

ADVANCED PAVEMENTS TESTING

TESTING



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# **Fully Automated Advanced Asphalt Saw**

IPC Global's new and improved Autosaw2 is a second generation fully automated asphalt saw with integrated clamping system. The Autosaw2 allows for fast and accurate cutting of rectangular beams, trapezoidal prisms, overlay test specimens, semi-circular specimens, and trimming of cylindrical specimens.



#### **Easy Operation**

The intelligent touch screen control, integrated rulers and reference blocks provide fast and effortless sawing of asphalt specimens.



#### **Automated Sawing System**

Fully automated, the system allows users to load their asphalt samples, input their desired settings and continue on with other tasks saving valuable working hours.



#### Clean and Safe

Integrated protection cabinet, stainless steel water tray and interlock system ensure unparalleled safety & cleanliness in laboratory environments.



#### **Accurate Specimen Preparation**

Optional jigs, pneumatic clamping, reference blocks and integrated rulers allow users to easily obtain exact dimensions of the most common international test standards.



## **Superior Cutting**

A powerful motor, adjustable automatic advance & retraction of the saw blade and adjustable limit switches ensure efficient specimen preparation.



#### **Endless Possibilities**

Easy to use reference blocks, jigs, and pneumatic clamping systems allow the system to be easily upgraded to suit the cutting requirements for any future testing standards.

# **Key Features**

Protection cabinet with several automatic locking access doors to ensure unparalleled safety and clean operation in laboratory environments.

Intelligent system with adjustable limit switches allow for repetitive cuts with minimal carriage overtravel, saving time.

Stainless steel water tray catches cooling water and debris for long life and easy cleaning.

Fixed positions and reference blocks allow users to easily obtain exact dimensions of the most common international standards. Additional dimensions can be obtained using the integrated ruler.

When the doors are open, an automatic break slows down the blade to ensure the safety of the operator.

Compressed air gun for cleaning specimens and sawing system.

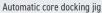
Easy set-up including carriage speed and retraction sequence with intuitive touch screen display. Separate carriage speeds can be set and adjusted during operation for cutting and retraction sequence.

AUTOSAW

AUTOSAW

Dynamic braking for rapid stopping when system is switched off.







Manual core docking jig

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# **Core Benefits**

#### **Automated and Safe**

- The cabinet with its interlocking system protects the operator, eliminating the need for manual tasks and constant monitoring of the specimen.
- Intuitive touch screen display for a quick set-up, saving valuable laboratory time and resources.

#### **Superior Design**

- Quick and easy specimen set-up.
- Clean operation and water containment for use within laboratory environments.
- Robust and ergonomic design with ideal height and horizontal reach for safe material handling and optimal operator well-being.

#### Value for Money

- Long lasting stainless steel
   water collection tray prolongs
   the life span of your machine
   while delivering accurate
   and repeatable results.
- Perfect specimens every time through the use of fixed position guides, reference blocks and pneumatic clamping system.
- Only requires air, water and power to operate.

The easy-to-use spacers and automatic controls of the Autosaw2 ensure that specimen are cut according to sizes specified by AASHTO, ASTM, AS, EN and other international standards without any need for manual measurements.

#### **Cut to International Standards**

- A system of reference blocks and several fixed position guides (pictured to the right) allow operators to easily obtain the exact dimensions specified in international test standards.
- All other dimensions can be obtained by placing the reference blocks into any position with the help of an integrated ruler.
- The position of the base plate supporting the reference blocks can be finely adjusted in order to minimize the error of the final specimen dimensions.
- The angle between blade and base plate can also be adjusted to minimize the perpendicularity error between the cut face and the sample axis.

#### All Shapes and Sizes

Autosaw2 is able to cut any kind of prismatic specimen from an asphalt slab up to a height of 200mm and a cutting length up to 500mm.

The saw can be modified with a large range of accessories to cut cores, rectangular beams, trapezoidal prisms, overlay test specimens, semi-circular & wheel tracking specimens, and trimming of cylindrical specimens (both manually and automatically).



Integrated ruler and fixed position guides



Overlay Test specimen jig



Prismatic sample clamp and reference blocks (standard)



Trapezoidal specimen jig

### Safe and Clean Operation

- The protection cabinet enables the operator to set-up a sample safely and with ease, also safeguarding him/her from spray during the cutting process.
- Several automatic locking doors at the front, back and top of the saw prevent the operator from accessing the dangerous areas while the blade is turning.
- Once the cutting procedure is complete, the system stops the blade before unlocking the doors.
- The protection cabinet also features catchment trays that collect the cooling water allowing the saw to operate in a clean and uncontaminated environment.



#### **Intelligent Design**

- The intelligent system with its adjustable limit switches enable operators to carry out many cuts with minimal carriage stroke.
- A large base plate with reinforced legs is strong enough to support large and heaving samples.
- The table is constructed from uncoated stainless steel to prevent any damage or scratching while moving heavy samples or specimens.

#### **Quick and Easy Operation**

- Autosaw2 is operated by a touch screen display allowing the operator to easily control the cutting speed (both before and during), and the automatic cutting sequence (sample locking, blade start, carriage start with required speed, fast return to home position and sample unlocking).
- Two physical buttons allow for quick and easy starting and stopping of saw.



Automatic core docking jig



Wheel-tracking core, semi-circle and disk-shaped compact tension specimen jig

# **Specifications**

Blade Diameter: 650 mmBlade Speed: 1,400/1,680 rpm (50/60 Hz)Max Cutting Depth: 200 mm (240 mm on request)Blade Traverse: 0 – 200 mm/min (variable speed)Cores: 38/50/100/150/200 mm dia.Blade Retraction Traverse: 0 – 999 mm/min (variable speed)Cutting Accuracy: +/-1%* max. * Length, perpendicularity and flatnessBlade Cooling: Water recirculation pump and stainless steel water tray (included)
Cores: 38/50/100/150/200 mm dia.  Blade Retraction Traverse: 0 – 999 mm / min (variable speed)  Cutting Accuracy: +/-1%* max.  Blade Cooling: Water recirculation pump
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# **Dimensions & Weight**

**Dimensions:** 1,575 x 1,300 x 2,190 mm (HxWxD)

Weight: 650 kg (approx.)

# **Services**

**Air Supply:** 700 kPa (clamping only)

Power Supply: 5 kW, 400 V 50 Hz 3 Phase

or 220 V 60 Hz 3 Phase

# **Ordering Information**

## 77-PV47105

Autosaw2 (50 Hz) complete with asphalt multislab / prism jig, blade not included

#### 77-PV47106

Autosaw2 (60 Hz) complete wiht asphalt multislab / prism jig, blade not included

## 77-PV47000/1

Diamond blade, 650 mm dia.

#### 77-PV47000/2

Sacrificial PVC tube for 100 mm dia. cores

#### 77-PV47011

Automatic core docking jig for round cores, 100 mm/150 mm dia.

## 77-PV47014

Manual core docking Jig for round cores, from 38 to 200 mm diam. to cut samples with manual feeding, from 10 to 300 mm length

#### 77-PV47020

Trapezoidal specimen jig for two point bend test

### 77-PV47025

Wheel-tracking core, semi-circle and disk-shaped compact tension specimen jig (requires core docking jig)

#### 77-PV47030

Overlay test specimen jig (requires core docking jig)

# **Specimen Preparation**



# GALILEO GALILEO RESEARCH

#### **Advanced Research Gyratory Compactors**

The new flagship range of gyratory compactors incorporates innovative Electromechanical Servoactuation and patented Orbital gyratory motion system. The Galileo Gyratory Compactors represent the most evolved models currently available on the market, worldwide and have been made available in two versions: Galileo and Galileo Research.



# **MULTI-KOR**

#### **Advanced Asphalt Core Drill**

The MULTI-KOR is a superior laboratory asphalt core drill whose robust and rigid design provides precise coring of asphalt prisms, cylindrical and slab samples to the highest quality. Designed to be easy to use, flexible and adaptable, it ultimately provides users with precise drilling capabilities, enabling users to have absolute confidence in the quality of their test specimens and the reliability of their test results.



# **PReSBOX**

#### **Asphalt Prism Shearbox Compactor**

PReSBOX provides the latest in asphalt specimen preparation and mix evaluation technology. High quality asphalt prisms are produced, from which beams and cylinders with excellent air voids distribution, homogeneity and particle orientation can be cut. With minimal operator involvement PReSBOX allows rapid and repeatable production of asphalt specimens in the laboratory.



## **KOR-BIT**

#### For coring cylindrical samples only

Coring from cylindrical sample can also be performed, as alternative, using the KOR-BIT machine, model 76-PV75302, similar model with fixed base instead of the mobile longitudinal base which distinguish the MULTI-KOR Drill. KOR-BIT is supplied complete with adjustable clamp identical to the accessory 76-PV75210.



# **IPC Global Customer Care**

IPC Global is the Advanced Pavement Testing Division of CONTROLS. As one of the longest established manufacturing companies in the world of Construction Materials Testing solutions, we are dedicated to supplying high quality, accurate, affordable, easy to use systems.

As a valued customer of CONTROLS, you will receive continuous, expert support and advice for your equipment. Furthermore, we can offer full installation and training in the correct operation of your CONTROLS equipment.

For support from our expert Customer Care Team, contact your local CONTROLS office / distributor or email **customercare@controls-group.com**.

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