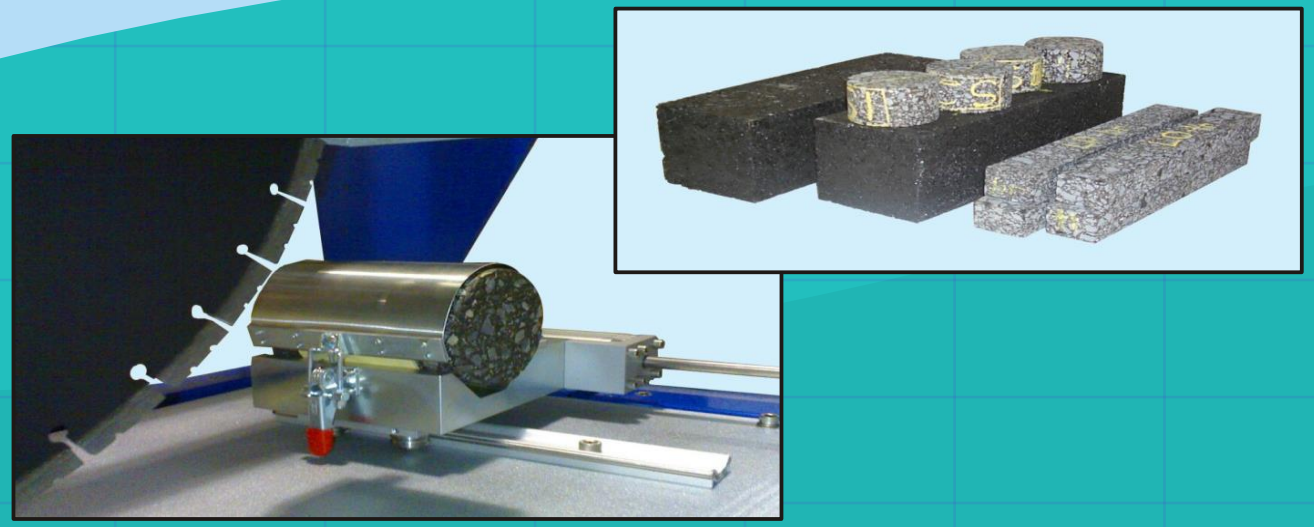
ISP550C
Automatic Heavy Duty Automatic Rock Core Cutting Machine

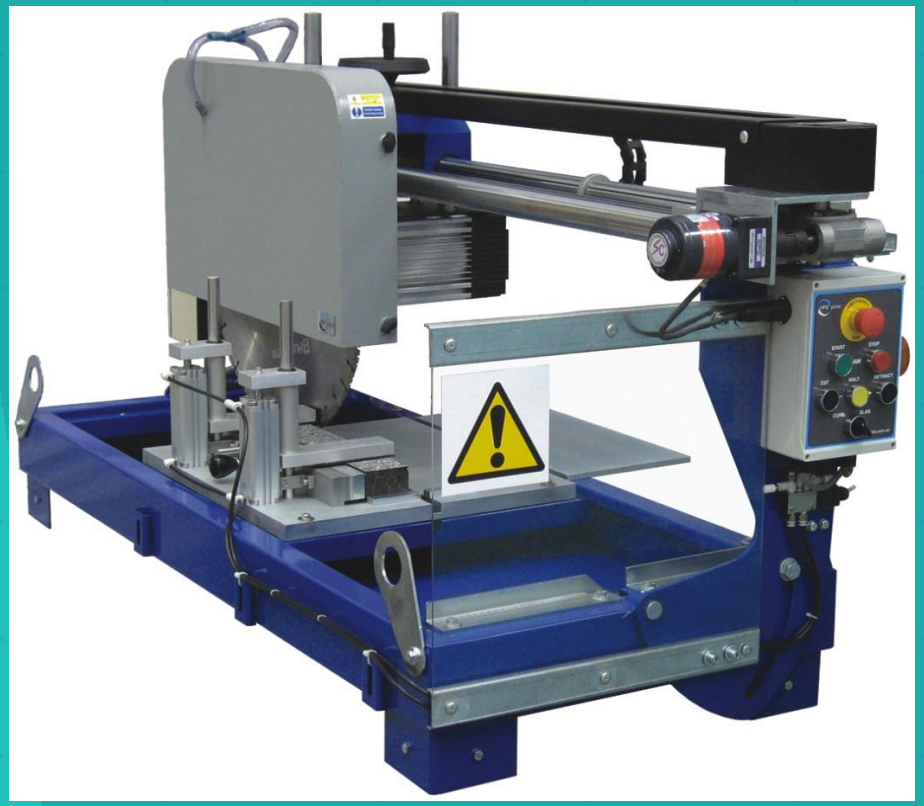


INTELLITEST

CONSULTING I EQUIPMENT I TESTING

logical solutions for intelligent work

- Intellitest has developed an automated clamping and sawing system for fast, accurate cutting of rock cores.
- The specimen preparation system is designed for fast and accurate rock core cutting of 100mm (or 4”) cylindrical specimens to length, by trimming each end.
- The system features a number of interlocks to ensure operator safety The saw blade advances and retracts to the home position automatically Cutting speed is operator selectable for optimum specimen finish and throughput Dynamic motor braking stops blade rotation in <1 minute.
- The cylindrical specimen cutting jig features a unique clamping mechanism to minimize damage to the specimen and maintain positive clamping during the cutting operation Use of a sacrificial PVC tube helps to achieve a superior cut finish and minimize chipping on exit of the saw blade.
- An electronically controlled pneumatic specimen positioning system indexes the specimen to the correct length thus ensuring the specimen is cut precisely to length (150mm) with perfectly parallel cut faces
- Power Supply: 5.5hp 400V/50Hz 3-phase, dynamically braked, Motor mounted on twin chrome plated steel rails with sealed bearings
- Blade Diameter: up to 610mm (much larger rock core can be cut)
- Cutting Depth: up to 200mm , Cutting Length: 450mm
- Blade Traverse: Variable Speed, automatic Stop and Return
- Clamping: Air Supply (700kpa) , Dimensions: 1900x950x1700mm, Weight: 300 kg approx.



Data Sheet – Automatic Rock Core Cutting Machine

Model: ISP550C

Make: Intellitest

Technical Specification	Parameter
Application	Sample preparation of different rocks:- Cutting of rock cylinder specimens as per BIS/ISRM standards Automatic & manual operation with high precision sliding perpendicular to cutting direction. Cutting single/multiple rock core samples with pre-defined length.
Motor Capacity **Speed of grinding wheel (RPM)**	4 HP User adjustable 1350-3200 RPM
Diamond cut off wheel	Metal bonded high concentration diamond cut off wheel with diameter 300 mm, thickness 1.5 mm and cutting depth of 100-120 mm
Cutting Table	600 (width)x 300 (depth) mm
Mode of operation	Automatic and Manual Integrated Digital display and control panel with facility for speed adjustment. Chamber is illuminated with light arrangement Automatic electronic breaking system with Two touch buttons on machine Emergency stop switch
Feed rate	Auto 0.1 to 2.5mm/sec
Locking System	Easy access during sample placement, operation safety, cut off wheel position placement and isolation between choice of opting for manual and automatic cutting.
Cooling Water System	Continuous closed loop circulation of cooling water arrangement to the cutting disc includes a. 70 litre tank b. 20 litres of anti corrosive and cooling lubricating fluid. c. Auto cleaning system -

	recirculation pump and sump assembly with jet sprinkler system positioned at cutting table.
Clamping System	Clamping system for single, multiple rock core samples (diameter 35mm to 85mm) to place the rock core samples with exactly perpendicular direction to the cutting blade while cutting.
Power requirement	440V 3ph 50Hz
Dimensions	1900x950x1700mm
Weight	300 kg approx
Construction	MS & Cast Iron with Powder Coating