



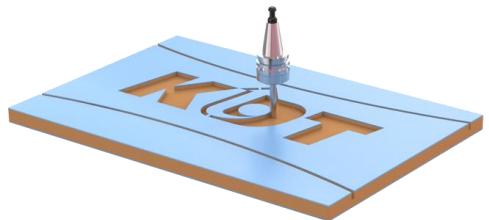
## FLAT BED CNC



**KN2409 DL**



## KN2409DL Flat Panel Nesting CNC. Strong, Precise and Outstanding value



## **KDT** – an Introduction:

KDT are a major manufacturer of panel-based machinery with over 20 years of technical knowledge and experience. They export successfully to all major world markets a comprehensive range of Edgebanders, Beamsaws, Panelsaws, Flow through production lines, CNC routing and Drilling machines. Annual production exceeds 19,000 machines

Click here and take a look...

<https://www.youtube.com/watch?v=xoqp9XiLNds&t=10s>

***KDT machines are built to work hard and designed to last.***

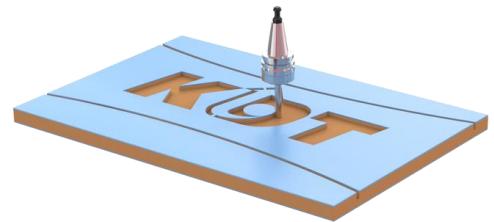


[www.ledamachinery.com.au](http://www.ledamachinery.com.au)

All features and product specifications subject to change without notice



## KN2409DL Flat Panel Nesting CNC. Strong, Precise and Outstanding value



### KDT 2409DL – Your economical entry into the KDT CNC flatbed range with drills

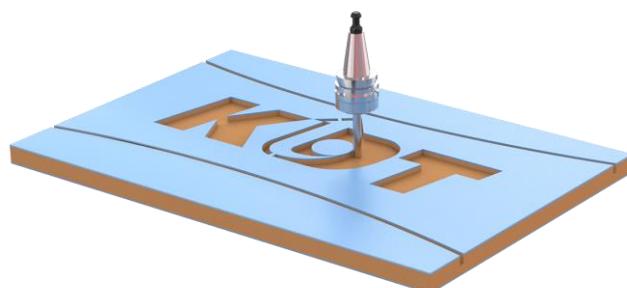
High standard specification, 12 station auto tool change, 10 drill spindles, auto load, align and unload capability, heavy duty construction with the option to add driven outfeed table and scissor lift loading platform.

Affordable quality!



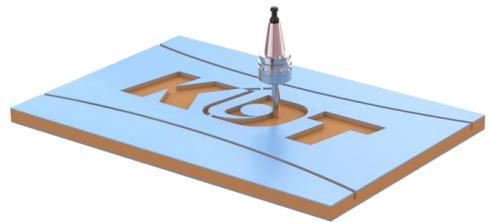
**CLICK: See the KDT 2409DL in action here...( NL version without drills shown here)**

<https://www.youtube.com/watch?v=BV4yY-hVom0>





## KN2409DL Flat Panel Nesting CNC. Strong, Precise and Outstanding value



### DESIGN IN DETAIL:

#### Machine Frame.

A CNC relies on the strength and rigidity of its frame.



***KN2409DL: Frame alone weighs over 1 tonne!***  
***All up machine weight 2450kg***

Heavy steel beams are the key around which the frame is built, and the guides mounted.

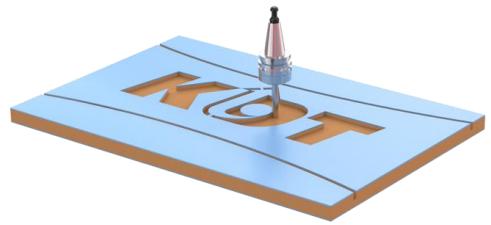
CNC welded and carefully heat treated to relieve any welding stress, then precision machined on a 5-axis machining centre to guarantee the accuracy of the bed and stability of the guide rails.

This construction is normally reserved for far more expensive CNC's and is fundamental to accuracy and long-life precision.





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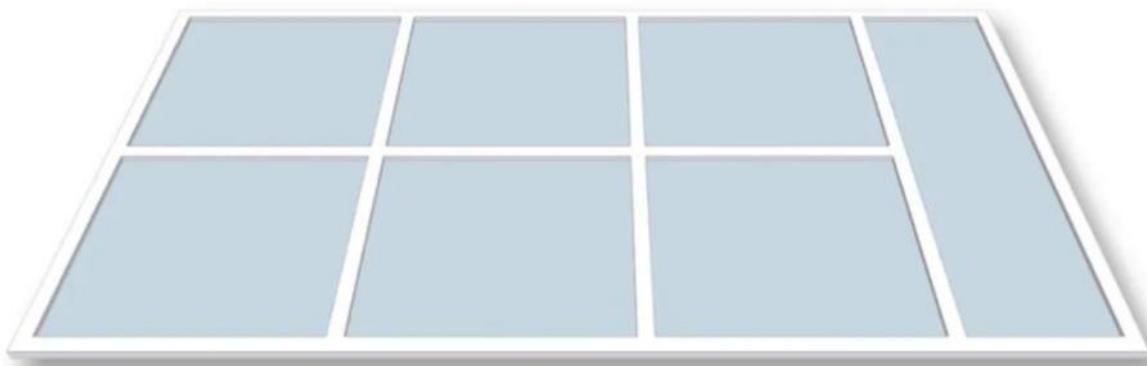
### Table vacuum system – crucial for a good result

Poor vacuum means wasted panels and time.

The KN2409DL Matrix table has 7 independent vacuum zones – easily enabling vacuum to be directed where its required dependent on panel size

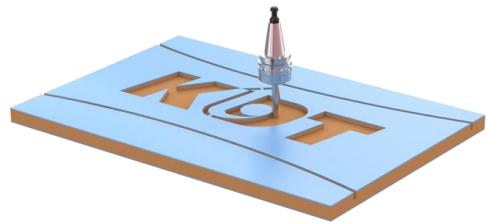
Vacuum zones – directly selected from the front of the machine direct vacuum

○	○	○	○	○	○	○
○	○	○	○	○	○	○





## KN2409DL Flat Panel Nesting CNC. Strong, Precise and Outstanding value



### Strong and reliable Vacuum.

The EUROVAC dry vacuum pumps lower maintenance costs without loss of vacuum in hot environments.

The powerful 5.5kw pump delivers 244 cubic m hour delivers maximum vacuum evenly across the selected table area.

*Safely secured workpieces - eliminates annoying, wasteful suction loss problems.*

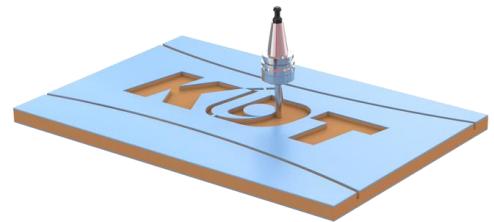
KDT pumps are external to the machine frame not under it. Heat build-up dissipates and maintenance is far easier, reducing costs.

A digital vac pressure gauge at the front of the machine frame confirms adequate vac pressure has been achieved.





## KN2409DL Flat Panel Nesting CNC. Strong, Precise and Outstanding value



### Robust and safe positioning stops and panel alignment

8 Extra sturdy stops raise and lower the front and rear positioning rails in combination with twin end stops. Safety sensors prevent injury or damage should a stop not retract.

Your panels are precisely aligned to the 'zero' point by powerful auto alignment pushers





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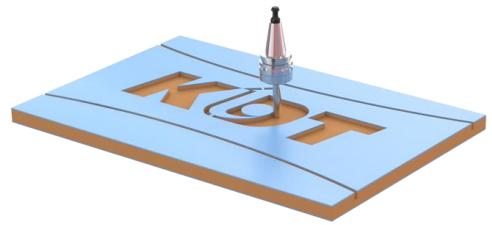
### Superior gantry design.

The gantry is supported and driven on both sides. This eliminates sag and flex providing superior accuracy and rigidity with greatly reduced vibration. This in turn delivers faster cleaner routing, improving finish.

Flexing or twisting of the gantry is eliminated by robust heavy steel top beam with solid cast iron (not alloy) end supports.

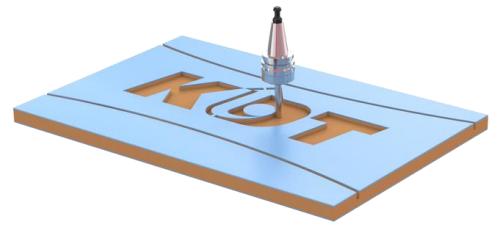
The smooth-running gantry traverses on linear bearings along precision ground flat rails. Smooth travel with low friction for reliability.

The guides are lubricated from a centralised system. Reduced friction and power consumption with prolonged service life.





## KN2409DL Flat Panel Nesting CNC. Strong, Precise and Outstanding value



### The best drives guides and cables...

The gantry is driven in X by 2 powerful Servo drives electronically linked and driven by reduction planetary gearboxes. These are coupled with high precision lineal guides.

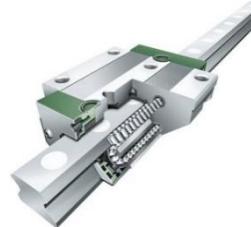
The Y axis is driven with a single servo drive coupled to a reduction Gearbox.

These drive the gantry and machining group along heavy duty 25mm helical rack and pinion systems.



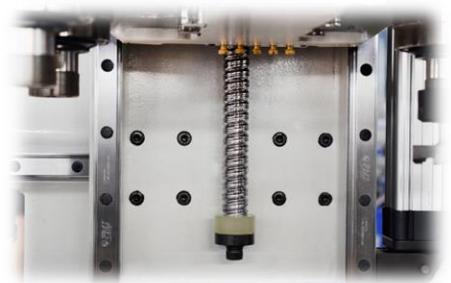
The helical rack and pinion system ensures rack teeth are always engaged fully. This delivers smooth acceleration and deceleration, increased accuracy with significantly reduced vibration and noise.

Z axis drive is by recirculating ball screw and twin widely spaced linear guides for smooth precise and quiet positioning



*German  
for their  
wear*

*IGUS flexible cables are used  
proven reliability in this high  
area.*

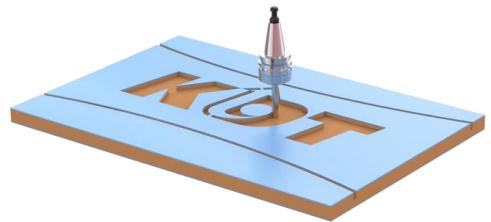


**100m/m min X / Y and 30m/min Z traverse speeds boosts output**





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### 12 Tools on board and measured!

The 12 station Linear auto tool changer supplied with 12 x ISO30 system tool holders and collets.



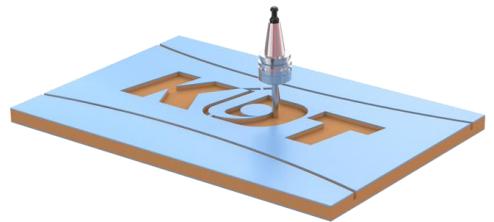
#### *Travels with gantry = faster tool changes*

To eliminate guess work and trial cuts a tool length measuring device allows even large tools to be automatically and easily measured.





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### Powerful Electro Spindle

The **9KW** air cooled Electro Router spindle has step-less control from **3,000 to 21,000 rpm** by Inverter. You always have the correct rotation speed for the optimum routing results and fastest safe cutting speeds.

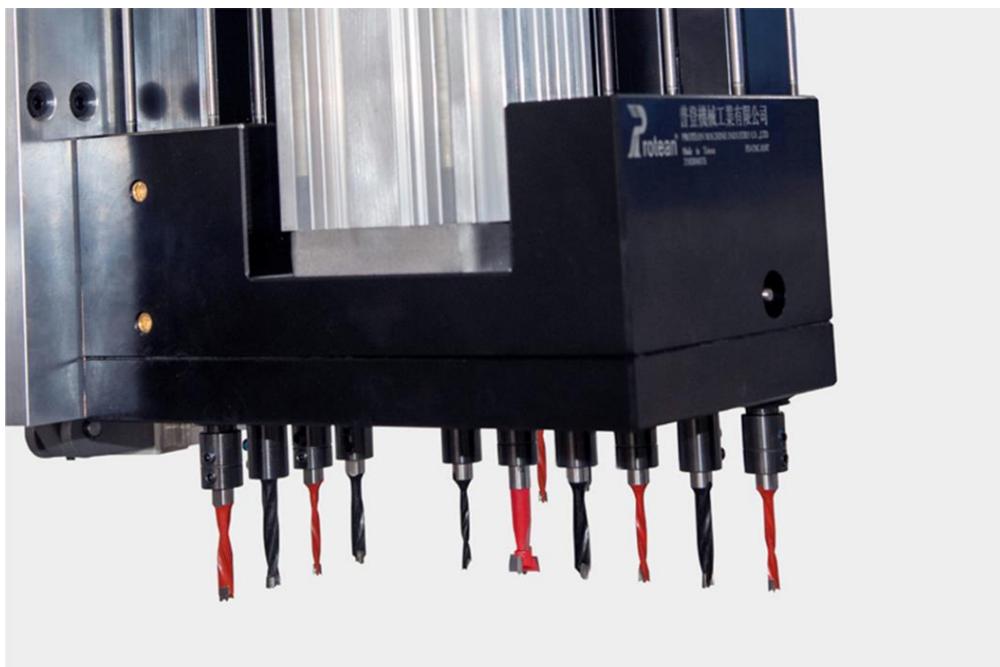
KDT's spindles have a well-earned reputation for quality and longevity with every mechanical, pneumatic and electronic component undergoing a rigorous double testing program.

The 10 Independent drills make short work of your drilling, line boring and hinge hole machining

6 in X and 4 in Y at 32mm spacing is both practical and versatile,

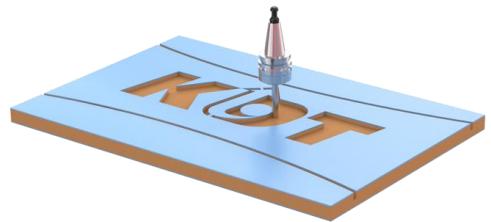
Spindles rotation at 6000rpm via a powerful 1.7kw motor ensures clean fast boring.

An efficient dedicated dust extraction hood to the boring head with pneumatic activation leaves a clean finish





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### Dust extraction is important.

KDT understand the importance of extraction that works effectively without the need for substantial extraction volumes.

Independent and close-fitting hoods on the Router, Drill head and push-off Arm switch pneumatically dependent on which unit is working.

***The result: just a single 150mm connection – class leading low extraction volume requirements!***



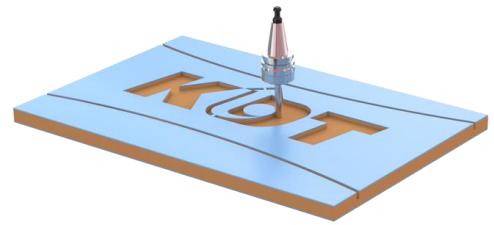
### Operator > Machine > Easy



KDT use the latest LNC machine controller with a reputation for reliability and user-friendly DELTA user interface screen.

A PC makes updates easy while providing a familiar user-friendly interface. KDT's controller will work with all recognised Kitchen Design/ Cabinet, CAD software.





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Electronic components are housed in a separate freestanding cabinet fitted with filtered Industrial fans ensuring the sensitive Inverters, servo drives, and other electronics are kept cool and dust free. *Essential for electronic reliability in an Australian summer.*

### Auto Nest push off – huge productivity boost.

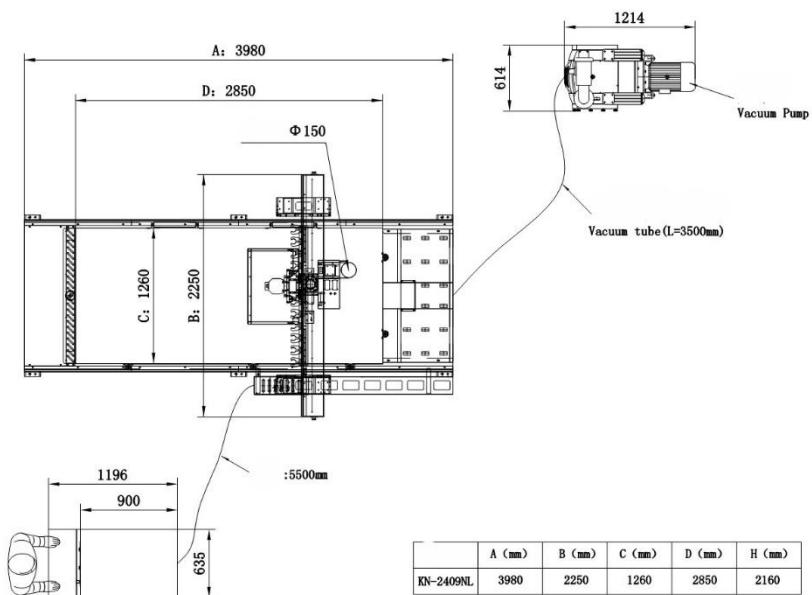
A smart unloading pusher arm with built in extraction pushes the completed nest to an (optional) sorting table. You can immediately load a new panel and commence your next nest effectively doubling your output.

A pneumatic on/off gate makes efficient use of your extraction airflow.



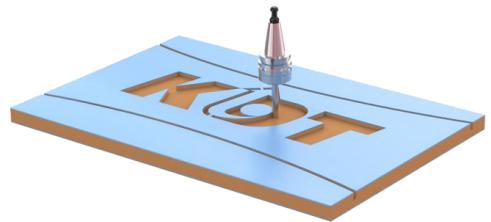
### You have the space.

The compact footprint of the KN2409DL suits smaller workshops where floor space is tight.





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### User friendly wherever you look.

A hand control makes machine set-ups easy – a neat touch: its magnetic

The PC control allows LEDA or KDT's Technical support Team to remote connect using 'TEAMVIEWER' should assistance be required.



### Other things you will like.



Easy compressed air connection and regulation. Simple, neat and tucked out of harm's way. Comprehensive tool kit, grease gun and User manual are supplied.

### Specifications

Working area of Y and X axes **2850 mm x 1220mm**

Maximum travel speed **100m/min in X and Y.**

Maximum travel speed **30m/min in Z**

Maximum cutting speed **25 m/min**

Power requirements **415 volt / 3 phase**

Capacity of vacuum pump **244m<sup>3</sup>/hr**

Vacuum table zones manually controlled **7 zones.**

Air cooled spindle 9 kw (12hp) **3000-21,000 rpm**

Linear automatic tool change **12 tool positions**

Dust hood connection diameter **150 mm: 3400 cubic m/hour**

Machine weight **2450 kg**

Transmission for X and Y axis **helical rack and pinion**

Transmission for Z axis **ball screw** Toolholder system **ISO30**





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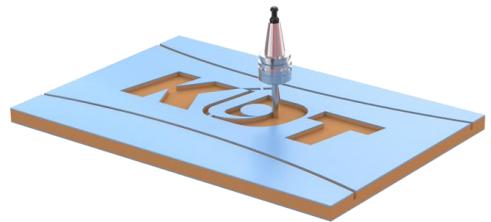
### Included:

Outfeed pusher with integrated dust extraction

Automatic tool length measure

12 x ISO30 tool holders and chucks and tooling package

***Safety fences with interlocked door access and light barriers are standard equipment.***



## Productivity boosting Options:

### Outfeed table – driven conveyor

An automatic stop/start system using optical sensors at the offload end detect panels > the panels present themselves at the end of the table for unloading without any chance of outpacing the operator. Can be combined with Label printing with Touchscreen control at the outfeed.



Outfeed table – Static  
Very economical and effective

### Hydraulic lifting table

Auto - height sensing maintains the correct stack height as panels are removed.

Safety valves to the hydraulics and an operator safety stop bar are included.  
Sturdy rear bollards make positioning a pack of board simple for the forklift driver.

Combined with the auto loading and alignment system that comes standard - you now have a fully automated panel loading system.

