Over the last decade, the editors of *Woodcraft Magazine* have seen and reviewed a multitude of new products. Some simply represented an attempt to build a better mousetrap, but a few have made fresh impressions on the woodworking world, and we’re betting that they are likely to continue making ripples for years to come.

While dozens of products deserve kudos, here, we have winnowed our list to the top 10. These items deserve special mention not only for making woodworking faster, easier, and safer, but also for their likely impact on future tool and product innovations. Even for those whose woodworking feet are firmly planted in tradition, no one can deny that these tools have broken new ground.

**Top 10 Game-Changing Tools of the Past 10 Years**

Woodworkers are constantly looking for ways to improve accuracy. In the past, this typically meant combining experience with various qualitative methods and maybe a few pricey tools.

Today, digital meters and gauges offer a shortcut to hair-splitting accuracy by giving woodworkers the ability to measure their work and calibrate machinery to the third decimal point. Compared to earlier precision measuring tools such as Vernier gauges and calipers, digital tools are simple to use and easy to read (a blessing for older eyes). This has really helped woodworkers home in on the detail of the craft, allowing precise assessment of joint tolerances, machine setups, and even hand tool operations. As production costs continue to drop, manufacturers are sure to develop digital upgrades for myriad other woodworking accessories and operations.

**#1 Better woodworking “by the numbers”**


When it comes to the often tricky craft of woodturning, Easy Wood Tools (EWT) wins the “Keep It Simple” award. While traditional turning tools require that the user “ride the bevel,” Easy Wood Tools (EWT) takes a much easier approach. To use one of these innovative tools, you simply hold it flat and level on the rest, advance the cutter into the workpiece, and let the shavings fly. EWT tool’s carbide tips solve another primary obstacle to beginning turners: sharpening. Taking a cue from sawblade and router bit industries, EWT outfits their tools with carbide tips. According the manufacturer, carbide lasts up to 20 hours longer than high speed steel. And when the edge

**#2 A fresh spin on turning tools**

Easy Wood Turning Tools ($59.99-129.99)
Brand new battery, motor, and charger technologies have allowed some manufacturers to now employ lighter-weight, lower-voltage batteries without cutting runtimes. For example, Milwaukee’s 18V, 7¼" circular saw and Festool’s 14.4V, Ti 15 Hybrid Drill/Driver outperform cordless tools twice their size. Their brushless motors, lithium batteries, and chargers are designed to work together, monitoring the motors and batteries in order to optimize performance and control overheating. Based on the performance of these tools, you can expect to see more heavy-duty tools—such as mitersaws and routers—“cut the cord” in the years ahead.

Milwaukee M18 7¼" Cordless Circular Saw, $329
Festool Ti 15 Impact Drill/Driver, $525

For those who have felt the pain that comes when perfectly-adjusted planer or jointer knives hit a hard knot or grain of sand, relief is in sight. The latest generation of planers and jointers now sport cutterheads that have dozens of machined pockets that accept small multi-sided cutters. When a cutter becomes dull or gets damaged, simply loosen a screw and turn the cutter to expose a fresh edge. No additional setup is required. Another plus: segmented cutterheads create less tearout when machining figured woods.

In the last few years, many higher-end machines have come equipped with segmented cutterheads, and replacement cutterheads are available for older machines. Today, segmented cutterheads are starting to filter down to more affordable machinery. We’re hoping that this upgrade becomes a standard option on many more machines in the near future.

Steel City Planer, $499.99
Laguna 8" Wedgebed Jointer, $1945
Jet 12" Planer/Joiner, $3364

Mortise and tenon joinery ranks as one of the strongest means of attaching parts, but cutting these joints can be time-consuming and may require an elaborate set-up. That changed in 2007, when Festool introduced the Domino, a handheld machine designed to combine the simplicity of biscuit joinery with the strength of loose-tenon joinery. Unlike router-cut mortises that require an up/down and side-to-side tool operation, the Domino DF500 and larger XL DF 700 employ a patented oscillating cutter mechanism that plunge-cuts the mortise to depth, and then moves from side-to-side to create a perfect mortise as you simply press the tool into the work.

In terms of speed, precision, strength, and size, no other mortiser comes close. Thanks to the Domino, furniture

Festool Domino DF500Q, $850
Festool Domino XL DF700, $1,250

Photos 1, 2, 3: Larry Hamel-Lambert; 4, 5: Manufacturer
Water-based finishes have finally established a reputation for being less odorous and easier to use than oil-based finishes. Today, many outperform their oil-based competition. According to the manufacturers’ tests, General Finishes’ High Performance finish (a polyacrylic blend) is the hardest, most durable consumer polyurethane topcoat on the market. This clear finish contains a UV stabilizer that protects underlying stains from fading and prevents the cured finish from breaking down in sunlight. Enduro Var is an oil-modified alkyd varnish in a water-based formula that dries fast and cleans up with water, yet it imparts the desirable amber tone of an oil-based varnish.

On the other side of the coin, safer products exist for removing finishes, too. Soy gel removes multiple layers of paint, urethane, acrylic, epoxy, or enamel, but does not emit toxic fumes, and can be cleaned up with water.

Modern pocket-hole joinery was born in the latter half of the 1900’s, and has proven to be an easy, affordable, and effective method of fastening cases, face frames, and other parts without having to wait for glue to dry. Recent developments by manufacturers have made the job even easier. The wide variety of jigs and accessories now available enable production shops and DIYers to select the tools they need to tackle ever larger projects such as cabinets, and furniture without an arsenal of clamps, complicated setups, or heavy machinery.

### #6 Finishing and stripping without a mask

- **General Finishes Enduro-Var**, $29.99/qt.

### #7 Solid, stone-simple joinery

- **Kreg Foreman**, $399, **Kreg R3**, $39.99
A decade ago, CNC (computer numerical control) machines existed almost exclusively in commercial shops. Today, affordable tabletop models have sparked purchases by a significant percentage of small-shop woodworkers as a complement to their array of shop machines and hand tools. Many beginners are adopting CNC’s because the machines enable them to rout precise inlays, cut out perfectly fitting project parts, and take on projects they previously avoided because they lacked the carving skills or tools.

CNC machines require a learning curve, but that may not be such an impediment in an age where many of us can set up a computer faster than we can fettle a plane. So stay tuned; CNC-inspired technology is already appearing on other machines, including router table lifts and fences, and mitersaw stations.

### Motors with brawn AND brains

A Digital Variable Resistance (DVR) motor is a direct-drive motor that relies on electromagnets instead of brushes. A micro-computer controls spindle speed and torque by switching these magnets on and off, eliminating the need for belts or pulleys. With the Nova lathe, the DVR motor constantly senses load and adjusts torque to maintain your desired RPM, even at super-low speeds. In addition to speed control and higher torque, a DVR’s use of magnets instead of rotors and brushes means that there are fewer parts to wear out.

In the next year, Technatool plans to launch a DVR drill press that can slow a bit as it breaks through the back of your workpiece to reduce tear-out, and even shut down the unit if it senses that you’ve accidentally left your chuck key in the chuck. You can bet you’ll see this technology in tablesaws and other critical machines in the future.

### Finger-Saving Saws

Unlike most woodworkers, Steve Gass refused to accept the notion that woodworking must be dangerous. In 2004, Gass introduced the world to SawStop’s flesh-detecting technology, and proved that it is possible to be faster than a spinning sawblade. In 1/200th of a second, the sensor detects fleshy contact and then triggers the brake to stop and drop the blade—often leaving the would-be victim with barely a scratch. Since its inauguration, SawStop tablesaws have saved thousands of digits. Aside from the safety advantage, SawStop’s standard features rank it as one of the best tablesaws in today’s market.

(Fun factoid: The company performs its now-famous “hotdog demonstration” almost 1,000 times each year.)