# **Concrete Testing Equipment**



www.hoskin.ca

## **About Hoskin**

For over seventy years, Hoskin Scientific has been a supplier of testing and monitoring instrumentation to the Canadian market. With offices in Vancouver, Oakville, and Montréal our customers are able to receive local sales and technical support in our three major departments.

Our Environmental Department provides solutions for monitoring and sampling biological and chemical parameters in the environment. Our team of environmental sales representatives and diverse product range guarantee that you will find the right products for your application. Specific areas include: water quality, water quantity, soil moisture, plant science, weather stations, indoor air quality, aquatic sampling, and oceanography.

Our Materials Testing Department offers testing equipment for soil, asphalt, petroleum, concrete and cement. Our qualified sales associates focus on providing a sophisticated range of testing equipment complying with the various test methods, ensuring that accurate and consistent test results are always obtained.

Our Instrumentation Department focuses on a wide range of products including optical camera systems, transducers and transmitters, data acquisitions and loggers, signal conditioners and indicators, automation sensors and measurement systems. We have technical sales associates that are trained in various areas and willing to help you with your instrumentation requirements.

## Rentals

We offer high quality, proven equipment that will provide the user with valuable data as well as numerous ways of retrieving, filtering and viewing that data. We carry a wide range of instrumentation, including: water quality, portable gas monitors, soil sampling instruments and more.

## **Rental Equipment:**

- Single and multi-parameter instruments that can be setup for spot checks or extended deployment/data logging
- Water sampling instruments
- Water velocity and stream profiling instruments
- Soil sampling instruments
- Soil vapour sampling instruments
- Portable gas monitoring instruments

Customer satisfaction is our goal and we make an effort to ensure that all our customers are satisfied with their rental. All rental instruments are cleaned and calibrated before being sent to the user (please note that we also require equipment to be returned clean). If a rental instrument requires recalibration, please return the instrument to us and we will recalibrate at no charge. Any instrument not functioning properly can be exchanged at no cost.

Hoskin Scientific offers technical support over the phone and can also provide hands on demonstrations.

We are constantly expanding and looking for new equipment to add to the rental inventory and welcome all suggestions.

Check our website www.hoskin.ca for current offerings.

Daily, weekly and monthly rental rates available – please call for a quote.

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## **Concrete Slump & Consistency**



## **Slump Cones**

Slump Cones are made of a heavy-duty, spun steel design. Available in English and Metric dimensioned models. Plated for rust resistance and long life.

ASTM C-143, C-192; AASHTO T-23, T-119, T-126.



## **Tamping Rods**

Tamping Rods are used with the Slump Cone, molds and other devices to eliminate air voids in fresh concrete.

ASTM C-31, C-124, C-138, C-143, C-157, C-192, C-232, C-234; AASHTO T-23, T-119, T-120,T-121, T-126, T-158, T-159, T-160.



## **Scoops**

Hoskin Scientific carries a wide variety of square and round nose aluminum scoops.

- Square Nose 8 oz, 16 oz, and 32 oz
- Round Nose
  5 oz, 12 oz, 24 oz, and 38.5 oz



#### **Brushes**

Hoskin Scientific carries a wide range of brass, nylon, fine, coarse, and wire loop brushes.



#### **Pans and Bowls**

Hoskin Scientific carries a wide variety and sizes of stainless and strapped steel mixing bowls and pans.



#### **Rubber Pails**

Hoskin Scientific carries a wide variety of rubber pails.



#### **Self Consolidating Concrete (SCC) 3-Ring Test Set**

This test has been designed to determine the passing ability (flow-ability) of SCC concrete. Our test set includes J-Ring fabricated in Zinc Plated steel rust resistance and a Base Plate made in stainless steel for durability. The base plate includes a return bend lip for easy carrying and includes three concentric circles etched on the base plate to center the ring.

ASTM C611/C611M and ASTM C1621/C1621M standard compliant.



## **Lollipop Min/Max Digital Thermometer**

- Measurement Range: -40°F to 311°F (-40°C to 155°C)
- °F/°C selectable
- Min/Max memory stores lowest/highest readings
- Automatic calibration feature
- Model 11040 Water Resistant
- Model 11050 IP65 Waterproof



#### **Dual Scale Max/Min Thermometers**

- fast and accurate readings
- Precise Measurements
- Select between Celsius and Fahrenheit



## **Dial Thermometers**

1-3/4", 2", and 3" Laboratory Testing and General Purpose Bimetal Thermometers. These models are used for general-purpose testing applications such as laboratory, food, concrete, asphalt, soil, and cosmetics.



#### **CA-0500 Concrete Pressure Meter**

The lid of the concrete pressure meter features a smooth sloped top so water and concrete wipes right off. By eliminating the cavities in the lid that trap and hold concrete, maintenance and repair problems are greatly reduced. The meters handles not only make it easier to carry, they also help to eliminate the maintenance problems caused by carrying the meter by its gauge. Additionally, they make it more convenient to use the meter's bucket as a 1/4 cu. ft. unit weight measure. Bucket's base is machined flat so meter sits firm and level when conducting a test. Standards, ASTM C-231 | AASHTO T-152.

Kit includes: Meter, plastic carrying case, tamping rod, strike-off bar, syringe, calibration equipment and operating instructions.



#### **Press-Ur-Meter**

The Press-Ur-Meter is a 1/4 cu. ft. (0.007 m3) air meter used to quickly determine the percentage of entrained air in fresh concrete.

The meter is supplied complete with tamping rod, syringe, calibration vessel, straight edge and carrying case.

- ASTM C-231; AASHTO T-152
- Aggregate Size. 2" (50.8 mm) maximum.
- Built-in pump
- Gauge. Direct-reading; 3-1/2" (89 mm) diam.

#### Pan Mixers



#### **Heavy Duty Model L**

The Model L can be fitted with a Pan Tipper which enables the material to be discharged into a wheelbarrow or onto the ground; the Pan Tipper handle is removable for transportation. The mixing pan and blades are guarded with a Safety Headguard supplied with the mixer. Automatic power take-up is fitted as standard; mixing automatically starts and stops as the mixing head is lowered and raised.

- Suitable for mixing a wide range of materials from dry, semi-dry to viscous
- Robust steel construction
- Safety guarding to head/pan and motor/engine/gearbox
- CE approved

#### **Model CF 35**



This model has been designed for small works and on site repairs, and anywhere small quantities of mix are required consistently and quickly.

The pan can be removed from the turntable with a Pan Carrying Handle. Alternatively, a Pan Tipper can be fitted allowing the material to be emptied directly into any suitable container. The mixing blades are hard-faced on the leading edges to prolong their life and spare parts are readily available from stock.

- Robust steel construction
- Safety guarding to head/pan and motor/engine/gearbox
- CE approved



#### **Model TEC225**

This model is a factory production model with a fast and efficient mixing action achieved by the pan being driven and the aggregates turning the revolving star blade.

Three fixed paddle blades balance the flow of material into a defined path creating a forced mixing action, and the side scraper blade prevents the material building-up on the side of the pan, and also diverts the mix back into the flow of material.

- Suitable for mixing a wide range of materials from dry, semi-dry to viscous
- · Complete with mixing pan and electrical control equipment
- Safety guarding to head/pan and motor/engine/gearbox

## Sample Preparation



## **Concrete Test Bio-Cylinder™ Molds**

- Bio-degradable Recyclable Virtually unlimited shelf life
- Meet A.S.T.M. specifications C39,C192 and C470
- Mold is non-absorptive
- Molded single unit for consistent dimensional uniformity
- Smooth molded plastic allows quick, easy stripping
- · Weather resistant, eliminating job-site storage problems
- Lids and stripping tools available
- Available in 2", 3", 4" and 6" diameter sizes



#### Single-Use, Plastic Cylinder Mold

- Complete with integral, domed plastic lid
- Meet A.S.T.M. specifications C39,C192 and C470
- Mold is non-absorptive
- Molded single unit for consistent dimensional uniformity
- Smooth molded plastic allows quick, easy stripping
- Available in 3", 4" and 6" diameter sizes



#### 4" Reusable Bio-Cylinder System

The Reusable Bio-cylinder System (RBS) is a 1/4" heavy wall cylinder mold, with an engineered Cylinder Saver Liner (CSL), and a Cylinder Saver Insert (CSI) which minimizes friction, allowing specimen to easily separate from mold.

- Conforms to ASTM C-470 specifications
- Replacement liners, inserts, and lids are available separately



#### **Cardboard Cylinder Molds**

ASTM C31, C39, C192, C470, C496; and AASHTO T22, T23, T126, T198

- Waxed cardboard molds with flat metal bottoms
- Available in 2x4, 3x6, 4x8 and 6x12 sizes



## **Digital Calipers**

A caliper is a device used to measure the distance between two opposing sides of an object. A caliper can be as simple as a compass with inward or outward-facing points. The tips of the caliper are adjusted to fit across the points to be measured, the caliper is then removed and the distance read by measuring between the tips with a measuring tool, such as a ruler.

Available in 8", 10", 12"



#### **Concrete Vibrator**

Lightweight round-head model is used for vibrating concrete test cylinders and molds in the laboratory or field. Unit is flexible-shaft type, powered with an electric motor. Variable shaft lengths and vibrating heads available.

- ASTM C31, C138, C192
- High strength cast aluminum housing
- Rugged shock absorbing frame
- Easy access to all serviceable parts
- Power sources are generally selected to maintain a vibration frequency of 10,000 vpm under maximum load



#### **Buoyancy Balance**

The density of hardened concrete specimens such as cylinders and cubes can be quickly and accurately determined using the ELE Buoyancy Balance.

The system consists of a heavy-duty support frame, incorporating a water tank mounted on a platform. A mechanical lifting device is used to raise the water tank and immerse the specimen suspended below the balance system. The electronic balance supplied with the system can also be used for standard weighing applications in the laboratory.

- ASTM C127; AASHTO T-85
- 22 kg x 0.1 g capacity balance system



## intelliCure Thermostaically Controlled Curing Box

intelliCure is the industry's ultimate curing solution. The unit heats and cools to maintain a constant (adjustable) curing temperature, for both the initial cure and the full 28-day cycle, intelliCure is designed specifically for the construction environment. The unit is rugged and designed for uncompromised performance and reliability.

- Patented "Bubble Plume" technology
- Certified accuracy vs. NIST traceable device
- Available in multiple sizes



## **EZ Cure Thermostatically Controlled Curing Box**

When a simple solution for curing concrete cylinders the first 24-48 hours is needed, EZ Cure is an economical, thermostatically controlled curing box that heats and cools as needed to maintain a constant 73°F curing environment. The EZ Cure is designed to be a simpler field curing solution while still meeting ASTM C31 curing requirements for job sites on a tight budget.

- 17 (6x12) cylinders or 35 (4x8) cylinders w/o stacking
- Standard 110 volt operation



#### intelliCure Match

intelliCure Match replicates fluctuating temperature conditions in real-time during the curing process so your breaks accurately represent your concrete placements.

- Monitors and matches concrete pour termperatures during curing
- Heats and cools water as needed to match placement temperatures
- Bubble plumes circulate water to maintain consistent temperatures
- System provides easy maintenance and heating element replacement
- Meets AASHTO T-23, AASHTO PP 54-06, and ASTM C 31 curing environments requiements



#### **Curing Tank Heaters**

Designed for efficient and economical indoor operation with curing tanks where temperature does not fall below 55°F (13°C). Submersible circulating pump also available.

- Mounted on aluminum base
- Thermostatically controlled heating coils
- Easily mounts on curing tank
- Deluxe model with pumping system for better circulation and controlled heating



## **Aquafogger**

Aquafog atomizer humidifier systems produce a very fine adjustable cool mist fog used for spot & indoor outdoor area cooling cooler. Powerful humidifiers Turbo XE fans, HRSM for adding moisture up to 100% RH.

- Hanging fan and portable units
- Stand-alone units; requiring no high pressure pumps or massive air supply lines
- Accepts ordinary water supplies, no filtration necessary
- Easy installation and operation

## **Compression Machines**



## **Accu-Tek Touch 250 Series Compression Machine**

- Capacity: 250,000 lbf (1,112 kN)
- Frame; Upper and lower steel plate sections with four steel uprights, threaded and welded into place; 14 .75" w. x 12 " d. x 37" h. (375 x 305 x 940 mm)
- Ram:6-1/8" (155 mm) diameter; 3" (76 mm) travel
- Upper Platen: Swivel seat type; 6-1/4" (15 9 mm) diameter
- Lower Platen: 7" (178 mm) diameter
- Vertical Clearance: 12 -1/2" (31 8 mm); or 14 -1/2" (368 mm) with lower spacer removed
   (Upper and Lower platens installed)
- Horizontal Clearance: 9" (22 9 mm) between uprights



#### **Accu-Tek Touch 350 Series Compression Machine**

- Capacity: 350,000 lbf (1,555 kN)
- Vertical Clearance: 19.75" (502 mm) without upper platen assembly from top of lower block
- Horizontal Clearance: 11.5" (292 mm) between uprights
- Ram: 7.716" (196 mm) diameter; 2" (50 mm) stroke
- Pump: 3 h.p (0.7 kw) electro-hydraulic pump mounted within reservoir with overload protection
- Controls: Pump-mounted pressure compensated flow control valve with 4-position control lever and adjustable flow valve. Pump on/off switch



#### **Accu-Tek Touch 500 Series Compression Machine**

- Capacity: 500,000 lbf (2,224 kN)
- Vertical Clearance: 19.62" (498 mm) without upper platen assembly from top of lower block
- Horizontal Clearance: 14" (355 mm) between uprights
- Ram: 8.75" (222 mm) diameter; 2.5" (64 mm) stroke with over travel limit switch protection
- Pump: 3 h.p (0.7 kw) electro-hydraulic pump mounted within reservoir with overload protection
- Hydraulic Controls: Pressure compensated flow control valve with 4-position control lever and adjustable flow valve. Pump Start/Stop Push-buttons



## **PILOT 1500kN Automatic Compression Concrete Testers**

The new automatic testers combine high productivity with Energy Saving.

ASTM C109 | ASTM C349 | ASTM C348

The test cycle with closed loop digital feedback is automatically performed by simply pressing the start button. The load-time graph and the actual load rate are displayed in real time during the test. Correct test execution according to the selected Standard, is continuously and automatically controlled.



## **PILOT 2000kN Automatic Compression Concrete Testers**

Rigid welded steel construction. ASTM spherical seat allows free alignment at the initial contact with the specimen. It is designed strictly conforming to the Standards, to test 4" and 6" diameter specimens.

- AASHTO T22
- Compatible with the new intuitive easy to use DATA MANAGER Software
- Double stage hydraulic pump with rapid approach: high throughput of tests (up to 40/
- Soft platen-to-specimen contact and smooth load rate from the ramp start
- Optional control of a second and third frame



## PILOT Automatic Compression Concrete Testers 2000kN - 4000kN High Stiffness **Frames**

Four column high stiffness welded frame tested for stability to EN 12390-4. Heavy duty spherical seat in lubricating oil bath, allowing initial free alignment at the initial contact with the specimen and automatic jamming up to the end of test.

- Reduced power consumption and silent operation by ES Energy Saving Technologies
- Double stage hydraulic pump with rapid approach: high throughput of tests (up to 40/
- Soft platen-to-specimen contact and smooth load rate from the ramp start
- Storage of up to 10 test profiles for each channel for quick start



#### PILOT 3000kN Automatic Compression Concrete Testers for Cylinders and Blocks

Rigid welded steel construction. Premium Heavy Duty spherical seat and rectangular platens 310x410x90 mm (12.2"x16.1"x3.5") for testing blocks according to ASTM C140 and ASTM C1314.

- Premium Heavy Duty spherical seat and rectangular platens 310x410x90 mm (12.2"x16.1"x3.5") for testing blocks according to ASTM C140 and ASTM C1314
- Upper platen and spherical seat are mounted on an axial screw assembly allowing easy adjustment of vertical clearance using slotted distance pieces.
- Innovative upgrading kit for easily switch of the spherical seat assembly for testing cylinders to ASTM C39, resulting a multi-testing unit!



## **Splitting Testing Devices**

Splitting testing device for cylinders dia. 4"x8" (100x200 mm) and 6"x12" (150x300 mm). Two-column steel frame with self-centering specimen holder.

- Max vertical daylight: 8.2"/ 210 mm (total height: 14.6"/ 370 mm)
- Min vertical daylight: 3.5"/ 90 mm (total height: 9.8"/ 250 mm)
- Horizontal daylight: 6.3"/ 160 mm (total width: 10"/ 255 mm)
- Max travel: 1.7" (45 mm)
- Weight: 61.7 lbs (28 kg)

## **Flexure Testing Device for Concrete Beams**

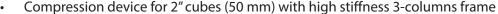


Flexure device for concrete beams having cross section 4"x4" (100x100 mm) and 6"x6" (150x150 mm). Two-column steel frame with upper spherically seated bearing assembly.

- Max vertical daylight: 6.3"/160 mm (total height: 14.6"/370 mm)
- Min vertical daylight: 4.3"/110 mm (total height: 12.6"/320 mm)
- Total width: 10" (255 mm) Max travel: 1.7" (45 mm)
- Upper rollers span: 4" (100 mm) or 6" (150 mm)
- Lower rollers span: 6" (300 mm) or 17.7" (450 mm)

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## **Compression Test Device for Mortar Specimens**



- Weight: 28 lbs (12.7kg)
- Both models are fitted with a spherically seated upper platen
- Round platens dia 2.95" (75 mm). Vertical daylight 2.08" (53 mm)





## **Concrete Specimen End Grinder**

This is the ultimate concrete specimen end grinding machine. This machine grinds three specimen end surfaces at one time automatically. It is a successful and reliable machine to reduce manpower, work time, and space to 1/3.

The operation panel on the side surface has simple allocation of buttons and provides easy operation to anyone. It is also equipped with specimen feeding speed adjustment function and timer function.

- Save time Test specimens typically require less than 60 seconds to finish. Continuous operator supervision is not required.
- Save materials No capping material is required to finish the specimen end. Grinding disks typically finish 3,000 - 5,000 pieces before a replacement is necessary.
- Portability and size Because of its small footprint, space is kept to a minimum. The end grinder is conveniently mounted on lockable castors providing easy mobility.
- Diamond wheel grinding with water
- Automatic feeding, automatic stop by timer
- Power supply: 110 Volts, 60Hz, single phase
- Standards: ANSI/ASTM C39



## **Capping Pads and Retainers**

Unbonded capping systems are available as an alternative method for use in compression testing of cylindrical concrete specimens. The system is faster, cleaner and odorless as opposed to bonded capping methods.

- Time saving and odorless
- Available in a variety of sizes
- ASTM C-1231 | AASHTO T-22



#### **Capping Compound**

Meets the following standards; ASTM C617, AASHTO T231, EN 12390-3

Hi-Cap™ Capping compound is used during sample preparation for compressive strength testing by creating a totally flat parallel surface and adhering in its liquid-viscous state to cover all imperfections or rough surfaces. Once returned to a solid state its compressive strength increases. In about 2 hours a 50 mm cube breaks at 8,000 psi to 9,000 psi (55.16 to 62.05 MPa).



#### **Capping Compound Warming Pots**

The Warming Pot is designed for use in any laboratory for melting and maintaining the temperature of capping compounds, paraffins and sealing waxes. All warming Pots are equipped with a cover, pilot light, and adjustable thermostat.

- Even heat distribution
- Thermostatic controlled for accurate heating
- Replaceable heating elements



## **DS 800 Core Drilling System**

The Husqvarna heavy-duty DS 800 drill system is the choice for the more demanding drilling applications. The precision ground column provides strength and rigidity for high horsepower drill motors. The carriage and base are made of high-strength aluminum designed to withstand excessive wear and to ease job site handling.

- Drill holes up to 16" (extra spacer required).
- 1" to 14" bit capacity standard. Spacers available for larger bit sizes.
- 42" long, precision ground and plated 2-7/8" square column reduces flex for more accurate drilling
- Reinforced base for added rigidity



## **DMS 330 Core Drilling System**

The Husqvarna DMS 330 is used for medium core drilling up to 16in diameter for reinforced concrete, bricks and other building material.

- The two-speed carriage gearbox features a cranking speed option for best drilling performance
- ATS-V model includes vacuum plate
- Plastic strips protect the aluminum column
- V -groove roller carriage for accurate alignment that requires minimal adjustment



#### 4120 Core Drilling System

#### **Standard Version:**

- Includes 4120 (large base)
- Choice of Milwaukee 15 or 20 amp (clutch model) motor with meter box

#### **Upgraded Version:**

- Includes 4120-22 (large base)
- Vacuum-hold down assembly
- Amp. meter box and 20 amp Milwaukee (clutch model) motor

## Angle Drilling thru 45°:

- Includes 4130 Dymo-Rig with large base
- Choice of 15 or 20 amp (clutch model) motor with meter box



## **DS50 Gyro Telescopic Stand System**

The Husqvarna DS 50 Gyro works with most drill motors. This system features quick mounting, easy drilling and fast unmounting on-site, saving both time and money. The modular system and the stand's flexibility allow both straight and angled drilling in walls, floors and ceilings.

- Fast and easy setup between horizontal and vertical drilling operations
- Due to the tiltable and turnable column this is the most efficient stand for drilling numerous holes in various positions with a single setup



#### **Ultra Lightweight Core Drilling Machine**

Handled, portable, ultra lightweight core drill machine. gasoline powered; just add gasoline and water and start drilling!

- Designed to accomplish core drilling into concrete/asphalt surfaces
- Honda, 4-cycle gasoline powered engine, 31cc drill faster
- 6-inch bit diameter capacity
- Drill vertical, horizontal, inverted or at any angle in between
- Heavy Duty, quad precision ball bearing gear box optimum gear ration for fast economical drilling



#### **Core Bits**

- Custom designed diamond matrix
- Top-quality diamonds set in a tough, metallic matrix and bonded to heavy-steel tubina
- Sizes from 1/2-inch to 72-inch (1.27 cm to 183 cm) diameter
- Standard length core samples of 13 inches, custom lengths available for special drilling applications
- Cost-effective drilling with maximum penetration speed
- Meet or exceed Concrete Sawing & Drilling Association (CSDA) standards



#### **Dry Masonry Saw**

This dry-cutting masonry chop saw was designed for brick & block jobs. Due to the large 14" blade and potent 3 HP carbon-brush motor, the unit can effectively cut blocks up to 5" thick in a single pass. Despite the saw's overwhelming power and cutting capacity, it is nevertheless one of the lightest in its class—weighing only 75 lbs.

For added versatility, the saw can be outfitted with an optional wet or dry kit to adapt the saw for use in a variety of situations.



#### **Guardmatic MS 510 Saw**

The Husqvarna Guardmatic MS 510 proves its value daily on the job, and many of them have been on the job for over 25 years.

- Dual capacitor increases power efficiency and reduces run amperage
- Patented Sta-Level® Blade Guard
- 2 Pivot Points
- 3 hp, 5 hp, or 7-1/2 hp electric motor options.
- Dual capacitor increases power efficiency and reduces run amperage, making it an ideal machine for low voltage conditions



#### Portasaw MS 355

The industry's best built, longest lasting portable masonry saw is now even better with standard carrying handles. The most reliable saw in the market is easy to set-up and transport. \*Shown with optional stand and blade.

- Patented Sta-Level® Blade Guard
- 2 Pivot Points
- Large Conveyor Cart
- Optional foot pedal kit allows the operator to use their foot to lower the blade into the material.
- High torque continuous duty Baldor electric motors



## **Masonry/Refractory Blades**

**SILENT RUNNER®** - Diamond blade for medium to large jobs. It features a laminated core for maximum noise reduction. The segment height is .390".

**MI SERIES** - Diamond blade for fast cutting of brick and block Available for general and abrasive materials. The segment height is .430".

BANNER LINE® - Diamond blade for medium to large jobs. Segment height is .335". BHT TURBO - Diamond blade for fast cutting of medium to hard brick and hard concrete paving blocks and stone. It is not recommended for block. The segment height is .495". DM DRI DISC® - Diamond blade designed for medium jobs. The segment height is .275". SUPER PREMIER® - Diamond blade for large jobs. The segment height is .335". SUPERLOK® GM - A blade for fast, chip-free cutting of granite and marble. It is also for general purpose cutting of quarry tile. The segment height is .170".

## **Non-Destructive Testing**



## Proove'it System - Rapid Chloride Permeability (RCP) Machine

The PROOVE it system is used to evaluate the resistance of concrete to the ingress of chloride ions in two ways.

- Computer controlled microprocessor power supply
- Testing up to 8 cells simultaneously
- Voltage settings of 10, 20, 30, 40, 50, and 60 VDC
- Programmable testing time as required
- Temperature measurement and recording
- Cyclic testing option for effect of curing duration



#### **Profoscope Rebar Detector**

**Profoscope** has a unique real-time rebar-visualization, allowing the contractor to actually "see" the location of the rebar beneath the concrete surface. This is coupled with rebar-proximity indicators and optical and acoustical locating aids.

The **Profoscope**+ has all the features of the classic Profoscope. In addition, the instrument can record measurement data, manually or automatically. This increases testing efficiency on the construction site significantly. The included software tool allows postprocessing or exporting of the collected data.

## Non-Destructive Testing



#### Profometer® 600 Advanced Cover Meter

The all-in-one solution for rebar assessment and corrosion analysis.

Advanced cover meter based on the new generation Profometer touchscreen allowing full data review directly on the instrument. Lightweight IP 67 universal probe with detachable scan cart and spot functionality for measurements where space is limited.

The Profometer 600 is the ideal instrument for contractors who need to avoid damage to the reinforcement steel when drilling, coring or cutting. It additionally covers the needs of inspection engineers to locate rebar and to assess concrete cover values and rebar sizes for spot checks.



#### **Profometer® 630 AI Advanced Cover Meter**

Advanced cover meter based on the new generation Profometer touchscreen with universal probe and scan cart. Enhanced correction factor for maximum cover accuracy on congested rebar arrangements. Dedicated functionalities for mapping concrete cover and for reporting one layer rebar arrangements.

- Highest cover measurement accuracy ever through Artificial Intelligence (AI) feature
- Advanced statistical tools to evaluate concrete cover compliance to specified minimum values



#### Profometer® 650 Al Advanced Cover Meter

Advanced cover meter based on the new generation Profometer touchscreen with universal probe and scan cart. Enhanced correction factor for maximum cover accuracy on congested rebar arrangements. Dedicated functionalities for mapping concrete cover and for reporting any 2D rectangular rebar arrangement.

- Full 2D rebar visualization with detailed cover, rebar size and spacing data for fast reporting
- Scalable solution with upgrade possibility to Profometer Corrosion



## **Profometer Corrosion**

Advanced half-cell measuring instrument for on-site mapping of the corrosion potential. Dedicated software for assisted measurements with rod and wheel electrodes. Statistical software for immediate data interpretation.

- High productivity with unique wheel electrode
- Advanced processing and reporting tools
- Easy upgradable with cover meter functionality for combined testing



#### **Resipod Resistivity Meter**

Resipod is a fully integrated 4-point Wenner probe, designed to measure the electrical resistivity of concrete in a completely non-destructive test. It is the most accurate instrument available, extremely fast and stable and packaged in a robust, waterproof housing designed to operate in a demanding site environment.

Surface resistivity measurement provides extremely useful information about the state of a concrete structure. This makes it one of the most versatile NDT methods for concrete.



#### **DY-2 Pull Off Tester**

Pull-off or adhesion testing is one of the most widely used test methods in the construction industry. This is reflected in the huge number of standards dedicated to the method covering applications such as adhesion of various concrete coatings to testing the tensile strength of concrete.

- Time and date of the test
- Test disc size
- Maximum load applied



## Pundit<sup>®</sup> Live Array Pro

The wireless Pundit Live Array Pro tomography scanner is connected with an iOS app to an Apple® iPad. It comes with Artificial Intelligence (A.I.) user support and 3D imaging capabilities.

- Real-time tomography
- Smart A.I. user support and positioning
- Increased productivity





The Pundit Lab is a flexible UPV test instrument designed primarily for operation in laboratories. It supports all traditional UPV test modes. The Pundit Lab+ comes with an extended feature set.

- Automated combination of the transmitter voltage and the receiver gain for accurate and stable measurements
- Open interface, can be integrated into LabView
- Pundit Lab+ removes the need for external amplification when used with exponential transducers



#### Pundit® 200

The Pundit 200 is a best-in-class UPV test instrument with an extended range of measurement modes. Rugged touchscreen with intuitive user interface for best possible measuring and analysis of the measured data.

- Various measurement modes including Line Scan, Area Scan, Data Logging, compressive strength correlations and E-modulus measurement
- Automatic surface velocity calculation according to standards
- Same instrument can be used with pulse echo transducers



#### Pundit® 200 Pulse Echo

The Pundit 200 Pulse Echo extends the ultrasonic application to objects where access is restricted to a single side. Major applications are slab thickness measurements and the location of voids and delaminations. Rugged touchscreen with intuitive user interface

- B-Scan is constructed directly on the instrument as the scan is carried out
- Can be upgraded to Multi Channel
- Same instrument can be used with classic pulse velocity transducers



#### Pundit® 250 Array

The Pundit 250 Array is a modular phased array pulse echo instrument incorporating drypoint contact transducers. It features unique real time B-Scans as well as on-site C-scans, P-scans and Volume scans.

- Full modular system allows to increase the number of channels by simply attaching additional probes
- Unique real-time B-scan and panorama B-scan
- Same instrument can be used with classic pulse velocity transducers



#### **Original Schmidt Rebound Hammer**

The Original Schmidt, the world's first and now most widely used test hammer for analyzing the compressive strength of concrete properties

**Type N:** Rebound values are read from a scale for subsequent calculation of the mean. Compressive strength values can be read from a conversion diagram

Type NR: Rebound values are recorded as a bar chart on a paper strip which has a capacity for 4000 test impacts

Type L: Handling equals type N, but the type L offers an impact energy three times smaller Type LR: Handling equals type NR, but with impact energy three times smaller. The LR also features a paper strip enabling up to 4000 test impacts without reloading

## Non-Destructive Testing



## **Original Schmidt Live Rebound Hammer**

The Original Schmidt Live is a uniquely versatile hammer that can be used as stand-alone analog hammer, a stand-alone digital hammer, together with a Bluetooth printer and finally as the world's most advanced R-value concrete test hammer with the Schmidt Live app.

- Comprehensive Apple iOS app for measuring, reporting and analysis
- Web reporting tool for instant offsite data availability and synchronizing
- All mechanical components are Original Schmidt components to ensure standards compatibility and durability



#### **Schmidt Concrete Rebound Hammer**

The SilverSchmidt is a unique integrated concrete test hammer featuring true rebound value calculated from the quotient of the impact velocity and rebound velocity to provide maximum accuracy.

- Automatic calcuation of rebound value according to international standards
- Best in class correlation with least dispersion for specific concrete mixes
- Extremely durable with long service intervals when compared with classical hammer



#### **OS-120 Schmidt Rebound Hammer**

The Schmidt OS-120 pendulum hammers are designed to test on softer material such as light weight concrete, gypsum boards, fresh concrete and the mortar of joints in brickwork.

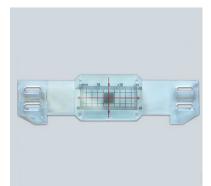
- Only rebound hammer that provides a test result at compressive strengths below 5
  Mpa
- Large, half circular scale with high resolution
- Two models for fresh concrete and mortar applications



## Portable Ground Penetrating Radar - Proceq GPR Live

Proceq GPR Live features the unique Stepped Frequency Continuous Wave radar technology delivering the widest frequency spectrum in the market. All applications typically addressed with radar antennas in the range of 0.9 to 3.5 GHz can now be covered with a single device. No need to buy and switch to a different antenna for every testing location. Current GPR solutions, in fact, cover only one frequency which allows to scan for only once specific penetration depth. Additionally, such solutions have large limitations in terms of detectable object size.

## Non-Destructive Testing



#### **Tell Tale Crack Monitors**

Tell-Tales consist of two plates which overlap for part of their length. One plate is calibrated in millimeters and the overlapping plate is transparent and marked with a hairline cursor. As the crack width opens or closes, one plate moves relative to the other and the relationship of the cursor to the scale represents the amount of movement occurring.

- Standard Tell-Tale
- Corner Tell-Tale
- Displacement Tell-Tale Plus
- Tell-Tale Plus



## **Crack Detection Microscope**

Specifically designed for measuring crack width in concrete, this high definition microscope operates via an adjustable light source provided by high power batteries. Supplied in a pocket sized carrying case.

- Dimensions ( $I \times W \times h$ ) 40 x 90 x 150 mm (in case)
- Magnification x 40
- Measuring range 4 mm
- Divisions 0.02 mm
- Weight 550 g



#### **Resonant Frequency Testing**

The only method of calculating the following material parameters non destructively: Young's Modulus of Elasticity, Modulus of Rigidity, Poissons Ratio, Damping Constant.

- Available for specimen sizes up to 6 inches (150mm) cross section dimension and from 1.75 inches (45mm) to 28 inches (700mm) in length
- Automatic identification of the resonance frequency
- Large easy to view display for data analysis of time domain and frequency spectrum signals
- Data can be stored and uploaded to a PC for further analysis and inclusion in reports
- Fast and easy to use system



#### Freeze Thaw Cabinet

The Rapid Freeze-Thaw Cabinet is used to measure the resistance of concrete to deterioration caused by repeated cycles of freezing and thawing in water. The system is designed to test up to eighteen 3" x 4" x 16" (76 x 102 x 406cm) concrete specimens simultaneously, with one being a control. Key features of system include:

- Fully automatic operation frees operator to perform other lab duties
- Allows users to establish field control using correlations between concrete strength and durability
- Permits the evaluation of variables in concrete properties and conditioning



#### **Concrete Inspection EZ Kit**

A compact kit for testing moisture in concrete per ASTM F2659 & ASTM F2170 featuring the Tramex CMEX II moisture meter and Tramex Hygro-i ® relative humidity probes. The Concrete Inspection EZ Kit comes in a protective Tramex Easy-travel case.

- Instant concrete moisture content test from 0 6.9% with CMEX II to ASTM F2659
- Perform multiple tests simultaniously
- Re-usable Hygro-i ® Relative Humidity probes prove to be the lowest cost per ASTM F2170
- Test ambient site conditions of Temperature, RH, Dew Point & Mixing Ratio
- Backlit display for ease of reading in low level lighting



## **Structural Humidity Measurement Kit**

The SHM40 offers an easy and reliable solution for humidity measurements in concrete and other structures using the borehole method. In this method, a humidity probe is left in the borehole until the humidity in the hole has reached an equilibrium state and the stabilized values can be read.

The interchangeable HMP40S probes connect easily to the HM40 indicator with a snap-on connector enabling convenient use of multiple probes with one indicator. The measurement data can be displayed in numeric, graphic or statistic views. The rugged HMP40S probes are IP65 classified and conform to the ASTM standard F2170-09.



#### **CME4 Concrete Encounter**

A pocket size non-destructive meter designed to measure the moisture content in concrete flooring prior to the application of floor coverings.

- Designed, developed and calibrated specifically for concrete
- Instant readings, measures up to 6% moisture content
- Non-destructive operation (No drilling)
- Large easy to read analog display
- "Hold" button freezes reading on analog meter.
- Battery operated (Supplied)
- Strong robust design



## **Vapour Emission Test Kit**

The vapour emission test is used for determining the moisture acceptability for the placement of floor coverings and coatings over concrete slab surfaces.

Using this method, users can easily quantify the volume of water vapour emitting from a 1,000 square foot concrete slab over a 24-hour period. Commonly known as the Anhydrous Calcium Chloride Vapour Emission Method, the test is directly specified by the vast majority of the Floor Covering Industry as the primary measure of moisture acceptability for floor covering or coating installations.





The perfect portable balance when cost matters and dependable results are a must!

The OHAUS CS Compact Scale is a lightweight, portable scale perfectly suited for use in laboratory, industrial, educational and home use applications. Applications can include forensic testing, quality control, formulation, soil sampling, postal weighing and dietary needs.

Designed with superior RF protection to deliver accurate and stable results when used in production areas or near cell phones. Approvals for electrical and emissions include CE listed and FCC Class B Part 15 operation.

## Air Voids Analysis System



#### **HS-745T Air Voids Analysis System**

Analyzing the air void content and distribution in hardened concrete is a key component when evaluating the susceptibility of concrete during freezing and thawing cycles.

The HS-745T Air Voids Analysis System includes:

- High quality Nikon trinocular microscope with the option to add a video camera and viewing software
- Nikon ber optic illuminator produces 150 watts of high-intensity cold light illumination
- Lamp life of over 1,000 hours
- 5 position counter assists in keeping count of parameters being analyzed



#### UX120-014M HOBO 4-Channel Thermocouple Data Logger

HOBO 4-Channel Thermocouple data logger records temperature using up to four J, K, T, E, R, S, B, or N type thermocouple sensors (sold separately).

The logger also has an internal 10K thermistor for cold-junction compensation of the thermocouple output.



## **UX100-014M HOBO Single Channel Thermocouple Data Logger**

Records temperature with thermocouple sensors (sold separately). Designed for a broad range of monitoring applications – from industrial process monitoring to concrete temperature monitoring.



#### **Protective Enclosure**

Onset's NEMA 4X weather-resistant enclosure for mounting in the HOBO UX100-014M and UX120-014M data loggers in wet, dusty, or condensing environments. It is intended for short deployments where additional protection is required.



## **Bulk Thermocouple Wire**

- Thermocouple Wire Types T, J, K
- Various outer jacket materials available
- Available in 100' and 1000' lengths



## **Connectors & Probes**

- T, J, K Types
- Penetration probes
- Miniature thermocouple connectors

## Thermocouple Dataloggers & Maturity Meters



## intelliRock® III Concrete Strength & Temperature Profiling System

intelliRock III is the leading solution for monitoring concrete strength and temperature. This concrete decision-making system allows you to report and review critical data from anywhere via cloud-based software. It is also the only system available to retain secure, uninterruptable, and unalterable data.

intelliRock III offers all of the tools you need to complete projects within budget and on schedule, including multiple mix design access, various alerts, and an infrared camera for temperature measurement and heat profiling.



## intelliRock® Maturity Loggers

The system consists of a range of sensors/loggers which measure and record physical properties of in-place concrete, a reader which is used to communicate with loggers and shuttle information back to a PC, and comprehensive software solutions to effectively analyze job-site information and communicate that information effectively. This innovative design allows a single reader to be used simultaneously with an unlimited number of loggers and with any type of logger in the intelliRock® III family.



## **Wireless Sensor Logger System**

The intelliRock wireless system allows data from remote sensors/loggers to be brought directly to your desktop. By connecting a wireless base station to your computer, and remote transmitters to any intelliRock® III product (including maturity, temperature, humidity, and precast loggers) data from intelliRock loggers can be downloaded directly into intelliRock software, straight from the concrete placement.

- Real-time information Download at any time to view current readings and make
- Safety- Avoid access to dangerous or inconvenient areas when downloading loggers
- Reduced Cost Automatic data collection. Real time information streamlines workflow



#### Thermocouple Thermometer

The Acorn Temp TC meter offers a wide -250 to 1372°C range. Use with Type J, K or T thermocouple probes for a -250 to 1372°C range

- MIN/MAX displays highest/lowest temperature since meter was switched on; or use MIN/MAX HOLD to continuously update lowest/highest temperature
- °C/°F selectable Offset temperature calibration adjustment
- Hold; Auto-off function helps protect meter components from occasional spills

Hoskin Scientific Limited has been supplying testing and monitoring instruments since 1946. Although our range is broad, we focus on three major markets including:

Geotechnical & Materials Testing Environmental Monitoring Test & Measurement Instrumentation

Hoskin Scientific operates out of three offices within Canada with an additional service centre in Edmonton, AB:

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