



MITYBOY

Get the cutting edge!



**Unbeatable quality CNC technology at an unbeatable price.
Higher productivity, lower operator costs and maximum panel efficiency.
A total entry-level CNC solution.**

Feature Benefit Analysis

MITYBOY

Full CNC Nesting technology at an affordable price

- **Simple to learn – great for first time CNC users**
- **Works by itself – while you get on with other tasks**
- **No assembly problems - accurate to 0.025mm**
- **Compact – less space than a dimension saw**
- **Less moving of panels – cuts time and damage**
- **Fast – cuts at up to 28m/min**
- **Seamless links to CAD-CAM software**
- **Everything from Jacks – no worries about integration**



A total entry-level CNC solution.

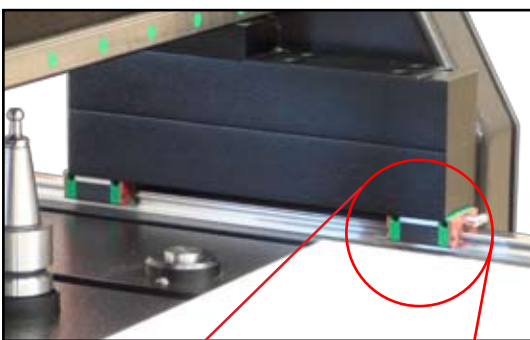
Features



2440mm x 1220mm processing area – fits a standard panel
= requires minimal space in your workshop.

Z-axis stroke of 240mm. **125mm clearance** from the top of the spoil sheet to the gantry arm. Plenty of Z-axis depth for your drilling requirements.

Superior 'gantry' design gives rigidity - with tooling equally supported regardless of Y-axis position
= minimal vibration compared with a cantilever system.



Mityboy features Swiss-made rack and pinion guides, with **closed loop servo motors on all axes** – not steppers. These servo motors provide super-smooth motion, and a feedback loop to ensure perfect accuracy.

There are **TWIN servo-motors on the X-axis** – providing a level of accuracy usually only found on the largest most expensive CNC machines. The two sides of the gantry run on separate rack and pinion guides, and cannot get out of synch – with the servo motors each arm features independent measurement and automatic self-adjustment.

= greater accuracy
= top level componentry & specifications



Linear Bearing System, keyed into place at the time of manufacturer
= best possible alignment and accuracy

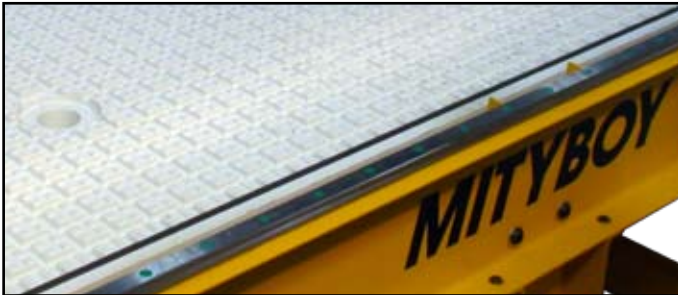
Bearings are a **standard size throughout the machine**. What's more the operator can carry out the lubrication.

= simple maintenance



Whether you're machining a full sheet or just a single component, superior hold-down suction comes from a **powerful 7.5kW vacuum pump** providing 38kpa.

Combine the powerful pump with the **honeycomb matrix vacuum table** and your panels are held fast. Such good hold-down that frequency of spoil board skimming is much reduced.



- = a secure panel for greater accuracy
- = longer tool life
- = less skimming means more efficiency



8kW (10.7hp) variable speed HSD spindle with ceramic bearings. The oversized motor and tooling means there plenty of grunt for difficult materials, including solid wood.

= plenty of power for all applications

There's an **automatic 6 minute warm-up sequence** to prepare spindle bearings. This is HSD standard operating procedure to ensure longest life and best performance, and Mityboy's start-of-day sequence ensures it is carried out.

An **automatic end-of-day sequence** means the machine head is parked ready for fastest possible start-up the following day.

= fast start-up & shut down procedures

= built-in safeguards to ensure trouble-free operation

7 station automatic tool change with pick and place functionality.

= no complicated rack or carousel to malfunction.

Tool holders and spindles are at **ISO tolerances**, with tool holders dynamically balanced at the factory.

Large ER32 collets gives you more **secure tool holding**

= truer running and greater accuracy.

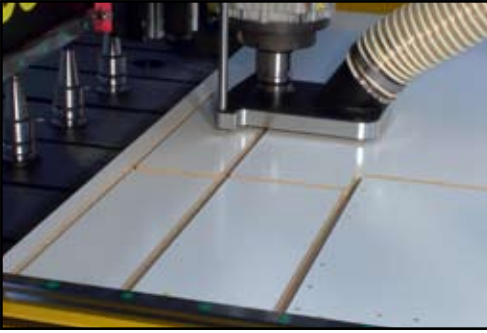


Automatic tool length sensing.

After replacing a tool no further operator work is required – the Mityboy will automatically sense the new tool length and adjust accordingly.

= no worrying about cutting too deep.

= minimum setup time



Up to 28 m/min positioning speed
with up to 65 m/min positioning speed!
= fast production when you need it

Operator safety is ensured, and dust extraction enhanced, with tooling contained in a vacuum hood and cover (not shown)
= maximum dust extraction
= maximum health and safety



Tool checking - permits re-cutting over any part of the job to recover from broken and blunt tool-bit cuts.
Multiple origins possible – if you're not Nesting you can run the same job at different places on the table.
= adaptability



X, Y and Z axis variable speed override from operator console. Using a simple dial, adjustments can easily be made at any point in your production process.
= flexibility

We have never seen dust extraction this good! No matter what speed you cut at, or what materials you work with, Mityboy's **high velocity dust extraction** will extract 99% of all dust. The system is so good it is already being copied by other manufacturers - the highest form of flattery!
= a safe, clean and dust-free environment

Mityboy's extraction system is optional, but we are confident you will not find a better dust extraction system on the market. For ease of use, efficiency and effectiveness, this extraction system cannot be beaten.
= unbeatable technology



(Optional) Pneumatic **pop-up positioning** stops

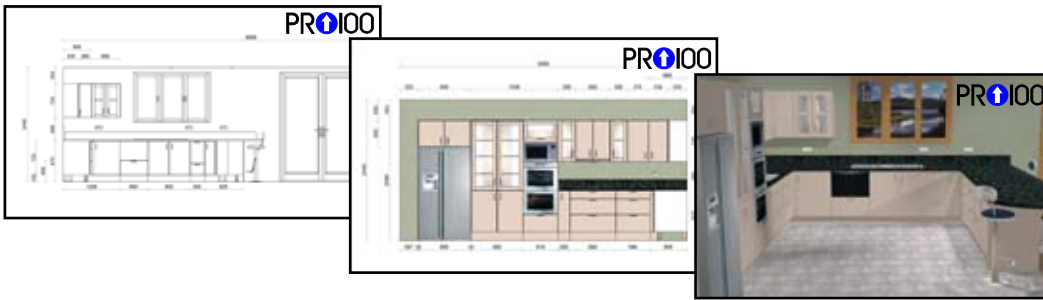


(Optional) **Digitizing probe** for 3D pattern-making.

Cut parts on your first day with fully integrated software.

Or use your existing design, carving or nesting software.

PRO100 – from Design2Cam. **3D design and manufacturing software.** (See separate details sheet)



ASPAN – the **CAD/CAM software for nesting** and cutting lists.



The PC and PLC software, the hardware and machine controls are all from Centroid CNC
= excellent continuity of data path from the PC all the way to the cutting head

Based in the USA, Centroid's expertise is in advanced CNC controls. Centroid produce complete CNC 5 axis 3D porting and digitizing machinery, particularly for the motor racing industry.

- = capable, proven technology**
- = quality components**

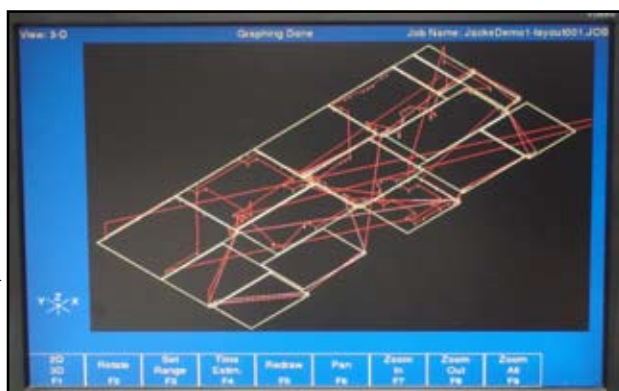
Mityboy uses the open-source **Linux** operating system – so no Microsoft licence issues
 Mityboy is run by **genuine ISO G-code** programming language – open text, fully documented.
 Manuals are provided with the machine, and the customer has full access to the coding.

File transfer is via USB stick from a CAD/CAM design program, and Mityboy has 1 GB onboard memory.
= simple, affordable solutions



Mityboy comes with a dedicated **hand control Jog panel** for all common functions.
 The combination of full spindle speed adjustment, job interruption, and tool length sensing means adjustments at any point in the cycle couldn't be easier.

= complete & flexible control for the operator



Not only do you get comprehensive control via the Jog panel, you also get a **fully intergrated 15" colour LCD monitor** - a feature usually only available on much larger and more expensive CNC machines.

Easy-to-operate and **featuring 3D graphics**, you can see your job onscreen before you cut. Mityboy provides a variety of onscreen 2D and 3D visuals showing all aspects of your drilling and cutting, meaning you can check your job first.

- = minimise design errors before you cut**
- = clear, easy to understand visualisation of each job**

Mityboy - your cutting edge!



Tool-position memory, even after power loss. Automatically continues working from point of interruption – no need to run the whole sequence again.

Smart-search allows you to **interrupt and restart anywhere** during the cutting program. No re-alignment required if a program is interrupted.

= simple yet flexible operation

Easy to operate.

= no specialist operator required

Set-and-forget programming. Once the machine is running **your operator can be elsewhere** - assembling, edgbanding the pieces from the previous job, or even designing your next project!

= minimal labour costs

Produce labels for parts (optional). No expensive integrated printer required – PRO100 and Mityboy will export to any basic printer using address labels.

= affordable solutions



Manufactured in Australia to the highest standards, you'll also get a comprehensive manual in clear English.

= excellent build quality

The Mityboy CNC solution comes in **a package to suit you**. Whether you make use of your existing software, air or extraction facilities, or buy the complete package, the choice is yours.

= options to suit your business

The Mityboy is **sold and fully supported by Jacks** – New Zealand's most trusted supplier of machinery and service.

= guaranteed support

= peace-of-mind

MITYBOY specifications*	
Processing area	2440mm x 1220mm
Z-axis height	240mm (125 gantry clearance)
Table height	700mm
Accuracy	0.025mm
Positioning speed	up to 65m/min
Cutting speed	up to 28m/min
Drilling speed	14m/min
HSD spindle	8kW (10.7hp)
Tool change	7 position with quick release
File transfer	via USB
Dust Extraction (optional)	7.5kW vacuum pump

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*Mityboy 2412– standard NZ execution only. Jacks & Procams reserve the right to amend specifications without notice. Please note that guards and other safety features may have been removed for demonstration purposes.

For more details talk to Jacks today

19 Allens Rd, East Tamaki, ph 09 271 7700
159 Ferry Road, Christchurch, ph 03 366 2013

www.jacks.co.nz

