideal for anyone needing fast measurement of areas, volumes of buildings, ceiling heights etc, where ever the laser dots can be seen.

This device makes measuring heights fast, simple and accurate no more walking around or bending down to set the device on the floor! Just stand and point the two dots to the points you want to measure. It is designed for simplicity of operation.

Save previous measurements, areas, volumes, add and deduct on as well as Pythagoras and tracking.

#### DISTO SPECIFICATION COMPARISON

Q WEBSITE SEARCH DLT DUAL





### TOP MEASURE MLT MINI

#### USB ULTRA COMPACT LASER TAPE MEASURE

The MLT MINI from Top Measure is one of the most compact laser tape measures available on the market today. It also happens to be an affordable price also!

Designed for simplicity of operation, the Top Measure Mini has only one button and a rechargeable battery - that's it.

No hassles, without multiple buttons and modes, no fussy battery doors or replacing batteries, just a simple 3-hour charge by USB will provide up to 5000 measurements.

The Mini has a typical measuring accuracy of +/-2mm and a distance range capability of between 5cm up to 40m.





SPECIFICATION								
COMPARISON	D1	D110	D2	ХЗ	X4	D510	<b>D</b> 810	S910
ACCURACY	2.0mm	1.5mm	1.5mm	1.0mm	1.0mm	1.0mm	1.0mm	1.0mm
RANGE	up to 40m	up to 60m	up to 100m	up to 120m	up to 150m	up to 200m	up to 200m	up to 300m
BLUETOOTH	×	<ul> <li>✓</li> </ul>	~					
APP CONNECTIVITY	×	<ul> <li>✓</li> </ul>	~					
TILT SENSOR	×	×	×	360°	360°	360°	360°	360°
AREA, VOLUME CALCULATION	×	×	Area only	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	~	<ul> <li>✓</li> </ul>	~
LINES OF DISPLAY	3	2	3	4	4	4	5	Graphic
OUTDOOR VIEWFINDER	×	×	×	×	~	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	~
MEMORY RECALL	×	×	10 Values	20 Values	20 Values	30 Values	30 Values	50 Values
TRIPOD MOUNT	×	×	×	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	~
P2P MEASURE MODE	×	×	×	×	<ul> <li>✓</li> </ul>	×	×	~
WEATHER PROTECTION	IP54	IP54	IP54	IP65	IP65	IP65	IP54	IP54
WARRANTY	2 YEARS*	2 YEARS*	2 YEARS*	2 YEARS*	2 YEARS*	2 YEARS*	2 YEARS*	2 YEARS*

Product specifications are subject to change, please confirm at time of purchase. \*3 Year warranty extension if registered with Leica myWorld online.

#### WIDE RANGE OF MEASURING WHEELS FOR ALL FARMING, CONTRACTING AND GENERAL MEASURING







Small 16cm diameter measure wheel with brake, handle counter reset and carry bag, suitable for measuring smooth internal and external surfaces.



Accurate's best selling measuring wheel, 32cm diameter, with brake, handle counter reset and carry bag, suitable for a wide range of measuring applications.



Small diameter 16cm measure wheel from Rotosure with brake, suitable for measuring smooth internal and external surfaces.



#### CLASSIQUE DELUXE Popular 32cm diameter

measuring wheel from Rotosure with brake, suitable for a wide range of measuring applications.

Optional bag.





High spec model of the Rotosure Classique Deluxe, the Pro model has the additional feature of a handle counter reset. Optional bag.





Large 48cm diameter wheel ideally suited for farming, irrigation and agricultural use due to its large circumference.



A professional, heavy duty electronic measuring wheel with a 32cm diameter featuring an electronic counter with a digital readout.





A machine mounted counter wheel featuring dual 10.5cm diameter wheels for measuring fabric and material as they come off a machine roll.



#### SPECIFICATION COMPARISON

COMPARISON	тмо6	TM12	500	DELUXE	PRO	мк60м	DM12
WHEEL DIAMETER	16cm	32cm	16cm	32cm	32cm	48cm	32cm
CIRCUMFERENCE	50cm	1m	50cm	1m	1m	1.5m	1m
MEASUREMENT INCREMENTS	Decimetres, meters	Decimetres, meters	Decimetres, meters	Decimetres, meters	Decimetres, meters	Decimetres, meters	Centimetres, meters
RESETTABLE COUNTER	~	~	~	~	~	~	~
HANDLE RESET COUNTER	~	~	×	×	~	×	~
COUNTER LIMIT	9999m						
TELESCOPIC HANDLE	~	~	~	~	~	~	~
BRAKE	~	~	~	~	~	×	×
KICK STAND	×	~	×	~	~	~	~
WEIGHT	1.06kg	1.86kg	1.1kg	2.25kg	2.4kg	1.65kg	2.04kg
WARRANTY	2 YEARS						

Product specifications are subject to change, please confirm at time of purchase.

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### SMART TOOL DIGITAL LEVEL

#### **HIGH QUALITY ELECTRONIC SPIRIT LEVEL**

The original Smart Tool, today this model still remains the preferred choice for accuracy, reliability and durability. Constructed from aluminium and featuring two built-in acrylic bubble vials, the LCD display is recessed and angled for easy viewing and displays the digital reading in mm/metre, inches/feet, degrees and percentage. A user calibration button allows the operator to check the accuracy of the level.

AVAILABLE IN 600MM (24") AND 1200MM (48") LENGTHS WITH PADDED BAG

SMARTINE

- Measures Degrees, %, in/ft and mm/mAccurate to 1/10 of a Degree
- Recessed LCD
- User Calibration Feature
- Audible Beep for Level and Plumb

+/- O.1° ACCURACY

### SMART TOOL PRO DIGITAL LEVEL

#### WATERPROOF ELECTRONIC SPIRIT LEVEL

Looking for a waterproof electronic spirit level? Based on the original Smart Tool, the GEN3 Pro has all the same features with the addition of a higher IP65 weatherproof construction.

The GEN3 Pro model also includes a auto calibration feature and a backlit LCD for use in low light situations.

Includes a padded level case/bag.



- Measures Degrees, %, in/ft and mm/m
- Accurate to 1/10 of a Degree
- IP65 Weatherproof Design
- Backlit LCD
- Auto Calibration

AVAILABLE IN 600MM (24") AND 1200MM (48") LENGTHS WITH PADDED BAG

+/- O.1° ACCURACY



### SMART TOOL DIGITAL MODULE

#### **COMPACT ELECTRONIC BUILDERS ANGLE SENSOR**

The Builder's Angle Sensor Module measures digitally for all 360 degrees of a complete circle. Installing a deck or stair rail, extending a roof or determining how much an old floor has sagged becomes simpler, faster and more accurate.

Now featuring the latest GEN3 design with IP65 weatherproof construction, auto calibration feature and a backlit LCD for use in low light situations.

Includes a padded level case/bag.

- Measures Degrees, %, in/ft and mm/m
- 170mm compact length
- Measures °, %, in/ft and mm/m
- IP65 Weatherproof Design
- Backlit LCD



AVAILABLE AS A MODULE ONLY

IP65 WATERPROOF RATING	Q WEBSITE SEARCH MODULE
	WATERPROOF

### NEDO WINKELTRONIC

#### **ELECTRONIC ANGLE FINDERS**

The Nedo Winkeltronic is a range of German quality, rugged and reliable angle finders, with an accuracy of  $\pm 0.1^{\circ}$  (600mm Pro model). The measured angle can be read on the large easy to read digital LCD display. Two integral spirit levels ensure true horizontal and vertical positioning and the hold function freezes the reading on the display.

The Easy 400 is the base model of the range, designed for simple economical angle measuring. The 600mm Pro model features a larger angle measuring range, precision resolution and a long shank.

- Accuracy of ± 0.1° (Pro 600mm model)
- Hold Function to keep a Measured Value
- Integrated Horizontal and Vertical Level Vials
- Large easy-to-read LCD Display



+/- O.1° ACCURACY	
AUCONAUT	WI

### MECHANICAL Slopemeters

#### **MACHINE MOUNTED SLOPE SENSORS**

Since 1943, Slope Meter Inc. in the USA has been producing mechanical slope indicators for heavy machinery. Slope meters are typically mounted on the dash in the operator's view and will give fast, accurate readings for any slope.

The Slope Meter No. 2 NS is the most popular indicator and is used to determine the % of grade, and is calibrated to read from 0-12%. It is designed for motor graders, dozers, asphalt pavers, wheel ditches, tunnelling machines and other equipment where exacting specifications are required.

For SCSI model, the safe driving speed for any curve is quickly and accurately determined, with the 'SCSI' mounted in the engineer's vehicle. The scale reads zero when the vehicle is level, and will show 'tilt' up to 25 degrees on each side. The scale is red beyond +/-10 degrees to denote danger zones.



ALUMINIUM CASTED RUGGED DESIGN WITH LARGE NUMERALS FOR EASY VIEWING



#### MEASURING EQUIPMENT

OPEN REEL TAPE MEASURES

### KOMELON & YAMAYO OPEN REEL TAPES

#### FIBREGLASS AND NYLON COATED STEEL FAST RETRACTING TAPE MEASURES

Komelon from Korea and Yamayo from Japan, are leading manufacturers of long open reel tape measures.

Fibreglass tapes are lightweight and durable and can be washed regularly when dirty. They do however have stretch at distance when tensioned.

Nylon Coated steel tapes have minimal stretch so are more accurate. Looking after a nylon steel tape will pro long it's life as the nylon coating prevents rusting.

The Komelon Unigrip Flex series of fibreglass tapes are dual sided with a quad ended riveted hooks. 30m, 50m and 100m lengths.

Yamayo Stilon tapes are a metric single sided tape measure with a dual riveted hook end. 30m, 50m and 100m lengths.







### HIGH ACCURACY POCKET TAPES WITH A RUGGED RUBBER DESIGN

Komelon's ergonomic and economical closed pocket metric tape measures offer performance, reliability, high quality durable construction and Class II CE accuracy.

Nylon coated steel with rubber protected casing, thumb tape locks, 8m and 15m lengths.

MODEL SPECS	PE85	MD85	MX82	IR85	LUR30
TAPE LENGTH	8M	8M	8M	8M	30M
TAPE WIDTH	25mm	25mm	32mm	25mm	10mm
MAGNETIC	×	~	~	×	×
CONSTRUCTION	Steel	Steel	Steel	Stainless	Steel

### YAMAYO Diameter tapes

#### SPECIALISED COMPACT DIAMETER TAPES FOR TREE WIDTH MEASUREMENT

Taking tree diameters is simple with this handy pocket size fibreglass tape. Yamayo Diameter Tapes measure both distance and diameter making them the perfect tool for forestry, tree-felling and environmental research. They are also commonly used to measure the diameter of rain water tanks and pipes.

All Yamayo diameter tapes feature a retractable 12.5mm wide PVC coated fibreglass tape that is durable and long lasting.

Available in 3m and 5m diameter models.



# Forestry Measurement

Advanced field solutions for high accuracy results in height, distance and angle measurements.

### HAGLÖF VERTEX Hypsometers





#### HAGLÖF Vertex 5

Haglöf's latest update to it's best selling instrument the Vertex 5 is the professional foresters' preference for accurate height, distance and horizontal distance measuring. The Vertex can be operated in areas with dense terrain where conventional methods such as measuring tapes, laser instruments are difficult to use.

#### HAGLÖF Vertex VL5

An advanced field solution for high accuracy results in height, distance and angle measurements. With an integrated tilt sensor and laser and ultrasound technology, the VL5 offers a variety of method options for any situation and surrounding. The results can be stored, or transferred wirelessly.



All you need in a Rangefinder Hypsometer. With a built-in GPS receiver, the Vertex Laser Geo features long range measurement with high precision laser with integrated tilt - and compass sensors for accurate 3D measurements.

#### SPECIFICATION COMPARISON

COMPARISON	VERTEX 5	VERTEX VL5	VERTEX LASER GEO
SIZE	80 x 54 x 31mm	93 x 63 x 72mm	93 x 63 x 72mm
WEIGHT	173g (incl. Battery)	243g	243g
BATTERY	1 x 1,5AA Alkaline	Chargeable Li-Ion 3.7V	Chargeable Li-Ion 3.7V
TEMPERATURE	-15° to 45°C	NA	-20° to +45° C
ULTRA SONIC DISTANCE	30m	30m	30m
HEIGHT	0-999m	0-999m	0-999m
RESOLUTION HEIGHT	0,1m	0,1m	0,1m
ANGLES	-90° to 90° Degrees	-55° to 85° Degrees	-90° to 90° Degrees
RESOLUTION ANGLE	0,1°	0,1°	0,1°
RESOLUTION DISTANCE	0.01m	0.01m	0.01m
LASER DISTANCE	NA	46cm-700m	46cm-700m
	Pri	oduct specifications are subject to chan	ge, please confirm at time of purchase

### HAGLÖF **Clinometers**









HAGLÖF

Simple easy to use electronic clinometer for measuring degrees or percentage of height change. Ideal for foresters, geologists, in construction and building.



EC II Electronic Clinometers feature single-key functions for distance setup and height measurement. Measure inclination and height from any known distance and present the results electronically.



The HCH instrument will be ideal when building roads and power lines, for demarcation of forest properties etc. Switch from compass to clinometer with one push of the button.

### NIKON Forestry pro II

#### WIDELY USED IN THE FORESTRY AND CRANE INDUSTRY FOR HEIGHT, INCLINATION AND DISTANCE MEASUREMENT

The Forestry Pro II from Nikon is a popular simple to use laser rangefinder designed for simplicity. It is easy and super fast to obtain the height of a tree, building or structure by simply pointing at the desired measurement point.

For forestry applications, the Forestry Pro II can obtain the tree height even when the top or base of a tree is blocked by branches or bushes, giving the height of a tree using the horizontal distance and angles of both the top and base of the tree.

- 500m Distance Range
- Simple Two Button Operation
- Simple Height of Tree/Structure Calculation
- Slope, Distance and Height Measurement



### HAGLÖF Mantax Blue Calipers

Mantax Blue is a classic diameter caliper available in many graduation options and lengths. Mantax Blue have scale print on both sides and they are rugged and durable with detachable jaws and adjustment keys included. This is a simple, smart, durable and economic choice of diameter caliper!

Mantax Blue calipers are used in a wide variety of applications and many different operation areas such as diameter measuring of trees and timber, log scaling, in fishery industry and wildlife management, in construction and in healthcare industry.



### HAGLÖF INCREMENT BORERS

Haglöf Sweden is the world's largest producer of increment borers and come in a great variety of models, lengths, core diameters and sizes.

Haglöf borers have blue handles in grip friendly plastic material and a metallic lock. The borer bits are made from hardened steel with PTFE coating for protection and reduced friction. The extractors are produced in stainless steel with metallic head and special design for easy core extraction of the wood core.

Borer bits, extractors, starters and holsters can be purchased separately.



### FLAGGING **Tape**

Flagging tape is a universally used convenient marking product for use on construction sites, forestry blocks and surveying projects for identifying highly visible marks and localities.

Available in: Pink, Orange, Yellow, White, Blue, Red and Green (sold in packs of 10 for each colour).



Olympus is the leader in the ultrasonic determination of thickness and dry film coatings. Many commercial and industrial companies and consultants throughout New Zealand rely on the performance and reliability that Olympus has become reknown for.



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# Non Destructive Testing NDT



### OLYMPUS 27MG

### PROFESSIONAL DIGITAL THICKNESS GAUGE WITH DUAL TRANSDUCER

The 27MG from Olympus is a professional ultrasonic thickness gauge, designed for maintenance engineers and inspectors that need to monitor wall thickness in metal pipes, tanks, beams and structural supports.

Despite its compact size, the 27MG has many innovative measurement features utilising the same technologies that are available on our more advanced thickness gauges. The durable, rugged 27MG is battery-operated and features a large, backlit LCD with easy-to-read numerals, and an intuitive colour-coded keypad with direct access to many key features.

27MG smart features and capabilities include:

- 0.50 mm to 635 mm thickness range
- Automatic Probe Recognition
- Auto Zero Compensation
- Hi-Low Alarm settings
- Min./Max. thickness capture mode (20x per second)

The 27MG is compatible with Olympus' complete line of easy interchangeable dual element transducers that vary in frequencies, diameters, and temperature capabilities to deal with virtually every application. See chart over page.

### **OLYMPUS**<sup>®</sup>

OLYMPUS IS AN INTERNATIONAL COMPANY OPERATING IN INDUSTRIAL, MEDICAL AND CONSUMER MARKETS, SPECIALISING IN OPTICS, ELECTRONICS AND PRECISION ENGINEERING.







#### WHY CHOOSE OLYMPUS?

Olympus has an industry-leading portfolio of innovative test, measurement, and imaging instruments. Leading edge testing technologies include remote visual inspection, microscopy, ultrasound, phased array), eddy current, eddy current array, X-ray fluorescence and optical metrology. Our products include ultrasonic flaw detectors and thickness gauges, videoscopes, borescopes, microscopes, in-line and advanced nondestructive testing systems, XRF and XRD analysers, interferometers, and a large selection of scanners, probes, software programmes, and instrument accessories.

Our goal is to supply reliable, economical systems globally that enhance safety, security, quality and productivity for customers and that contribute to society. We are committed to pursuing the development of new technologies, products, and services that offer the best solutions to customers' needs. Our commitment to designing quality products is linked to our customers' responsibility to comply with industry standards and regulations.



### OLYMPUS 45MG

#### HIGH PENETRATION THICKNESS & CORROSION GAUGE WITH DATA LOGGING

Despite its compact size, the 27MG has many innovative measurement features utilizing the same technologies that are available on our more advanced thickness gauges. The durable, rugged 27MG is battery-operated and features a large, backlit LCD with easy-to-read numerals, and an intuitive colour-coded keypad with direct access to many key features.

27MG smart features and capabilities include:

- 0.50 mm to 635 mm thickness range
- Automatic Probe Recognition
- Auto Zero compensation
- Gain Adjust
- Differential mode
- Hi-Low Alarm settings
- Min./Max. thickness capture mode (20x per second)



#### 0.5-635mm 2 WE THICKNESS RANGE VEAR SEARCH 4

### OLYMPUS TRANSDUCERS

TRANSDUCER	ITEM #	FREQ. (MHz)	CONNECTOR	TIP DIA. mm	RANGE STEEL mm	TEMP RANGE 'C	CABLE
D7910	U8454038	5.0	90°	12.7	1.00 to 254	0 to 50	Potted
D790	U8450002	5.0	Straight	11.0	1.00 to 500	-20 to 500	Potted
D790-SM	U8450009	5.0	Straight	11.0	1.00 to 500	-20 to 500	LCMD-316-5B3
D790-RL	U8450007	5.0	90°	11.0	1.00 to 500	-20 to 500	LCLD-316-5G3
D790-SL	U8450008	5.0	Straight	11.0	1.00 to 500	-20 to 500	LCLD-316-5H
D791	U8450010	5.0	90°	11.0	1.00 to 500	-20 to 500	Potted
D791-RM	U8450011	5.0	90°	11.0	1.00 to 500	-20 to 400	LCMD-316-5C
D7912	Q4530005	10.0	Straight	7.5	0.50 to 25	0 to 50	Potted
D7913	Q4530006	10.0	90°	7.5	0.50 to 25	0 to 50	Potted
D794	U8450014	5.0	Straight	7.2	0.75 to 50	0 to 50	Potted
D797	U8450016	2.0	90°	22.9	3.80 to 635	-20 to 400	Potted
D797-SM	U8450017	2.0	Straight	22.9	3.80 to 635	-20 to 400	LCMD-316-5D
D7226	U8454013	7.5	90°	8.9	0.71 to 50	-20 to 150	Potted
D798-LF	U8450019	7.5	90°	8.9	0.71 to 50	-20 to 150	Potted
D798	U8450018	7.5	90°	7.2	0.71 to 50	-20 to 150	Potted
D798-SM	U8450020	7.5	Straight	7.2	0.71 to 50	-20 to 150	LCMD-316-5J
D799	U8450021	5.0	90°	11.0	1.00 to 500	-20 to 150	Potted
MTD705 <sup>4</sup>	U8620225	5.0	90°	5.1	1.00 to 19	0 to 50	LCPD-78-5

Product specifications are subject to change, please confirm at time of purchase.

### OLYMPUS 38DL PLUS

#### ADVANCED SINGLE & DUAL ELEMENT THICKNESS & CORROSION METER

Despite its compact size, the 27MG has many innovative measurement features utilizing the same technologies that are available on our more advanced thickness gauges. The durable, rugged 27MG is battery-operated and features a large, backlit LCD with easy-to-read numerals, and an intuitive colour-coded keypad with direct access to many key features.

27MG smart features and capabilities include:

- 0.50 mm to 635 mm thickness range
- Automatic Probe Recognition
- Auto Zero compensation
- Gain Adjust
- Differential mode
- Hi-Low Alarm settings
- Min./Max. thickness capture mode (20x per second)



0.5-635mm THICKNESS RANGE



### OLYMPUS GAGEVIEW

#### PC INTERFACE SOFTWARE PROGRAMME FOR DOCUMENTATION AND DATA TRANSFER

The GageView Interface Program is included with the Data Logger option for either the 45MG or 38DL Plus.

This Windows-based application collects, creates, prints, and manages data from the gauge. GageView Interface capabilities include:

- Create datasets and surveys
- Store data editing
- View dataset and survey files and setup values
- Download/upload thickness surveys
- Export surveys to spreadsheets and other programs
- Collecting snapshot screens
- Print Thickness, Setup Statistics and Grid Reports
- Download/upload single element transducer setup files
- Software updating



WINDOWS-BASED APPLICATION





### OLYMPUS SCANNERS

#### OLYMPUS WELD INSPECTION SCANNERS

Accurate has a wide range of scanners to address fabrication or maintenance weld inspections needs. We have solutions for small pipes up to flat plates with the capacity to hold multiple probes for complete weld volume coverage.

Whether you choose a motorised or manual option, Olympus' wide range of phased array scanners offer versatility, dependability, and repeatability.



#### OLYMPUS Corrosion inspection Scanners

Corrosion mapping is a highly demanding application that requires the capability to precisely encode a probes position in up to two axes.

Corrosion scanners can be mounted on pipes and flat surfaces and are easy to use for fast detection of defects from manufacturing-induced lamination to in-service wall thickness reduction.

The Olympus models include semiautomated and Dual Linear Array (DLA) phased array corrosion systems through to fully automated, steerable motorised 2-axis scanners capable of performing corrosion mapping in remote locations.



#### OLYMPUS AEROSPACE INSPECTION SCANNERS

Inspecting large areas with fast C-scan acquisition is a critical feature for the aerospace industry. Olympus' range of professional scanners with suction cups are well suited to holding onto composite type surfaces, so you can perform mapping with up to two precise encoded axes.

Models include the RollerFORM, a phased array wheel probe, the GLIDER scanner, a two-axis encoding scanner for manual inspection of slightly curved or flat composite surfaces and the VersaMOUSe scanner, designed for linear encoded scans with a phased array probe.



The BB20 and BB30 paint thickness meters from Trotec are the ideal quick assessment tool for you to quickly determine the dry coating thickness of paints over metallic surfaces.

The dual sensor uses magnetic induction for steel (ferrous) metals and eddy current for aluminium (no ferrous) metals.

TROTEC BB30

#### BASIC DRY FILM ELCOMETER WITH REMOVABLE PROBE FOR COATING THICKNESS OF METALS

Compared with the lower cost BB20 unit, the BB30 features a removal probe and an angled display. The removable probe allows the sensor to be placed away from the meter. It utilisies the same dual ferrous and non-ferrous sensor to measure the thickness of metallic coatings as the BB20 albeit with a greater depth capability of up to 2mm (2000 microns).



#### BASIC DRY FILM ELCOMETER FOR COATING THICKNESS OF METALS

The BB20 is a simple low cost paint/coating thickness meter. The dual ferrous and non-ferrous sensor enables the user to measure the thickness of metal coatings like paint and varnishes, galvenising and enamel on iron or non iron metals like aluminium. The measuring range of the BB20 is up to 1.25mm (1250 microns) with a typical accuracy of 3%.

STRUCTURAL INTEGRITY



### JAMES INSTRUMENTS V-METER MK IV

THE MOST ADVANCED ULTRA-SONIC TEST SYSTEM FOR ACCURATELY IDENTIFYING BASIC CHARACTERISTICS OF COARSE GRAINED MATERIALS SUCH AS CONCRETE, WOOD, MASONRY, CERAMIC, GRAPHITE AND MORE!

Advanced ultrasonic pulse velocity meter designed to determine the structural integrity of concrete, wood, ceramic and other coarse grained construction materials.

Using the ultrasonic sensors, cracks, voids and honeycombs can be detected up to a depth of 75mm, which can all lead to structural weakness.

Ultrasonic testing can be applied to new and old structures, slabs, columns, walls, fire damaged areas, hydroelectric structures, pipe, prefab and pre-stressed beams, cylinders and other concrete forms. A wide range of transducers are available.





### JAMES INSTRUMENTS VUCON

#### THE VUCON IMPACT ECHO SYSTEM IS FOR MEASURING THE THICKNESS AND QUALITY OF CONCRETE

The impact-echo method is based on the use of impact generated stress waves that propagate through the material and are reflected by both the materials external surfaces and internal flaws. This method can be used to make accurate non-destructive measurements of thickness in concrete slabs and plates, and to locate internal flaws such as honey-combing, debonding and delaminations.

It can measure thickness, locate cracks, voids and other defects in masonry structures where mortar bonds the masonry together. The impact-echo method is not affected by the presence of steel reinforcing bars.

Conforming to ASTM C-1383 it is ideal for bridges, decks, retaining walls, roads and runways.



### JAMES INSTRUMENTS REBARSCOPE

#### **ADVANCED AUTOMATIC DEPTH & SIZE COVER METER**

The Rebarscope<sup>®</sup> from James Instruments is an advanced rebar locating system, using electo magnetic eddy current technology.

The Rebarscope, enables the user to not only locate reinforcement bars but also determine rebar depth and the rebar size. Is also capable of locating non ferrous metals: such as copper, aluminium, some stainless steels, wire, and more. The optional Scan Cart logs distance data as well as the location of rebar.

### JAMES INSTRUMENTS MINI R-METER

#### **PROFESSIONAL CONCRETE REBAR LOCATOR**

The Mini R-Meter is an industry professional accurate rebar and cover meter, for finding and determinig the depth of rebar in concrete.

From James Instruments, a world leader in NDT testing equipment, the Mini-R allows the user to select the size diameter of the rebar, then the instrument will automatically correlate the rebar cover. The exact position and orientation of rebar can be measured and rebar-free areas can be identified for drilling, grinding, resurfacing, or insertion of new machinery mountings.

#### **RELATED PRODUCT** CONCRETE SCANNING GPR





SINGLE HANDHELD SENSOR FOR REBAR DEPTH DETERMINATION UP TO 200MM



# JAMES INSTRUMENTS WM-250

#### **MANUAL REBOUND 'SCHMIDT TYPE' HAMMER**

The WM-250 from James Instruments is a manual rebound hammer, used for the quick determination field testing of the compressive strength of cured concrete structures, primarily floors and vertical surfaces.

This easy-to-use instrument provides a quick and simple test for obtaining an immediate indication of concrete strength in various parts of a structure.

It will also provide the indices of hardness and compressive strength for other construction materials. The unit can be used on plaster and mortar as well to verify consistency. The Test Hammer is also used on brittle rock cores where a larger impact will damage the specimen. It is typically used for thin concrete specimens (between 50mm (2") and 100mm (4") thick) such as sidewalks, bridgedecks and some driveways.

Rebound hammers are easy to record the mean rebound number. It conforms to ASTM C-805 and other international standards.

#### **SPECIFICATIONS**

- Weight: 0.9kg
- Size: 267mm with plunger retracted
- Impact Energy: 2.2Nm
- Includes Carrying Case





### JAMES INSTRUMENTS JAMES BOND TESTER MK III

### FOR TESTING TENSILE STRENGTH OF OVERLAYS, AND OVERLAYMENTS

The James Bond Tester<sup>™</sup> MK III or pull off adhesion test measures the bond strength or tensile strength of concrete, asphalt, tile, concrete repair, or other overlay material by the direct tension or pull off method.

Features an adjustable alignment plate with built-in leveling facility for both vertical and horizontal pulls.





#### SHOTCRETE PENETROMETERS



### MECMESIN DIGITAL SHOTCRETE PENETROMETER 1000N / DELUXE

#### THE BEST TOOL FOR SHOTCRETE TESTING

The Shotcrete Penetrometer is a complete portable system for testing the compressive strength of the initial curing stage of young sprayed concrete to BS EN 14488-2 (Method A).

It provides accurate readings of the forces required to penetrate sprayed (shotcrete) or poured concrete. These resistive force readings are then used to convert to a compressive strength value. This accuracy—beyond the requirements of the standard—and portability make it ideal for on-site testing.

The deluxe version has a conversion factor entry to convert measurements to KPa and it has a password protect lockable keypad.



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