

STRIATECH INTELLIGENT DIRECT DRIVE • 2HP DVR MOTOR • 50-5,000 RPM

NOVA NEUTRON

ENGINEERED TO INSPIRE **NOTHING COMES CLOSE.**

AT A GLANCE

The most sophisticated control system ever fitted to a NOVA lathe, inside a 17" swing machine built to handle whatever you put on it.

2HP DVR MOTOR	Striatech direct drive, 50–5,000 RPM. The spindle is the rotor - no belts, no pulleys, no power lost in transmission. Constant torque from the first chip to the final pass.
4.3" TFT TOUCHSCREEN	Full-colour graphical interface with icon menus, multi-language support, and QR code access to the manual. Designed to work with gloves on. A first for NOVA lathes.
360° SWIVEL & SLIDE	The headstock rotates a full 360° and travels the entire length of the bed. Lock it anywhere, at any angle - inboard, outboard, left or right-handed. Outboard turning up to 28".
8+ SAVED SPEEDS	Programme your turning stages directly into the machine. Rough, shape, detail, finish - one press to get there. Adjust in 5 or 50 RPM steps, reprogramme in seconds for the next project.
ELECTRONIC BRAKING	Stops the workpiece in seconds - cleaner and safer than hand-braking. FWD/REV at the touch of a button. Electronic Lockout keeps the machine secured when you step away.
SMART SPEED RAMP	Select your workpiece diameter and the NEUTRON accelerates to a safe RPM automatically. XL mode brings unbalanced or oversized blanks to speed gradually, without drama.
2.4GHZ WIRELESS REMOTE	Speed control and real-time RPM display from wherever you re standing. Built-in USB connectivity for firmware updates and data.
DIGITAL INDEXING	24 positions, controlled and displayed on-screen.
DRYING MODE	Drying mode runs automatic FWD/REV cycles every 30 minutes - set it and leave it.
LOAD SPIKE DETECTION	The NEUTRON monitors power draw continuously and intervenes before a dig-in becomes a problem. Slow-start mode handles large or unbalanced workpieces from the first rotation.
10-YEAR WARRANTY	10 years on the motor, 5 years on electronics and mechanical components. No brushes to replace, few moving parts - built to run for a very long time.

10 YEAR MOTOR	5 YEAR ELECTRONICS & MECHANICAL	Best in the industry. No brushes to wear out and few moving parts. The DVR motor is built for a lifetime of trouble-free performance - and we back that with the warranty to match.
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NEXT-GEN HMI PANEL

4.3" full-colour TFT touchscreen
F1–F4 direct-access shortcuts
8+ programmable saved speeds
On-screen digital indexing
Live load meter and power limiter
Icon menus, multi-language
QR code manual access
Service reminders
Glove-friendly operation

A FIRST FOR NOVA LATHES



02 / TECHNOLOGY

INTELLIGENT DIRECT DRIVE & NEXT-GEN TOUCH CONTROL

Every element of the NEUTRON's control system is designed around one idea: the machine should handle the complexity so you can focus on the work. Striatech's DVR direct drive technology provides the platform - 2HP of constant, intelligent power from 50 to 5,000 RPM. The NEUTRON's 4.3" TFT touchscreen puts all of it in your hands.

STRIATECH DVR DIRECT DRIVE

The lathe spindle *is* the rotor. There is no belt, no pulley, and no stage between the motor and your work. This means zero transmission power loss, whisper-quiet operation, and torque that is available at any speed - not just the middle of a belt range. The NEUTRON delivers 50 RPM as confidently as it delivers 5,000.

CONSTANT SPEED UNDER LOAD

The NEUTRON reads spindle position thousands of times per second, adjusting power continuously to hold your chosen RPM. Push into a heavy cut or come off the tool - the speed stays exactly where you set it. That consistency changes what you can do at the finishing stage, where small speed variations show in the surface.

SAFETY THAT WORKS FOR YOU

Electronic Braking stops your workpiece in seconds - faster and more controlled than any manual method. The Electronic Lockout secures the machine with a code, so it stays off when you need it to. Load Spike Detection monitors power draw and responds before a catch escalates. Slowstart mode brings large or unbalanced blanks to speed gradually, protecting both the work and the turner.

THE 4.3" TFT TOUCHSCREEN

This is the first full-colour graphical touchscreen on a NOVA lathe. It replaces a bank of buttons and a numeric display with a proper interface icon-based menus, live RPM and load readout, on-screen indexing, service reminders, and QR codes that link directly to the manual. It works with gloves on, supports multiple languages, and is legible across the workshop.

PROGRAMMABLE FOR HOW YOU TURN

Eight or more favourite speeds can be saved and recalled with a single press - rough, shape, detail, finish, whatever your workflow requires. The F1 through F4 shortcut keys put your most-used functions on the surface. Coarse or fine speed adjustment in 5 or 50 RPM increments, reprogrammed in seconds when the project changes.



SPECIFICATION SUMMARY

- **2HP DVR MOTOR** 50–5,000 RPM, drying mode
- **17" INBOARD SWING** (28" with outrigger)
- **24" BETWEEN CENTRES** (44" with bed extension)
- **360° SWIVEL HEADSTOCK** Full bed-length slide, 22.5° detents
- **4.3" TFT TOUCHSCREEN** Multi-language, icon menus, glove-friendly
- **8+ PROGRAMMABLE SPEEDS** Coarse or fine, full range
- **ELECTRONIC BRAKING** Rapid stop; FWD/REV; Electronic Lockout
- **2.4GHZ WIRELESS REMOTE** Real-time RPM display
- **DIGITAL INDEXING** 24 positions on-screen
- **DRYING MODE** Auto FWD/REV every 30 minutes
- **LOAD SPIKE DETECTION** Power limiter and speed algorithm
- **SLOW-START MODE** For large or unbalanced workpieces
- **USB + WIRELESS** Firmware updates and data connectivity
- **NO BELT/PULLEY** Zero transmission loss, whisper-quiet

03 / VERSATILITY & SPECIFICATIONS

BUILT AROUND HOW YOU WORK

Most lathes make you adapt to them. The NEUTRON doesn't. Its precision-machined cast iron headstock rotates a full 360° and slides the entire length of the bed - which means you can work inboard, outboard, left-handed, right-handed, or at any angle the project demands. Lock it anywhere, not just at preset positions.

"This design allows for a virtually unlimited range of setups, accommodating every turning scenario and technique."

HEADSTOCK

360° rotation, 22.5° detents	Slides full length of bed
1-1/4" x 8TPI or M33x3.5 ASR spindle	24-position digital indexing
Spindle lock with flywheel	Magnetic lamp mount surface
96mm vacuum chuck interface	Easy-swap motor, controller & HMI

TAILSTOCK

4.7" (120mm) quill travel	MT2, laser-marked scale
Scale for calipers & dovetail sizes	Strengthened 10mm locking handle
Trapezoid thread for smooth, consistent movement	

CONFIGURATIONS

NEUTRON - Hybrid Cast Iron & Steel Stand	
NEUTRON MAX - Cast Iron Stand	
NEUTRON or NEUTRON MAX with Bed Extension (44" between	
NEUTRON or NEUTRON MAX with outrigger (28" outboard capacity)	

STANDARD EQUIPMENT

9" Toolrest	130mm Faceplate
Manual	Knock Out Bar
2MT Live Center	2MT Spur Center
USB A-A Cable	Fastening Hardware

OPTIONAL ACCESSORIES

NOVA Chucks & Faceplates	Outrigger (28" outboard)
Bed Extension (40" between centers)	NOVA Modular Toolrest System

TURNING CAPACITY	
TURNING DIAMETER	17" (432mm) / 28" (711mm) with outrigger
BETWEEN CETERS	24" (610mm) / 44" (1118mm) with bed extension
HEADSTOCK	
SPINDLE THREAD	1-1/4" x 8TPI RH or M33x3.5 RH
SPINDLE TAPER	Morse Taper #2 (2MT)
HEADSTOCK SWIVEL	360° — detents every 22.5°
HEADSTOCK SLIDE	Full bed length
SPINDLE INDEX	24 divisions (15° apart)
TAILSTOCK	
QUILL TAPER	Morse Taper #2 (2MT)
QUILL TRAVEL	4.7" (120mm)
QUILL DIAMETER	1-3/8" (35mm)
MOTOR & COTROL	
MOTOR TYPE POWER	DVR Direct Smart Drive
OUTPUT SPEED	2HP (240V) / 1.75HP (110V)
RANGE	50–5,000 RPM
INPUT VOLTAGE	110/240V
DISPLAY	4.3" TFT Colour Touchscreen
WIRELESS	2.4GHz remote with speed display
TOOLREST	
REST	9" (229mm)
POST	1" (25mm)

