B040M
APS
AUTOMATIC PAVE SAW
DUAL BLADE CONCEPT FOR PERFECT PARALLEL CUTTING

Matest has developed a dual bladed automated sawing system for fast, accurate cutting of cores, prisms and slabs prepared using Matest's range of asphalt compaction machines; Gyratory Compactors, ASC-Asphalt Shear-box Compactor and ARC-Asphalt Roller Compactor for Four Point Bending (4PB), Two Point Bending (2PB), Overlay tester (OT), Semi Circular Bending (SCB) and wheel tracking tests using Matest/ Pavetest's range of leading edge testing systems.

It includes: **cooling water recirculation pump, tank and protection cabinet with interlocks to ensure operator safety.**

B040M

MAIN FEATURES

- Two saw blade design ensures for perfect parallel cutting.
- Motorized feed with automatic retraction of saw carriage.
- Electronic control unit with touch screen colour display, that runs like a standard PC .
- Adjustable cutting speed.
- Slabs and prisms can be sawn safely and accurately.
- Jigs also available for trimming 100 and/or 150mm diameter cylinders/cores.
- Facilitates cutting rectangular beams, trapezoidal prisms, overlay test specimens, semi-circular & wheel tracking specimens, and cylindrical specimens.
- Simple spacer system allows precise preparation of beams and cylinders from 38mm to 160mm long, without the need for measurement.
- Other dimensions can be accommodated using integral ruler.
- Adjustable limit switches facilitates repetitive cutting with minimal saw carriage travel. Secure specimen clamping. Choice of mechanical or pneumatic.
- Protective enclosure, with safety interlocks, combines clean operation with unparalleled operator safety.
- Dynamic breaking system stops saw blade rotation when power is switched off.

THE NEXT GENERATION FULLY AUTOMATED ASPHALT SAWING SYSTEM

Matest's new APS-Automatic Pave Saw is the next generation fully automated asphalt sawing system with integrated specimen clamping. **The APS offers fast and accurate cutting of rectangular beams, trapezoidal prisms, overlay test specimens, semi-circular specimens, and trim- ming of cylindrical specimens.**

The APS uses two blades to ensure perfect parallel cutting of cylinders and beams at set intervals from 38 to 160 mm long.
If equipped with proper blades, the APS cuts not only asphalt but also several other materials.
The APS is controlled using Matest's tried and proven **iTouch electronic** control unit with touch screen colour display for perfect cutting of specimens for AASHTO, ASTM and EN standards without the need for manual measurements. **It is the safest and most advanced asphalt cutting saw** available on the market and is the perfect companion to our range of advanced asphalt preparation and testing equipment.
The APS is capable of cutting prismatic specimens up to 240mm high and a cutting length up to 700mm and cylindrical specimens up to 200mm diameter. **The APS can be configured using one or two blades, with a large range of jigs and fixtures** to cut rectangular beams, trapezoidal prisms, overlay test specimens, semi-circular & wheel tracking specimens, and trim cylindrical specimens accurately, with excellent parallelism and perpendicularity. Various alignment blocks, guides and reference spacers allow operators to easily achieve the most commonly used dimensions specified in a range of international standards with little or no measurement. Any other dimensions can be accommodated with the aid of an integrated ruler.

The **iTouch controller** allows the operator to easily control the cutting speed and sequence and a series of adjustable limit switches minimizes the saw carriage travel during repetitive cutting.
The high grade stainless steel work surface and associated corrosion resistant components ensures the unit will perform well and look good for many years.

The **protective enclosure** provides a high level of operator safety and protection from water spray. Safety interlocks prevent the operator from opening the enclosure and accessing hazardous areas while the blade is rotating. Once the cutting sequence has finished and the blade has stopped rotating, the enclosure is unlocked automatically.

ACCESSORIES

B040-01 APS DIAMOND BLADE, 650 mm diameter (q.ty 1 or 2)
or
B040-02 APS DIAMOND BLADE, 700 mm diameter (q.ty 1 or 2)

B040-03 SET OF SPACERS for mounting the APS Diamond blade, 650 mm diameter (needed for B040-01)

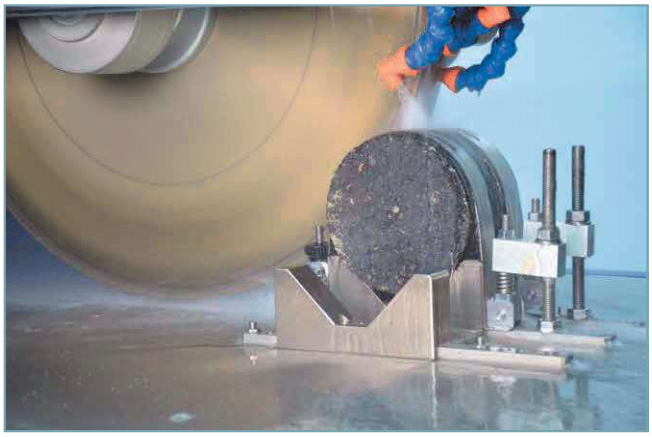
B040-04 SET OF SPACERS for two blades configuration (needed for two blades configuration)

B040-05 SPACER for one blade configuration (needed for one blade configuration)

B040-06 DISPLACEMENT TRANSDUCER for the control of the blade position

B040-07 PNEUMATIC CIRCUIT (needed with Pneumatic cutting jigs)

If equipped with pneumatic cutting jigs, the unit requires compressed air, minimum 8 bar



SPECIFICATIONS

- One or two blade concept
- Blade Diameter(s): 650 mm or 700 mm
- Blade Speed 1,400rpm (50Hz) or 1,680rpm (60Hz)
- Adjustable cutting speed, min 40 mm/min max 200 mm/min
- Max Cutting Depth 200 mm (with 650 mm blade diameter) or 240 mm (with 700 mm blade diameter)
- Cores 100 or 150 mm diameter (38 mm or 200 mm diameter on request)
- Max Prism Length 700 mm
- Cooling water recirculation pump and tank included
- Net Weight 500 kg approx.
- Parallel (Dual blade) cutting distance: 38 mm to 160 mm at set distances
- Dimensions 2370 mm (L) x 1340 mm (D) x 1670 mm (H)
- Air Supply 600 kPa (for pneumatic clamping option)
- Power Supply:
  400V 50Hz 3ph, 230V/220V 50Hz 3ph (B040M)
  400V 60Hz 3ph, 230V/220V 60Hz 1ph (B040X)
  208V 60Hz 3ph (B040Z)

CUTTING JIGS

B040-10M APS manual Multi-Slab/Prism jig suitable for slabs and prisms with the following dimensions: 40 - 240 mm depth x 700 mm length.

B040-10P-KIT APS automatic Multi-Slab/Prism jig suitable for slabs and prisms with the following dimensions: 40 - 240 mm depth x 700 mm length.

B040-12M APS manual trapezoidal specimen jig for two point bend (it requires B040-10M or B040-10P-KIT).

B040-13M APS manual core docking jig for Ø 150-100-60-50-40-38 mm cores.

B040-13P APS automatic core docking jig for Ø 150-100-60-50-40-38 mm cores.

B040-14 Instrumentation for Overlay test, wheel tracking core, semi-circular and disk shaped compact tension specimens (it requires B040-13M or B040-13P).