

**nova™**  
**PRO-TEK 50mm (2") Jaws**  
**QUICK START**  
**INSTRUCTION MANUAL**



Thank you for purchasing our PRO-TEK 50MM (2") Jaws – a new addition to our Nova wood-turning jaw range with advanced features to enhance your chuck performance. It provides a versatile and easy method for fast and secure work holding for all turning – bowls, egg cups, vases, boxes, goblets, and an endless variety of similar projects

### **YOUR SAFETY**

**Keep these instructions in a safe place for future reference.**

**WARNING:** These jaws can contribute to serious injury (as with any other power tool accessory) if this manual guidance is not followed or misused on the lathe. Read and understand also the lathe owner's manual. If you do not have a manual, contact the lathe supplier to obtain one before using the lathe and chuck. The user must be professionally trained to use this jaw set. Vocational school courses or formal training is recommended.

As with other work holding methods, an extremely cautious and sensible approach is necessary. With the **PRO-TEK 50mm (2") Jaws**, it is impossible to give exact directions as to the amount of tightening pressure required for adequate work holding or approved chisel cutting techniques. Follow closely strict guidelines in this manual for different jaw types on wood blank diameters and length, plus strictly follow recommended lathe speeds.

### **Safe Operation**

**Eye Protection:** Woodturning operations can result in objects being thrown into your eyes, resulting in severe eye damage. Protective eyewear must be used at all times. Everyday vision wear is not protective eyewear. We recommend a full-face shield. Always wear eye protection which complies with current ANSI Standard Z87 (USA)

**Noise Protection:** Use earplugs or ear defenders. Particularly if the noise exceeds 85dB, exposure to high noise levels can lead to hearing problems.

**Dust Protection:** Use respiratory protective equipment (dust mask, portable respirator device). As exposure to high levels of irritating dust when turning or sanding hardwoods, softwoods, and manufactured composite boards (MDF) can result in serious health problems. Also, adequate workshop dust extraction must be used.

Chuck must be adequately secured on lathe spindle: Follow mounting instructions for your lathe for faceplates and other spindle fixtures. Do not rotate the chuck under power unless the workpiece is firmly clamped.



### **WARNING**

**MAXIMUM RECOMMENDED SPEEDS FOR PRO-TEK 55mm (2") Jaws:**

**Expanding :** 684 RPM / **Contracting:** 1440 RMP

**LATHE SPEED:** Excessive speed is a serious lathe hazard. Always turn at the slowest speed possible. Ideal speed will vary with wood blank size. The larger the blank, the slower the speed. Consult your lathe manual or lathe information plate for speed guidelines. Do not attempt to use the chuck unless the recommended lathe speeds to the wood blank size are known. Additionally, you must strictly follow the maximum speed limits set out in this manual's operating section. Do not exceed them under any circumstances.

**CHECK WORKPIECE:** Examine wood blank carefully before mounting on chuck/lathe. Only mount wood with no cracks, splits, holes, or any other weaknesses (e.g., rotten or spongy sections). Do not use poorly jointed or laminated wood. An irregular or out-of-balance stock needs to be turned at the slowest possible speed until it is in balance.

Make sure wood is clamped firmly. Follow mounting instructions for different gripping modes and jaw types. In the expansion mode do not use excessive force, or jaws may split the wood.

Check wood is securely held in the chuck before operation. Check grip by vigorously wrenching wood blank back and forth. If any loosening occurs, re-examine the holding area for adequate grip (Following mounting guidelines) and any damage to the holding area. Rotate manually to make sure of clearance before switching on the power.

**DUPLICATOR OR JIGS:** Do not use chuck for work holding with a duplicator or jigs.

### **Safe Practice**

**CHISEL USE:** Use only handheld woodturning chisels to shape wood being held in the chuck. Use the recommended chisel for the job. Use safe and commonly approved techniques.

**WARNING:** Never attempt to place hands on a moving chuck on a lathe. Wait for the chuck to come to a complete stop before hands are anywhere near the chuck. Trying to grab at a moving chuck could result in **SERIOUS INJURY**.

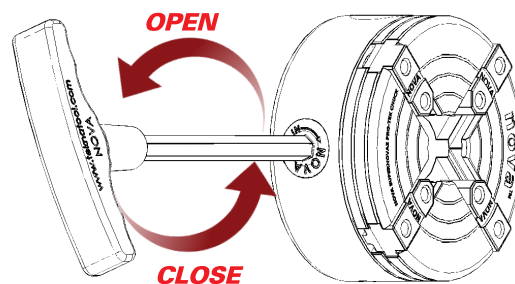
**JAW SLIDES:** For safe operation, do not extend the jaw slides beyond the chuck body under any circumstances. Wherever possible, stand to one side of the revolving wood.

**WEAR SUITABLE CLOTHING:** Do not wear any loose clothing, neckties, gloves, bracelets, rings, or other jewelry that could get caught in moving parts. Wear protective hair covering to contain long hair.

**DRUGS, ALCOHOL, MEDICATION:** Do not operate chuck or lathe while under the influence of drugs, alcohol, or any medication.

**KEEP CHILDREN AND VISITORS AWAY:** All children and visitors should be kept a safe distance from the work area.

### **OPENING AND CLOSING OF JAWS**

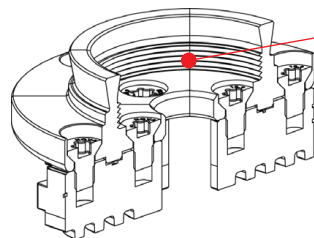


### **ATTACHING AND REMOVING JAWS AND CHUCK**

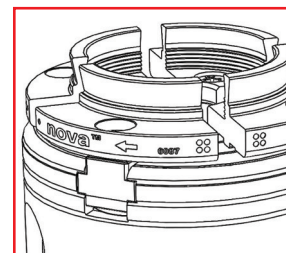
The jaws must be properly attached to the chuck to function as intended. Before installation, ensure the jaw slide top surfaces are clear of any dust or debris before attaching the jaws on the chuck.

Follow the steps shown below to attach the jaws on the chuck:

**1. Loosely attach the jaw segments on the jaw slide top surfaces with the appropriate screws and firmly close the jaws to make sure no light is visible between the jaw segments.**



*Note: Always mount the jaws clockwise.*



**2. Firmly tighten the screws with the appropriate screw.**

Loosen and remove the screws when removing the jaws from the chuck.

# **nova™**

## **PRO-TEK**

### **50mm (2") Jaws**



### **WARRANTY:**

This NOVA product is backed by a warranty period of 6 years from the date of purchase.

**INTERNATIONAL CUSTOMERS:** Our Teknatool agents may issue their own Warranty in addition to our warranty policy to cover this product. Their legal terms may vary from those stated above, please check with your dealer.

Our policy is one of continuous improvement. We therefore reserve the right to change specification/design without notice.

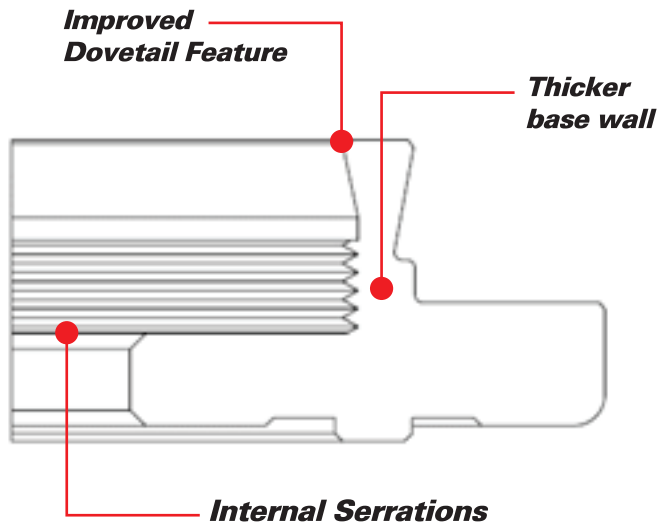
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## HISTORY OF nova™ PRO-TEK 50mm(2") Jaws

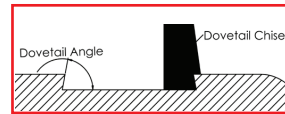
At NOVA, we work hard to build product experiences that fulfill our customers' actual needs. Customer involvement and feedback were critical to the success of our design process. We listened, and we went to work and created our Pro-Tek 50mm (2") Jaws with a professional turner in mind.

Its improved features such as an internal dovetail profile and a serrated interior give extra gripping power. The Jaw's wall thickness were increased for added strength and machined from a single solid piece of 1045 High Tensile Steel for precise closing and added durability for long life.

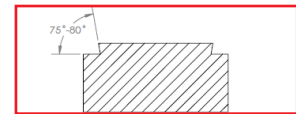


BACKWARDS COMPATIBLE - FULLY COMPATIBLE WITH ALL NOVA CHUCKS

## FORMING A MORTISE OR TENON



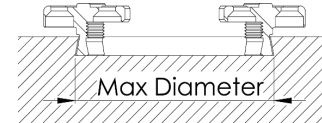
Using a Nova Dovetail Chisel #6008 (or any other suitable tool), cut into the wood, rest the flat side of the chisel on the bottom surface of the recess to form a dovetail profile of between 75~80° degrees with 10mm (25/64") depth.



Using a suitable chisel, turn the outer diameter of the wood to form the tenon. The length of the tenon should be 3mm (0.12") less than the internal height of the jaws.

A tenon is where the jaw contracts onto the workpiece to grip. This is mainly for box, goblet and vase turning (end grain items with a fair degree of overhang).

Tenon Diameter for 50mm Jaw		
	Min Diameter	Max Diameter
Cylinder	45mm (1 3/4")	65mm (2 9/16")
Square	40mm (1 9/16")	50mm (2")



### CHUCK GRIPPING DIRECTION FOR TENON

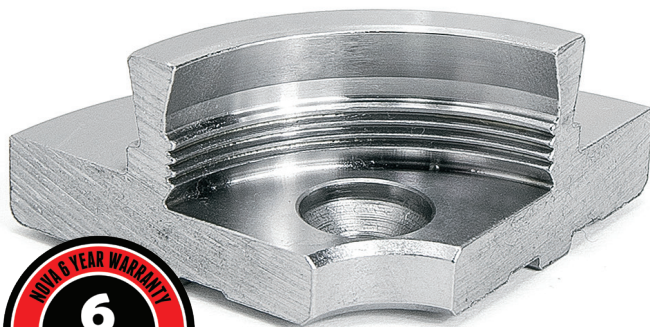
A mortis is where the jaw expands into a recess of a workpiece to grip. This operation is mainly for bowl and platter (Items with parallel wood grain). IT IS NOT RECOMMENDED THAT A MORTIS BE USED FOR ANY LONG WORK (OVER 100mm or 4 inches). DO NOT EXCEED 600RPM WITH THIS OPERATION. OUT OF BALANCE STOCK MUST BE TURNED AT THE SLOWEST SPEED POSSIBLE.

Diameter of recess for 50mm jaw mortis	
MIN	MAX
50mm (2")	70mm (2 3/4")



### CHUCK GRIPPING DIRECTION MORTIS

## nova™ PRO-TEK 50mm (2") Jaws



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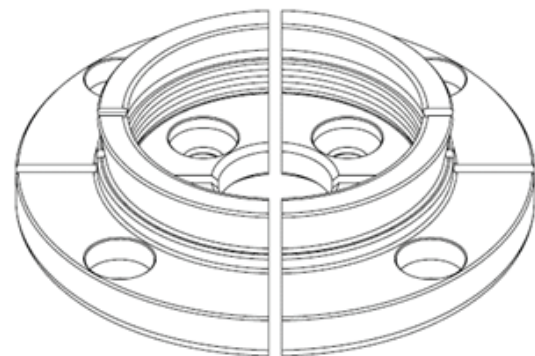
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**SKU-6087**