NIMAC GROUP

PANEL SIZING CENTER

ATLAS 100/100T

NIMAC GROUP

1977 **NIKOLAIDIS MACHINES.** Firm's foundation by Anestis Nikolaidis as a beam saw manufacturing industry.

2000 **Exports to the international market.** Constant presence in the largest exhibitions globally.

2008 **New state-of-the-art factory** 4.000m^2 in Kavalari, Thessaloniki.

2011 **NIMAC GROUP.** The new international trademark. High end manufacturing certified with **ISO 9001.** Production of wood working machines "made in NIMAC" well established in the international stage.

2016 **NIMAC CNC Laser**. Manufacturing of Laser engraving and cutting CNC machines.

2017 **NIMAC Robotics.** Developing of the Robotics and Automation department.

1977

ENGLAND

GERMANY

HOLLAND

2018 The export rate reaches **90% of the total production** with representation in 5 continents.

2019 Participation for the fifth time in a row in **Ligna** (Germany), world's most famous woodworking exhibition. Exports to North Europe.

2020 **Introduction of EtheCAT technology.** State-of-the-art technology in all the electronic and control elements of the machines.

2021 **New investments** made in CNC machines to enhance and improve the quality of manufacturing.

2022 **Net metering** and investment in **Green Energy**. Installation of solar panels to move the factory forward energy autonomy.

IRAN

AUSTRALIA

ATLAS
1 0 0

New generation's beam saws by **NIMAC GROUP**

The most competitive European beam saw in the category of cutting up to 5 panels in height at a time 105mm blade projection

- Designed according to the top standards
- Heavy-duty construction without restrictions
- Applied solutions which maximize cutting quality
- High quality components
- Ether Cat technology
- Fast and accurate linear movement of the Saw Carriage
- Machine preparation for lifting table and panel storage systems
- Grooving
- Cut out

Blade projection	**105mm**
Cutting length	**3200mm, 3800mm, 4400mm**
Saw carriage speed	**5-130m/min**
Main motor	**10-15-20Hp**

Additional equipment:

Robust and self-levelling grippers ensure that the panels are firmly locked in place, and allow for the full expulsion of sectioned stacks from the cutting line. The pusher travels through precision pinions and racks. Maximum accuracy thanks to double measuring system: magnetic encoder and servomotor.

The perfectly linear movement of the Saw Carriage is achieved through a rack and pinion system and is driven by a brush-less servomotor.

Vacuum panel lifter for easy panel transport

Front side loading platform

2 YEARS NIMAC WARRANTY for all mechanical parts

ATLAS
100T

Pneumatic mechanism for the safe separation of panels from the stack.

Industrial beam saw with automatic back loading platform

Maximize the quantity of the cutting panels by one operator

Blade projection	**105mm**
Cutting length	**3200mm, 3800mm, 4400mm**
Saw carriage speed	**5-130m/min**
Main motor	**10-15-20Hp**

Additional equipment:

ALIGNERS
Two aligning devices providing perfect panel's parallelism.

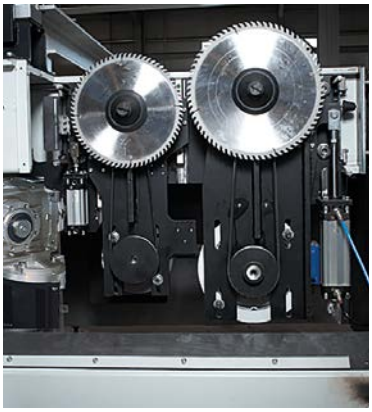
Heavy Duty lifting table platform: In standalone frame to avoid vibrations on machine's stability.
Moving on 4 large trapezoidal screws.
Maximum lifting capacity 600mm.

Side loading platform

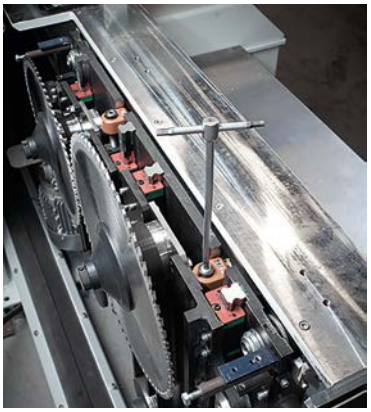
Automated magazine – panel storage system

High expectations based on highest quality components

- EtherCat technology: The leading industrial protocol for real time communication of all axes, minimization of idle times and maximum accuracy. Reduced wiring, easy maintenance and zero problems in electrical parts.
- Robotic cables. Servo drives on saw carriage and pusher axis.
- Powerful controller TPA including the most advanced software with 3D real time graphic simulation with messages for the operator.
- Cutting Optimizer software.
- UPS for PC protection.
- Saw Carriage runs on rack - pinion system for precise and hi-speed movement.
- Servomotor in standard configuration.
- LED lights: operation-color visualization according the machine's condition. Mounted on machine's frame.
- Robust construction and hi-quality linear shafts provide stability and accuracy on cutting line.
- Modern pusher controlled by servo motor. Transmission on rack-pinion and sliding on round linear guide. Maximum accuracy thanks to double measuring system: servo motor and magnetic encoder. Pusher's backward speed 50m/min.
- Supporting aluminium bars with rubber rollers for smooth panel sliding without damages.
- Pressure beam operation according to panel's thickness.
- Efficient aspiration tubes on 4 points.
- Spraying system for acrylic panels (optional).
- Saw-blade rpm control by inverter (optional).
- Blade projection by servo motor (optional).



Sliding on round linear shafts with rack-pinion transmission

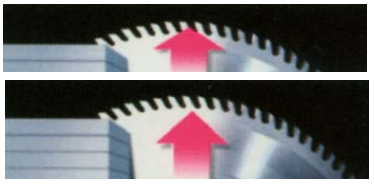


Depth grooving regulation by Sikos. Scoring regulation(left-right) from outside kit. By Sikos (optional electronic regulation with servo by PC).

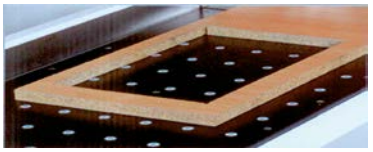
Practical and reliable blade change system (easy change) by using only 1 key.

Automatic Side Aligner
The side aligner runs on prismatic guides and ensures precision on cross-way cuts. Powerful pusher for panel movement. The pusher travels through precision pinions and racks. Maximum accuracy thanks to double measuring system: magnetic encoder and servomotor.

Grooving system on automatic sequence.



Automatic blade projection (2 pos) according panel's thickness



Cut-out.

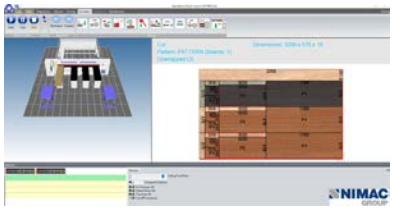
Easy use by powerful software

Experience
Flexibility
Innovation

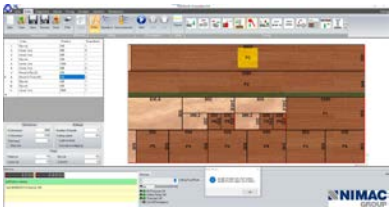
- Windows 10 and 3d visual program on real time.
- OPTICUT top optimizing program.
- High analysis monitor for easy use.

- TFC (Tension Free Cut) management allows additional grooving and cuts to be made at the longitudinal cuts, as to eliminate the banana effect in the longitudinal cuts present in the cutting pattern.

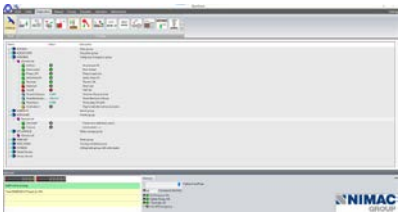
Smart cut: bigger strips cutting capacity thanks to smart software-production increase.



- Easy use software with advanced operations
- Graphical simulator easy programming even on complicated cutting maps
- 3D visualization on real time that shows to used the panel.



- Production report about cutting measures, PVC edge banding and working time
- OPTICUT LITE. powerful optimization provide higher production on min time.



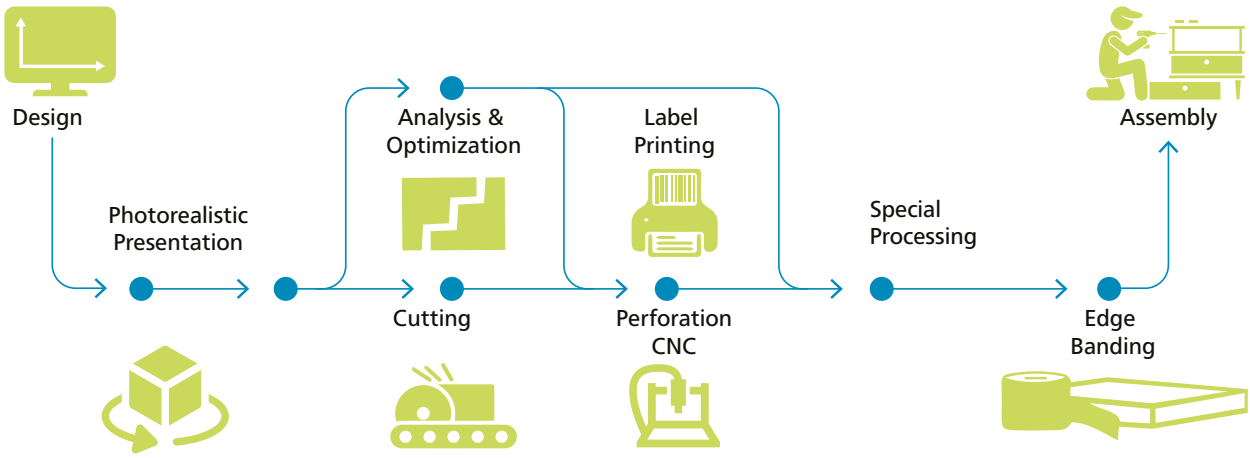
- Error checking menu provide full information about the machine's condition. And ensures the fastest problem's solution
- Connection with external furniture production software and optimizer software's with cost analysis and storage control.

HEXAGON
MANUFACTURING INTELLIGENCE

CABINET VISION
ALPHACAM

COMPLETE SOFTWARE SOLUTIONS

From design to final wood working operation on min time



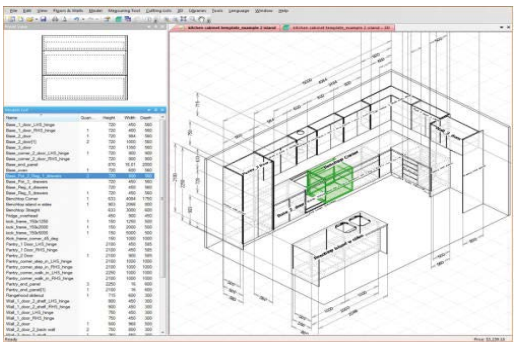
Design
Full parametrical design. Powerful box processor and large library.

Rendering
Impressive photorealistic presentations.

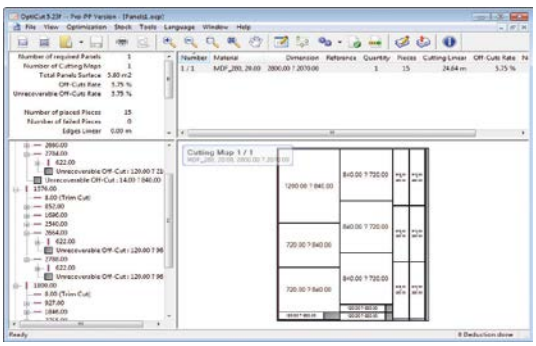
Analysis & Optimization
Large number of automatic reports including list of materials, invoices, orders, lists and nesting.

Production
Post processor for automatic execution on beam saws Nimac and to any cnc router brand.

optional software



FURNITURE DESIGN SOFTWARE
Interactive design and construction software cabinets, based on a strong methodological idea.
Automatic management of all details assembly and construction.
Accurate cutting lists. Export of executions file (post processor) for CNC machines.



OPTICUT PRO PP: CUTTING OPTIMIZATION SOFTWARE, CUTTING / PVC COSTING AND WAREHOUSE
Based on a powerful algorithm that calculates different sheets, materials and cutting methods. It has water calculation, PVC, leaf spinning, parametric labels and warehouse management.
Impressive performance: Sorts cutting lists to the most efficient layouts in seconds, saving time and money.

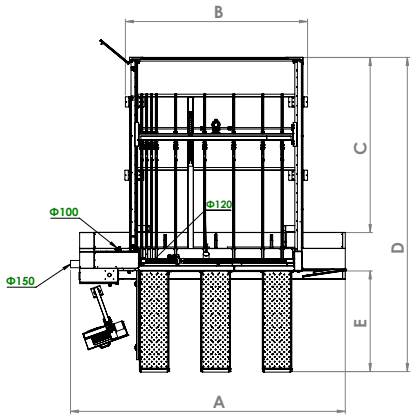
ATLAS 100 / ATLAS 100T

TECHNICAL DATA

Cutting length	3200mm	3800mm	4400mm
Pusher's stroke	3200mm	3800mm	4400mm
Blade projection		105mm	
Main saw diameter		355mm	
Scoring saw diameter		160mm	
Main motor power		10Hp	
Scoring saw power		2Hp	
Saw carriage speed		0-130m/min	
Pusher's travel speed		0-50m/min	
Automatic side aligner		50-1100mm	
Automatic blade projection (2 pneumatic positions)		according panel's thickness	
Grippers quantity (standard)	5	7	9
Magnetic tape for pusher's measurement (non-contact system). Maximum accuracy.			
Slotted pressure beam. The panels are always gripped up to the last cut			
Scoring unit axial and vertical micrometric adjustment			
New 3D software including optimization and automatic panel measurement			
Quick blade change system			
Advanced 4 axis TPA controller			
PC with Windows SSD Hard Disc.			
Optimization software Opticut lite (Max. 100 pieces)			
Grooving system			
Cut Out			
CE safety rules. Rear safety fence and hands protection curtain.			
Teleservice through internet (free of charge during warranty period)			
Electrical panel With EtherCat technology			

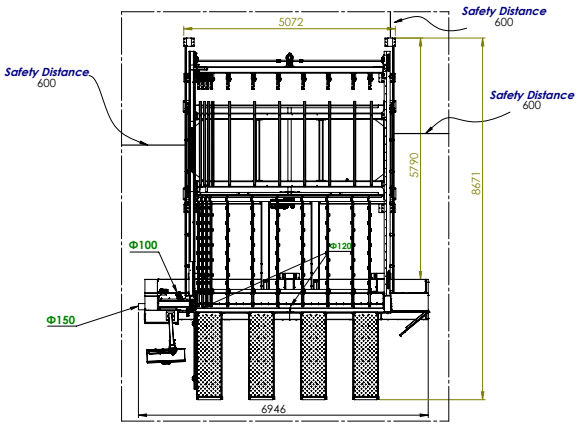
OPTIONAL EQUIPEMENT

Air flotation tables	1300x500mm / 2000x600mm
Air flotation on main machine' s frame	
Automatic pressure beam according panel's height (pneumatic positions)	
Main motor 15Hp or 20Hp	
Movable second and third table	
Extra grippers	
Air-condition unit on electrical cabinet	
Label printer and barcode software	
Laser indicator on cutting line	
UPS for PC protection	
Movable box with Start / Stop button. Practical solution when large panels are on front tables	
Servomotors for automatic blades projection instead of pneumatic system	
Servomotor for scoring vertical and axial regulation	
Opticut PRO: Office optimizer full version, pvc calculation, stock and cost analysis, unlimited pieces and panels to optimize	
Cabinet Design Software – Complete production solution from Design to Machining in few minutes	
Side loading platform	
Machine preparation for storage systems	



ATLAS 100

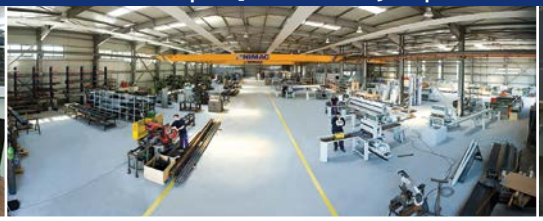
USEFUL CUTS	A	B	C	D	E
3200x3200	5600	3718	3610	5640/6340	1300/2000
3800x3800	6200	4218	4460	6360/7060	1300/2000
4300x4300	6800	4818	5060	6860/7600	1300/2000



ATLAS 100T

USEFUL CUTS
4400x4400

research | **technology** | precision | **quality** | service


The technical data can vary according to the requested machine composition. In this catalogue, machines are shown with options. The company reserves the right to modify technical specifications without prior notice; the modifications do not influence the safety foreseen by the CE Norms

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