

# NORTHTECH

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*Machine, LLC*

iDOVETAIL



***The Simplest Dovetailer Available with Real Time 3D Custom Designer Interface  
It teaches your operator so you don't have too!***

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Borden, IN 47106  
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# NORTHTECH

*Machine,*

## NT iDovetail30

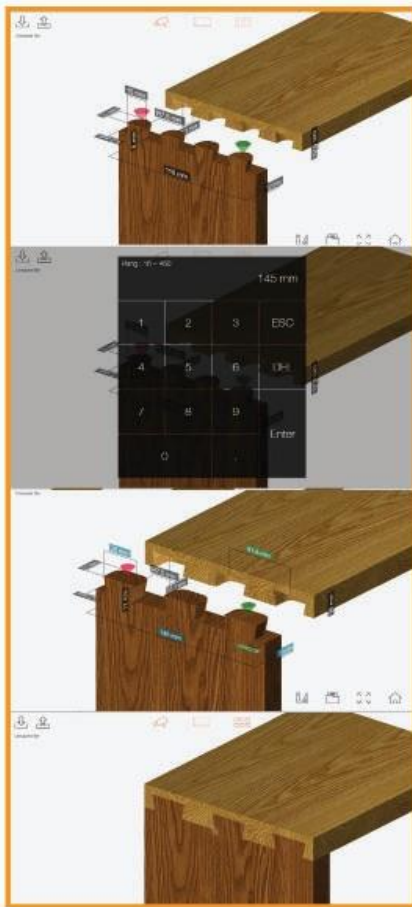
- 4.2kw (6HP) powered spindle
- Programmable spindle controls with a maximum 18,000RPM
- Maximum processing width: 750mm (30")
- Tenon dimensions: See following profile mode specific details
- Workable part dimensions: See following profile mode specific details
- Spindle vertical adjustment: 100mm (4") servo positioned
- Usable bits: See following detail
- Recommend working pneumatics: 90PSI on a 3/8" air line
- Dust port: (1) 4" requiring 436CFM @ point of extraction
- 195in/min dovetail bit acceleration
- Bit sharpening compensation adjustments via touchscreen interface
- Automatic bit recognition
- Horizontal & Vertical pneumatic clamping allows individual part release and mitered profiles
- Easy to understand error detection and display
- Net weight: 1,716lbs
- Gross weight: 1,826lbs
- Machine dimensions (LxWxH): 54" x 48" x 43"
- Packing dimensions (LxWxH): 62" x 56" x 51"
- (1) Tool box
- Warranty is one year parts
- All machines are tested stateside prior to shipment providing trouble free start up.



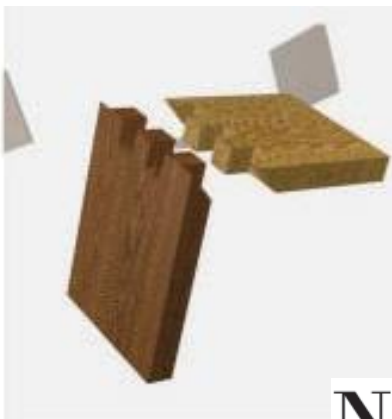
# Machine Features



- 10.1" High sensitivity touch screen interface with smart phone functionality.
- 3D Interface uses the same touch sensitive actions as your smart phone, such as Tap / Double Tap / Swipe / Pinch / Zoom.

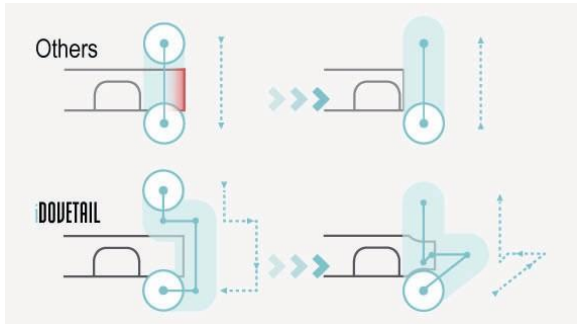


- Simply pick 1 of 8 profiles, touch the dimension you want to change, enter new dimension and review the drawing to verify profile design.
- Real time 3-Dimensional design interface, produces 3D rendering immediately upon single dimensional change.
- Real time 3D rendering allows for quick custom design layout on the fly.
- System will check bit dimensions prior to operation to confirm proper bit is installed for the selected profile.
- Reduces costly operator training and errors frequently had with manual calculations.

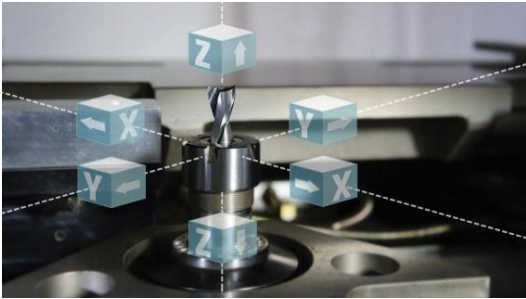


- Clamp system tilts to 45° for angled clamping for mode 7 and 8 mitered profiles.

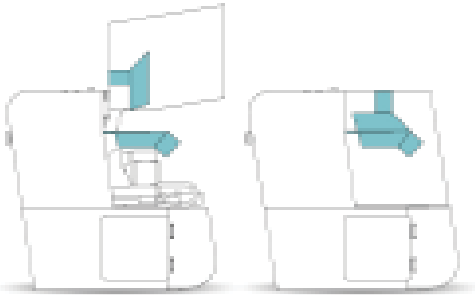
# Machine Features



- System will automatically calculate cutting path to prevent blowout, even on custom profiles.
- Blow out free cycle can be turned on/off.



- X-Y-Z Servo positioning is all controlled through idovetail interface.



- The separated dust hood design allows you to change the tool without removing the dust hood.
- Oversized and fully enclosed dust hood captures dust from varying trajectories on any profiles.
- This hinged access allows for ample room for a bit change while providing exceptional dust control.



- (2) Auto retracting positioning shelves mounted on dual linear shafts ensure a precise part position.

# Machine Features



- Central pump lubrication system keeps slide wear points easily lubricated.



- Regulator, filter and primary shut off valve for easy pneumatic connection.



- Both horizontal part clamps are bi-directionally powered for quicker part change.
- Clamps are tiltable for mitered profiles.



- Both vertical part clamps are bi-directionally powered for quicker part change.

# Machine Features



- Pneumatic lines and electrical wiring are encased in industrial cable track.



- ER25 chuck dovetail bit included.

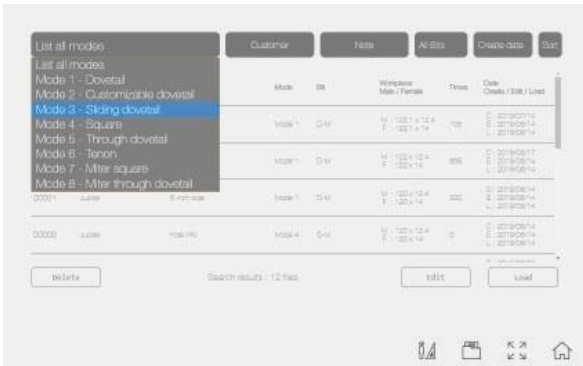


- All electrics are installed in a centralized cabinet for dust free operations and protected inside the body of the dovetailer.

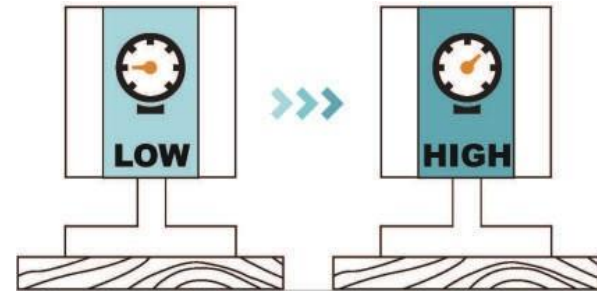


- Outside the touchscreen only (3) physical buttons for a streamline operation; Emergency stop and clamp operation buttons.

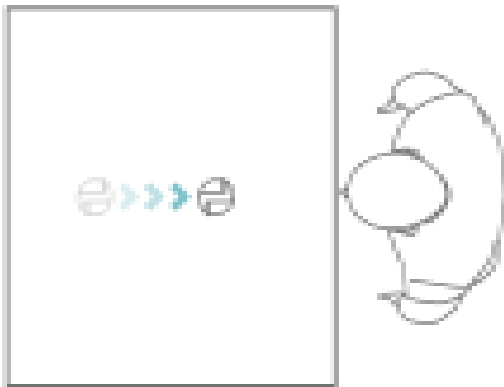
# Machine Features



- Windows based file storage allow operator to easily find saved profiles through sorting and search capabilities that most operators are already familiar with.



- Two stage pneumatic holddowns securely hold parts with a low pressure for added operator safety while placing parts in machine.
- Directly before cycle start, pressure is automatically increased to securely hold parts during processing.



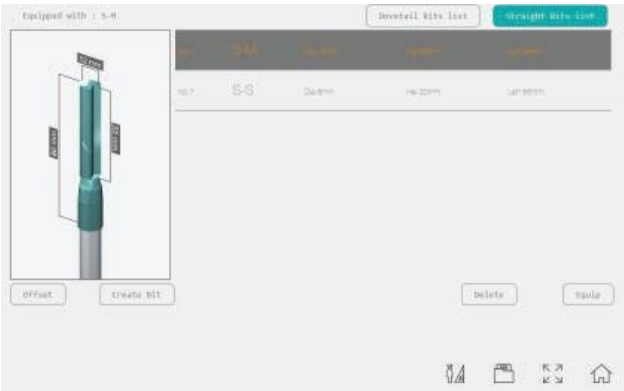
## Easy Tool Change

- Upon opening rear access hood, the spindle will automatically move to the position closest to you for an easy and quicker bit change.



- 90/45 degree rotating clamp support for mitered profiles.

# Machine Features



- When you change or create a new bit, you can see it in the visual file.
- This 3D bit rendering makes it easy to enter new bit dimensions.
- Once a profile is selected, system will measure installed bit to confirm proper bit is installed.



- Programs allow for profile specific RPM and feed systems.



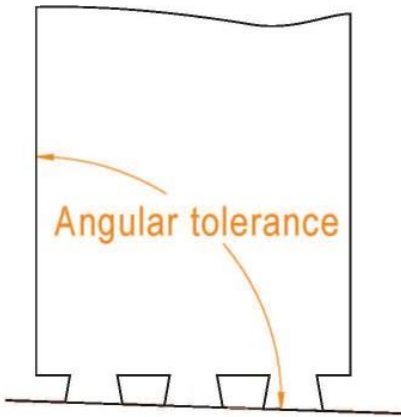
- Windows based operating system gives operator navigation comfort.
- Operational log allows factory technicians trouble shooting capability preventing onsite tech visits.



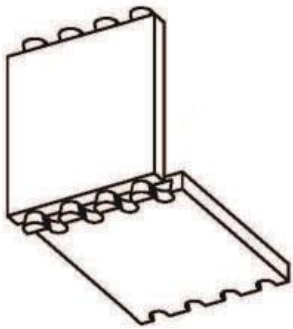
- Fence is calculated by iDovetail's program and automatically moves fences into the correct position.
- Vertical fences are fixed.



# Machine Features

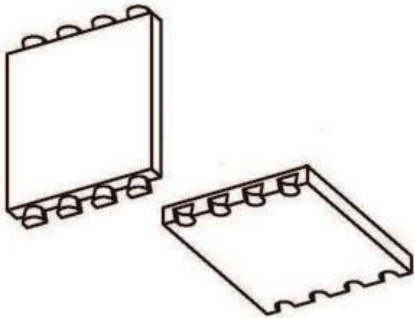


- True 90° is very important for drawers and frames.
- If you cannot ensure that your workpiece is a true 90° cut, you can easily solve it by using the bottom cut mode.
- When selected, the bottom will be resquared by cutting 1mm (.04") before cutting tenons.

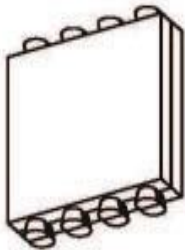


- The iDovetail offers the most versatile loading options eliminating the need to move fences in 6 different profile modes.

- Simultaneous cutting of female and male tenons.

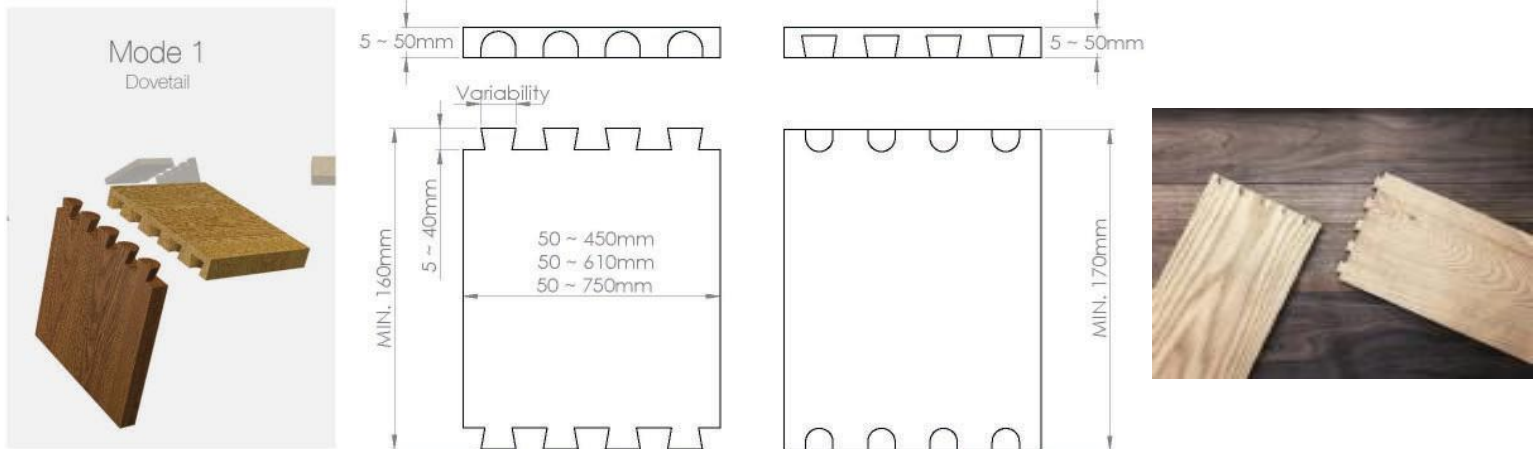


- Independent part cutting.



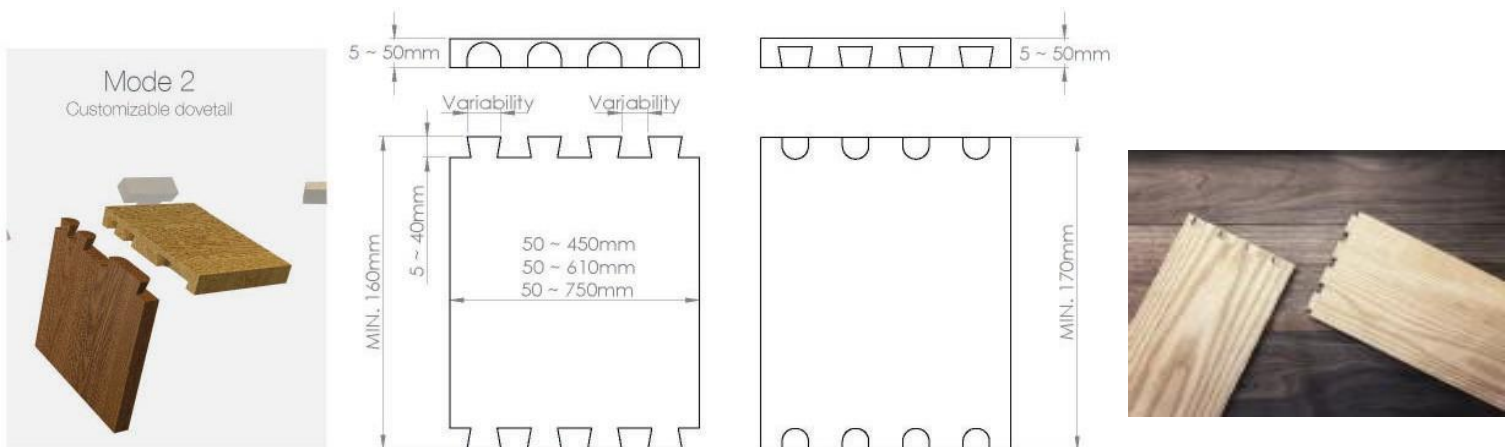
- Back-to-back cutting of male tenons.

# 7 Different Profile Modes with iDovetail



## Mode 1: Standard Dovetail

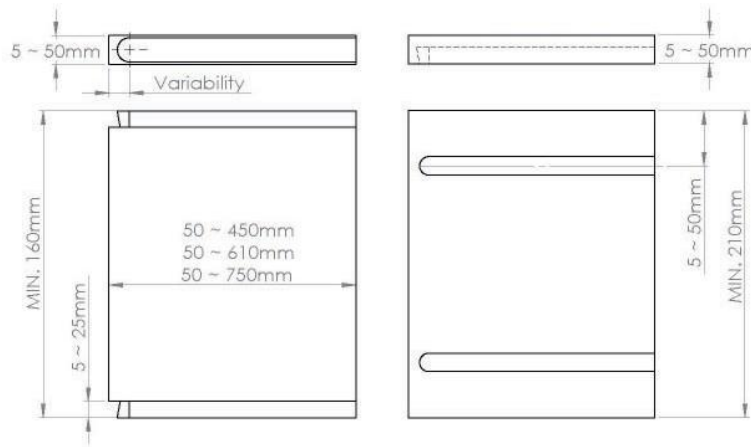
- The fixed pitch dovetail profile mode allows for male tenon adjustments.



## Mode 2: Customizable Dovetail

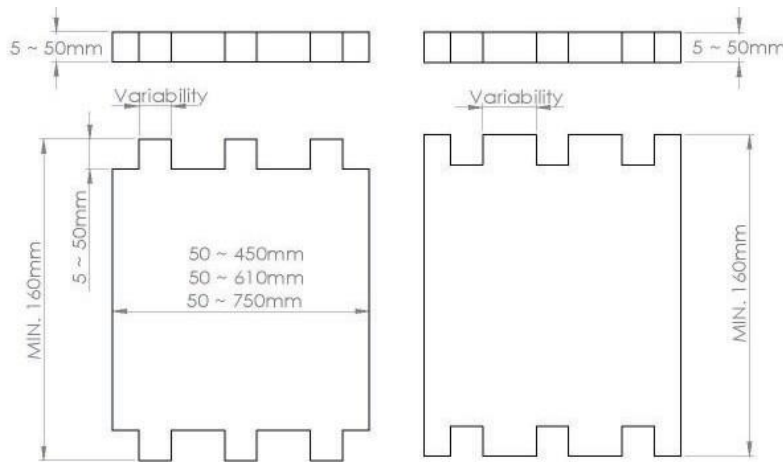
- The custom pitch dovetail profile mode allows for female and male tenon adjustments.

# 7 Different Profile Modes with iDovetail



## Mode 3: Sliding Dovetail

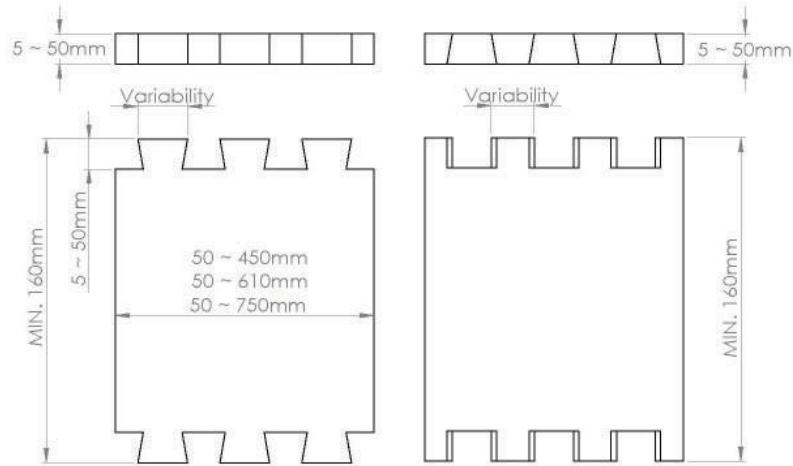
- The sliding dovetail profile mode has multidimensional adjustment capability.



## Mode 4: Square Mortise and Tenon

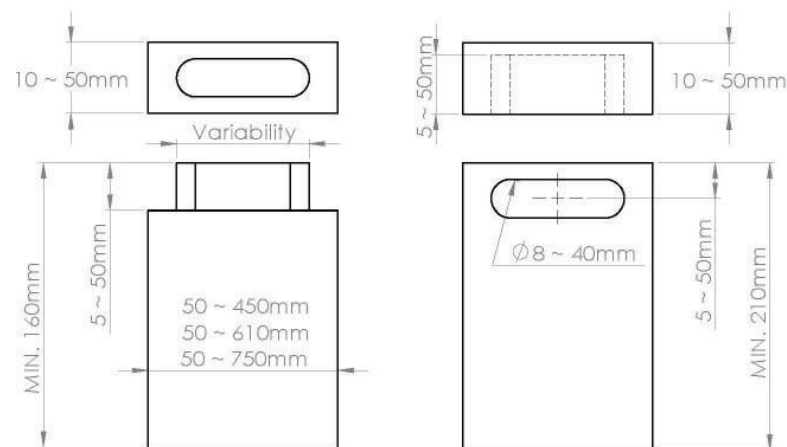
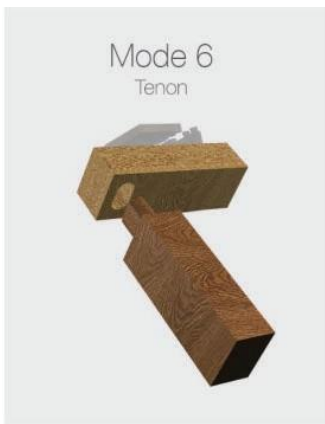
- The customizable square mortise and tenon profile mode has female and male tenon multidimensional adjustments.

# 7 Different Profile Modes with iDovetail



## Mode 5: Tapered Dovetail

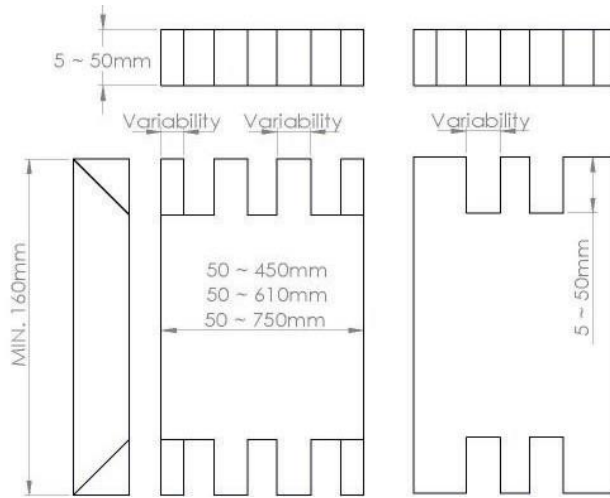
- The tapered dovetail profile mode has multidimensional adjustments.



## Mode 6: Mortise and Tenon

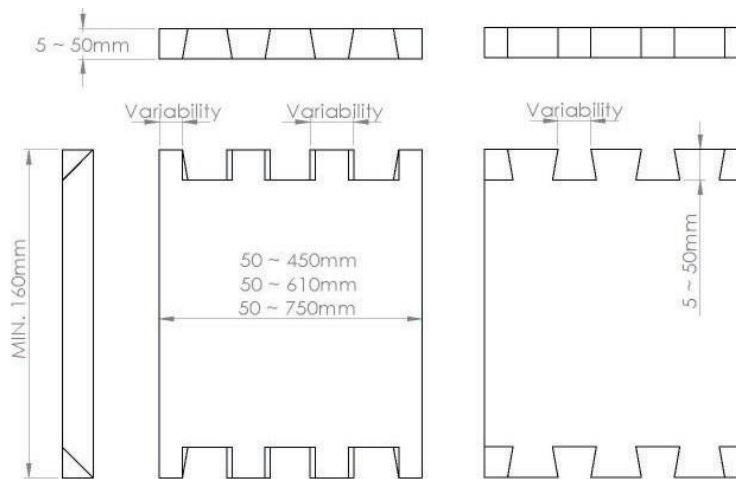
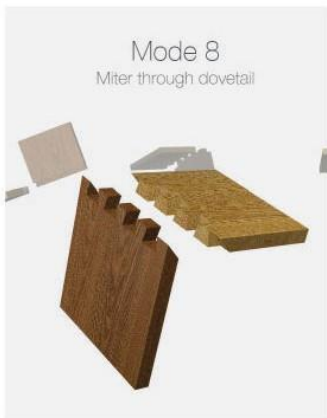
- The mortise and tenon profile mode has female and male tenon multidimensional adjustments.

# 7 Different Profile Modes with iDovetail



## Mode 7: Mitered Square Mortise & Tenon

- The mitered square mortise and tenon profile mode has female and male tenon multidimensional adjustments.



## Mode 8: Mitered Tapered Dovetail

- The mitered tapered dovetail profile mode has multidimensional female and male tenon adjustments.

# iDovetail Usable Bit Sizes

Type	Structure	Dia.	Degree	Blade Length
#1 Dovetail bits	Carbide-Tipped	6mm (.24")	10	6mm (.24")
#2 Dovetail bits	Carbide-Tipped	10mm (.39")	10	10mm (.39")
#3 Dovetail bits	Spiral	14mm (.55")	10	14mm (.55")
#4 Dovetail bits	Carbide-Tipped	14mm (.55")	10	14mm (.55")
#5 Dovetail bits	Carbide-Tipped	18mm (.71")	10	20mm (.79")
#6 Dovetail bits	Carbide-Tipped	24mm (.94")	10	30mm (1.18")
#7 Dovetail bits	Carbide-Tipped	35mm (1.38")	10	54mm (2.13")
#8 Straight bits	Spiral	6mm (.24")	10	23mm (.91")
#9 Straight bits	Spiral	12mm (.47")	10	55mm (2.17")

## Workable Part Dimensions by Bit

	Workpiece Thickness (Profile Modes 1 ~ 3)	Workpiece Thickness (Profile Modes 4 ~ 8)
#1	5mm - 8mm (.20" ~ .31")	5mm - 6mm (.20" ~ .24")
#2	6mm ~ 15mm (.24" ~ .59")	6mm ~ 9mm (.24" ~ .35")
#3	8mm ~ 20mm (.20" ~ .79")	8mm ~ 13mm (.20" ~ .51")
#4	10mm ~ 20mm (.39" ~ .79")	10mm ~ 13mm (.39" ~ .51")
#5	13mm ~ 25mm (.51" ~ .98")	13mm ~ 19mm (.51" ~ .75")
#6	15mm ~ 35mm (.59" ~ 1.38")	15mm ~ 29mm (.59" ~ 1.14")
#7	25mm ~ 50mm (.51" ~ 1.97")	25mm ~ 50mm (.51" ~ 1.97")
#8	5mm ~ 20mm (.20" ~ .79")	5mm ~ 20mm (.20" ~ .79")
#9	5mm ~ 50mm (.20" ~ 1.97")	5mm ~ 50mm (.20" ~ 1.97")

# Standard Estimated Production Capability Mode 1 - Dovetail Cut Mode

Depth	Cut	Boxes / Per Hour
3" Depth	Cut with Trimming	53
3" Depth	Cut without Trimming	71
4" Depth	Cut with Trimming	48
4" Depth	Cut without Trimming	64
5" Depth	Cut with Trimming	44
5" Depth	Cut without Trimming	59
6" Depth	Cut with Trimming	40
6" Depth	Cut without Trimming	54
8" Depth	Cut with Trimming	36
8" Depth	Cut without Trimming	50
10" Depth	Cut with Trimming	32
10" Depth	Cut without Trimming	42