



Home Improvement

POWER TOOLS REVIEW

Circular Saws • Drills • Impact Drivers • Jigsaws • Sanders • Bench-Top Tools • Compressors

The latest power tools put more savings and versatility in your hands. Manufacturers increased run time, and new hybrid tools allow you to perform multiple tasks. Plus, you'll encounter a new twist on how to operate cordless screwdrivers.

By Drew Vass

To say you'll encounter a battery of changes when you shop for power tools in 2013 is both a literal and figurative interpretation of what manufacturers have done to their products in the past 2 years.

Literally speaking, the newest batteries that are used for cordless power tools drive their products 33 percent longer than do the batteries that had the most capacity 2 years ago. Figuratively speaking, the newest power tools usher in a new generation of versatility and control. A new crop of hybrid products allows you to use more tool heads than ever before on the same body, so you can do more than just drill, hammer

and saw with the same tool. Also new are cordless screwdrivers that you operate with a twist of the wrist rather than the press of a trigger, which is a feature that likely will arrive on other power tools in the years ahead.

BATTERY LIFE. Today's power-tool batteries typically have a maximum of 18–20 volts, but their capacity, which is measured in amp-hours (Ah), continues to increase. As a result, the run time for power tools that use the newest lithium-ion batteries is longer than ever before.

In 2011, no power-tool battery had a capacity of more than 3 Ah. However, at press time, 12 out of 17 power-tool manufacturers offered 4-Ah batteries that can be used to power multiple

products, and three other manufacturers are expected to add such batteries in the months ahead. Furthermore, Metabo says it will introduce a 5.2-Ah battery in 2014.

Experts say it's impossible to pin down how long that most power tools run per amp-hour. Nonetheless, battery experts confirm that under identical working conditions and with the same tool, a 4-Ah battery should last 33 percent longer than a 3-Ah battery does before charging is required. Based on our

hands-on evaluations, we found the experts' take to be reasonable.

Another benefit is that large-capacity batteries should have a longer life span than do batteries that have less capacity, experts tell Consumers Digest. Lithium-ion batteries are designed to serve 300–500 charge cycles (depending on the quality of their cells), battery experts say. So, a 3-Ah battery will have to be replaced sooner than a 4-Ah battery will, because the 4-Ah battery runs

longer between each charge.

Before you get too amped about the newest battery capabilities, you should know that you'll pay at least \$30 extra for a 4-Ah battery compared with a 3-Ah battery and \$50 more for a 4-Ah battery than you would a 2-Ah battery. Furthermore, the run time of most 4-Ah batteries outlasts the demands of most homeowners and do-it-yourselfers, says Jayson Serrault of Batteries Plus, which sells and rebuilds batteries for power

✓ Best Buys in Drills, Impact Drivers & Random-

Best Buy Categories

- [P]=Premium selection
- [M]=Midrange selection
- [E]=Economy selection



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Best Buys in drills, impact drivers and random-orbit sanders were selected based on performance, ergonomic design, manufacturer reputation and warranty.

Manufacturers of corded drills don't publish a drill's torque, which is the best measure of a drill's power. *No-load speed* represents a drill's speed when no force is applied and can help to determine which materials a drill is best suited to handle. However, no-load speed isn't a reflection of a drill's power.

All Best Buy corded drills have an 8-foot power cord and an 8-amp motor.

All Best Buy cordless drills come with two batteries and a charger. All listed weights include a battery. Unless otherwise noted, the warranties for drills and batteries are the same.

All Best Buy corded random-orbit sanders have a 3-year warranty. *rpm*=revolutions per minute; *bpm*=blows (or impacts) per minute; *NiCd*=nickel cadmium; *NA*=not available.

Best Price is a reflection of the lowest retail price that was available at press time and is subject to change.

CORDED DRILLS

[P] **MSRP: \$262; Best Price: \$139**
 >> The is a repeat Best Buy selection, because it's the

least expensive 8-amp drill that has a 5-year warranty and a one-half-inch keyless chuck, which means that you can use larger drill bits on this model than you can on models that have a smaller chuck.

Features:

- * No-load speed: 0–850 rpm
- * Weight: 5.6 lbs.
- * Chuck: 1/2-in. keyless
- * Warranty: 5 yrs.

[M] **MSRP: \$100; Best Price: \$99**

>> The which was called the is a repeat Best Buy selection, because it's the least expensive 8-amp drill that has a one-half-inch chuck. We found that this model's keyed chuck system has a more solid grip than does that of all other models that we evaluated that are in this price range. The chuck that's on other midrange models occasionally slipped or failed to secure bits tightly when we used them.

Features:

- * No-load speed: 0–850 rpm
- * Weight: 5.0 lbs.
- * Chuck: 1/2-in. keyed
- * Warranty: 3 yrs.



[E] **MSRP: \$60; Best Price: \$60**

>> The is the least expensive 8-amp drill that's on the market, and it has a higher speed rating than does any other model that's in this price range. Based on our hands-on evaluations, this drill powers large auger bits faster and more easily than do other economy models and doesn't bog down at low speeds, which other models do.

Features:

- * No-load speed: 0–2,700 rpm
- * Weight: 5.2 lbs.
- * Chuck: 3/8-in. keyless
- * Warranty: 3 yrs.

CORDESS DRILLS

[P] **MSRP: \$279; Best Price: \$279**

>> The outperformed every other cordless drill that we evaluated. We found that this model delivers the most power at all speeds, and it's the only model that doesn't bog down when it's pressed as hard as possible to drive an auger bit. The side handle that's on other models gets in the way of their clutch-setting mechanism and makes it difficult to access and turn, but this model's clutch-setting mechanism is unobstructed and easy to turn.

Features:

- * Battery: 18-volt lithium ion
- * No-load speed: 0–1,850 rpm
- * Torque: 725 in.-lbs.
- * Weight: 4.9 lbs.
- * Chuck: 1/2-in. keyless
- * Warranty: 5 yrs.; 3 yrs. battery



[M] **MSRP: \$149; Best Price: \$129**

>> The is the least expensive 20-volt model that we found that has a one-half-inch chuck. This model delivers the most power of any model that we evaluated that's in this price range. This model's clutch setting is the easiest to adjust and the smoothest to operate among all of the midrange models that we evaluated.

Features:

- * Battery: 20-volt lithium ion
- * No-load speed: 0–1,600 rpm
- * Torque: NA
- * Weight: 3.5 lbs.
- * Chuck: 1/2-in. keyless
- * Warranty: 3 yrs.

[E] **MSRP: \$80; Best Price: \$69**

>> No other model that's in this price range delivers more torque and operates more smoothly in heavy drilling than the does. Although its body is bulky compared with that of all other cordless drills, we found that this

tools. In other words, if you're anything less than a weekend warrior, buying power tools that have a 2-Ah battery should serve you just fine, experts say.

DO-ALL BE-ALL. Manufacturers increasingly offer power tools that are designed to let you cut, drill and fasten all with the same tool, via interchangeable parts. Although Black & Decker introduced this concept in the late 1990s with a pistol-shape tool that had attach-

ments that allowed you to drill, sand and saw, models that Black & Decker and Craftsman brought to market in 2011 modify the pistol-shape concept and increase the number of attachments. Ridgid and Ryobi also introduced hybrid tools in 2010 and 2011, respectively, that are based on flashlight-shape multitool products.

You can remove the drill/driver head that's on Black & Decker and Craftsman hybrid tools and use optional at-

tachments that turn the tools into an impact driver, a jigsaw, an oscillating multitool that allows you to cut, scrape and sand materials, a router, a sander or a trim saw. Craftsman also has attachments that allow you to drill into brick or concrete or to inflate tires.

The primary difference between Black & Decker's Matrix and Craftsman's Bolt-On hybrid tools, compared with Black & Decker's first hybrid tool, is that the
(Continued on page 78)

Orbit Sanders

model is more balanced and has the most comfortable grip.

Features:

- * Battery: 18-volt NiCd
- * No-load speed: 0-1,400 rpm
- * Torque: 400 in.-lbs.
- * Weight: 4.6 lbs.
- * Chuck: 1/2-in. keyless
- * Warranty: 1 yr.

CORDLESS IMPACT DRIVERS

[P] *(Model name obscured)*
MSRP: \$349; Best Price: \$329
>> No other model delivers a better combination of power and compact size than the *(Model name obscured)* does. This model's short driver head allows it to fit into tighter spaces than would any other impact driver, such as between wall studs or floor joists that are spaced closely. We found that this model also drives large lag bolts that are at least one-half inch in diameter faster and more smoothly than any other model does.

Features:

- * Battery: 20-volt lithium ion



- * No-load speed: 0-2,850 rpm
- * Torque: 1,500 in.-lbs.
- * Force: 0-3,300 bpm
- * Weight: 3.6 lbs.
- * Warranty: 3 yrs.

[M] *(Model name obscured)*
MSRP: \$279; Best Price: \$279
>> The *(Model name obscured)* is a repeat Best Buy selection, because it delivers superior performance among models that we evaluated in this price range. Although this model is slightly bigger than other mid-range models are, we found that it drives large lag bolts faster and more easily than do other midrange models.

Features:

- * Battery: 18-volt lithium ion
- * No-load speed: 0-2,200 rpm
- * Torque: 1,400 in.-lbs.
- * Force: 0-3,200 bpm
- * Weight: 3.5 lbs.
- * Warranty: 5 yrs.; 3 yrs. battery

[E] *(Model name obscured)*
MSRP: \$129; Best Price: \$129
>> The *(Model name obscured)* is the least expensive 18-volt lithium-ion-powered cordless impact driver that we found. This model drives large lag bolts more quickly and more steadily than do other models that are in this price range. This model is sold exclusively at Home Depot.

Features:

- * Battery: 18-volt lithium ion
- * No-load speed: 0-2,600 rpm
- * Torque: 1,500 in.-lbs.
- * Force: 0-3,200 bpm
- * Weight: 2.6 lbs.
- * Warranty: 3 yrs.



CORDED RANDOM-ORBIT SANDERS

[P] *(Model name obscured)*
MSRP: \$114; Best Price: \$114
>> The *(Model name obscured)* is a repeat Best Buy selection, because it's the least expensive 6-inch, 4-amp sander that has a trigger switch, which allows for easy on/off control. This model also is the only sander that we found that has a switchable one-eighth-inch (for fine sanding) or one-fourth-inch (for finish removal) sanding pattern; a soft-start motor, which prevents gouging; and a two-position front handle that can be adjusted for individual preference.

Features:

- * Power: 4.0 amps
- * No-load speed: 4,000-10,000 rpm
- * Random-orbit action: 1/8 in., 1/4 in. (diam.)
- * Height: 8-13/16 in.
- * Paper: 6-in., 8-hole, hook-and-loop
- * Trigger switch: Yes

[M] *(Model name obscured)*
MSRP: \$100; Best Price: \$100
>> The *(Model name obscured)* is a repeat Best Buy selection, because we found it to be smoother to operate and quieter than are other models that

are in this price range. Unlike other midrange sanders, this model has a full rubberized top, which makes it easy to grip the tool from any angle.

Features:

- * Power: 3.5 amps
- * No-load speed: 7,000-12,000 rpm
- * Random-orbit action: 3/32 in. (diam.)
- * Height: 4 in.
- * Paper: 5-in., 8-hole hook-and-loop
- * Trigger switch: No

[E] *(Model name obscured)*
MSRP: \$59; Best Price: \$59
>> The *(Model name obscured)* is a repeat Best Buy selection, because it's the least expensive 3-amp model that we found. This model is smaller and has a better ergonomic design than do other models that we evaluated in this price range. These features make this model easier to grip and more comfortable to operate than are other economy models.

Features:

- * Power: 3.0 amps
- * No-load speed: 12,000 rpm
- * Random-orbit action: 3/32 in. (diam.)
- * Height: 5-3/4 in.
- * Paper: 5-in., 8-hole hook-and-loop
- * Trigger switch: No

For more information about the above Best Buys, contact the manufacturers directly. See page 68.

Best Buys in Circular Saws, Jigsaws, Table Saws

Best Buy Categories

- [P]—Premium selection
[M]—Midrange selection
[E]—Economy selection



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Best Buys in circular saws, jigsaws, table saws and compound miter saws were based on performance, ergonomic design, ease of setup and adjustments, manufacturer reputation and warranty.

All Best Buy corded circular saws have a 10-foot power cord and a 3-year warranty. All Best Buy cordless circular saws and jigsaws include a battery and a charger. All Best Buy cordless circular saws have a 3-year warranty for tool and battery. All Best Buy corded jigsaws have a 6-amp motor. All Best Buy table saws have a 15-amp motor.

spm=strokes per minute.

Best Price is a reflection of the lowest retail price that was available at press time and is subject to change.

CORDED CIRCULAR SAWS

[P] **MSRP: \$179; Best Price: \$170**
 >> The is a repeat Best Buy selection, because we found that it cuts best and is the easiest to operate among all of the models that we evaluated. Compared with all of the other corded circular saws that we evaluated, this model's unique front-mounted depth-control hardware is the easiest to view and to operate, and its adjustment mechanisms are sturdier than are those of other models.



Features:

- * Power: 15 amps
- * No-load speed: 5,800 rpm
- * Weight: 12.3 lbs.
- * Bevel: 0-50 degrees

[M] Porter-Cable

MSRP: \$90; Best Price: \$90

>> The is a repeat Best Buy selection, because it's the lightest 15-amp circular saw that we found, and we found that it cuts more quickly, quietly and smoothly than does any other model that we evaluated that's in this price range. This model's grip is the most comfortable, and its blade-depth-setting hardware is the sturdiest among midrange models.

Features:

- * Power: 15 amps
- * No-load speed: 5,600 rpm
- * Weight: 9.5 lbs.
- * Bevel: 0-55 degrees

[E]

MSRP: \$60; Best Price: \$60
 >> The is a repeat Best Buy selection, because we found that it's the most powerful and smoothest-cutting saw that's in this price range. This model provides more torque than other economy models do and cuts through tough materials, such as medium-density fiberboard and solid oak, better than do other economy models.

Features:

- * Power: 13 amps
- * No-load speed: 5,000 rpm
- * Weight: 11.7 lbs.
- * Bevel: 0-45 degrees

CORDESS CIRCULAR SAWS

[P] **MSRP: \$399; Best Price: \$396**
 >> The is a repeat Best Buy selection, because it's the only cordless circular saw that has a 7-1/4-inch blade. As a result, this model performs



long cuts, such as ripping sheets of plywood, better than does any other cordless circular saw that we evaluated. This model also is the only 36-volt model that has a 3-year warranty.

Features:

- * Battery: 36-volt lithium ion
- * No-load speed: 4,000 rpm
- * Weight: 9.9 lbs.
- * Bevel: 0-50 degrees

[M]

MSRP: \$249; Best Price: \$229
 >> The is the most powerful model that we found in this price range. You'd have to spend at least an extra \$110 to buy a cordless circular saw that operates at a higher voltage than this model does. Based on hands-on evaluations, we found that this model cuts more smoothly and with greater speed than does any other midrange model.

Features:

- * Battery: 20-volt lithium ion
- * No-load speed: 3,700 rpm
- * Weight: 8.3 lbs.
- * Bevel: 0-50 degrees

CORDED JIGSAWS

[P] **MSRP: \$265; Best Price: \$265**
 >> The is a repeat Best Buy selection, because it's the best jigsaw that we evaluated. We found that this model cuts more smoothly and quickly and with greater maneuverability than any other corded or cordless jigsaw does. This model's 13-foot cord means that it has the longest reach of any corded jigsaw that we evaluated.

Features:

- * No-load speed: 1,000-2,900 spm
- * Weight: 5.1 lbs.
- * Power cord: 13 ft.
- * Warranty: 3 yrs.

[M]

MSRP: \$100; Best Price: \$90
 >> The cuts more smoothly and quickly than does any other corded jigsaw that we evaluated in this price range. This model also makes it easier to load blades than it is on any other corded jigsaw that we evaluated, because it's the only model that we found that requires no levers or other mechanisms to load the blade.

Features:

- * No-load speed: 500-3,100 spm
- * Weight: 5.0 lbs.
- * Power cord: 8 ft.
- * Warranty: 1 yr.



[E]

MSRP: \$70; Best Price: \$70
 >> The is a repeat Best Buy selection, because we found that it cuts more smoothly and quickly than does any other corded jigsaw that's in this price range—particularly when it comes to cutting curves. This model also is the only corded jigsaw that we evaluated that has an easy-to-operate lever-based bevel adjustment; all other economy models require the use of a hex key for you to adjust the bevel.

Features:

- * No-load speed: 0-3,200 spm
- * Weight: 5.4 lbs.

& Compound Miter Saws



- * Power cord: 8 ft.
- * Warranty: 3 yrs.

CORDLESS JIGSAWS

[P] *MSRP: \$399; Best Price: \$329*

>> The _____ cuts better than does any other cordless jigsaw that we evaluated. This model also is the only cordless jigsaw that we found that requires no levers or other mechanisms to load blades, which makes it much easier to load blades than it is on other models.

Features:

- * Battery: 18-volt lithium ion
- * No-load speed: 0-2,700 spm
- * Weight: 5.3 lbs.
- * Warranty: 1 yr.

[M] *MSRP: \$279; Best Price: \$259*
>> You'd have to spend at least an extra \$120 to buy a model that has more power than the DC-

_____ does. This model also is the only cordless jigsaw that's in this price range that allows you to adjust the bevel without a tool.

Features:

- * Battery: 20-volt lithium ion
- * No-load speed: 0-3,000 spm
- * Weight: 6.8 lbs.
- * Warranty: 3 yrs.

BENCH-TOP TABLE SAWS

[P] *MSRP: \$550; Best Price: \$550*

>> Among all of the table saws that we evaluated, we found that the _____ is the easiest to

assemble, set up and operate. This model's bevel adjustment and deck extension operate the most smoothly and with more ease than does that of any other table saw that we evaluated.

Features:

- * No-load speed: 3,650 rpm
- * Table dimensions: 29 in. (w) x 20-29/32 in. (d)
- * Weight: 60.0 lbs.
- * Bevel: -2-47 degrees
- * Warranty: 1 yr.

[M] *MSRP: \$250; Best Price: \$250*

>> The _____ is the only model that we found that allows you to adjust the bevel setting by pressing and turning the blade-height-setting dial, which makes its bevel-setting hardware easier to adjust and fine-tune than is the bevel-setting hardware that other midrange models have. The clamp handle that's on this model's fence is larger and easier to set than are those that are found on other midrange models that we evaluated.

Features:

- * No-load speed: 5,000 rpm
- * Table dimensions: 25 in. (w) x 19-5/8 in. (d)
- * Weight: 63.6 lbs.



- * Bevel: 0-45 degrees
- * Warranty: 1 yr.

[E] *MSRP: \$149; Best Price: \$159*
>> The _____ is the least expensive model that we found that has a 520-square-inch table, which is nearly 100 square inches larger than is that of any other model that's in this price range. We found that this model's motor runs more smoothly and more quietly than does that of other economy models, and its bevel and rip-scale settings are the easiest to read among economy models that we evaluated.

Features:

- * No-load speed: 5,000 rpm
- * Table dimensions: 26 in. (w) x 20 in. (d)
- * Weight: 34.1 lbs.
- * Bevel: 0-45 degrees
- * Warranty: 3 yrs.

BENCH-TOP COMPOUND MITER SAWS

[P] *MSRP: \$450; Best Price: \$450*
>> The _____ is the least expensive double-bevel sliding compound miter saw that has a 5-year warranty. Based on our hands-on evaluations, this model is easier to set up and to operate than is any other double-bevel sliding model that we evaluated.

Features:

- * Power: 12 amps
- * No-load speed: 3,800 rpm
- * Weight: 43.0 lbs.
- * Blade: 10-in., sliding
- * Bevel: 0-45 degrees right, 0-45 degrees left
- * Warranty: 5 yrs.

[M] *MSRP: \$300; Best Price: \$250*
>> The _____ is the least expensive double-bevel compound miter saw that has a 12-inch blade and a 5-year warranty, as well as a unique dial-based system that allows you to adjust the bevel angle



by twisting a knob. Among all of the models that we evaluated in this price range, this model's deck is the largest and steadiest, and its motor produced the least vibration during cutting.

Features:

- * Power: 15 amps
- * No-load speed: 4,000 rpm
- * Weight: 46.3 lbs.
- * Blade: 12 in.
- * Bevel: 0-48 degrees right, 0-48 degrees left
- * Warranty: 5 yrs.

[E] *MSRP: \$119; Best Price: \$100*
>> The _____ is the sturdiest model that we evaluated in this price range. For instance, this model's pivot joint is made out of thick metal; the pivot joint that's on other economy models is made out of a thinner metal or plastic. As a result, we found that this model's saw is more stable and more secure to operate than are other economy models that we evaluated.

Features:

- * Power: 15 amps
- * No-load speed: 5,000 rpm
- * Weight: 25.0 lbs.
- * Blade: 10 in.
- * Bevel: 0-47 degrees
- * Warranty: 3 yrs.

For more information about the above power tools Best Buys, contact the manufacturers directly. See page 68.

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gears for the Matrix and Bolt-On series are built into the tool attachments rather than the tool body. As a result, Matrix and Bolt-On attachments are designed to operate more like a dedicated tool than were the attachments that were on Black & Decker's first hybrid tool.

Black & Decker's Matrix series tool system comes in 12-volt, 20-volt and

corded models that cost \$50, \$70 and \$68, respectively. Craftsman's Bolt-On series comes in a 20-volt (\$120) and a corded (\$60) model. Each attachment costs at least \$25.

Ridgid's JobMax and Ryobi's Job-Plus hybrid tools come with an attachment for a standard oscillating multi-tool. Additional attachments allow you to turn the tool into a drill/driver, an im-

compact driver, a jigsaw, a nailer, a ratchet or a reciprocating saw. Ridgid's hybrid tools come in models that are 12-volt (\$99), 18-volt (\$150) and corded (\$79). Ryobi's hybrid tool is available only as an 18-volt model that's sold without a battery or charger (\$70). You'll pay at least \$40 for each attachment.

Hybrid tools deliver a cost-savings
(Continued on page 80)

✓ Best Buys in Air Compressors

Best Buy Categories

[P]=Premium selection

[M]=Midrange selection

[E]=Economy selection



SEE PAGE 80

Best Buys in air compressors were selected based on performance, ease of use and warranty.

Light-duty models have an output rating that's up to 5 standard cubic feet per minute (SCFM) at 90 pounds per square inch (psi) or less and are suited for use with pneumatic nail guns. Moderate-duty models have an output rating that's higher than 5 SCFM at 90 psi and less than 10 SCFM at 90 psi and are suited for use with pneumatic nail guns as well as some pneumatic sanders and drills.

Unless otherwise noted, all Best Buy selections have wheels.

The motor's power rating is given in *running horsepower* (rhp), which is the horsepower that's generated when the air compressor runs at normal settings.

Best Price is a reflection of the lowest retail price that was available at press time and is subject to change.

LIGHT DUTY

[P] **MSRP: \$349; Best Price: \$349**

>> No other light-duty air compressor delivers better performance than the **does**. The combination of this model's 4.5-gallon tank, 200-psi maximum pressure and output rating of 5.0 SCFM means that it's capable of delivering more air over a longer period of time than any other light-duty model does.

Features:

- * Output: 5.0 SCFM
- * Tank capacity: 4.5 gal., 200 psi max
- * Motor: 1.6 rhp
- * Warranty: 1 yr.

[M] **MSRP: \$299; Best Price: \$299**

>> The **is** the least expensive and lightest model that we found that has an output of at least 4.9 SCFM and a 3-year warranty. No other nonwheeled air compressor has more versatility than this model does. You can remove the compressor and its compact tank from the two main tanks to tackle smaller jobs, such as inflating tires.

Features:

- * Output: 4.9 SCFM
- * Tank capacity: 5.0 gal., 150 psi max
- * Motor: 1.6 rhp
- * Warranty: 3 yrs.

[E] **MSRP: \$129; Best Price: \$129**

>> The **is** the least expensive model that has wheels and an output rating of 4.0 SCFM, which allows it

to power pneumatic nail guns longer between compression cycles than do other air compressors that are in this price range. You'd have to spend an additional \$129 to get a model that has a higher output rating than this model has. This model also is the least expensive air compressor that we found that has a 2-year warranty, which is rare among economy models.

Features:

- * Output: 4.0 SCFM
- * Tank capacity: 8.0 gal., 125 psi max
- * Motor: 1.5 rhp
- * Warranty: 2 yrs.

MODERATE DUTY

[P] **MSRP: \$799; Best Price: \$755**

>> The **has** the highest running horsepower and output rating of any moderate-duty portable air compressor that we found. We also like the design of this model: Its twin cylinders can be moved like you would a wheelbarrow, which makes this model easier to move on gravel or other uneven worksite surfaces than other moderate-duty air compressors are.

Features:

- * Output: 7.0 SCFM
- * Tank capacity: 9.0 gal., 135 psi max
- * Motor: 3.0 rhp
- * Warranty: 1 yr.

[M] **MSRP: \$524; Best Price: \$530**

>> The **is** the least expensive 1.9-rhp air compressor that has an output of at least 6.0



SCFM. You'd have to spend an extra \$186 to buy another model that has more running horsepower than this model does, and you'd have to spend at least an extra \$275 to buy another model that has a higher output rating than this model has.

Features:

- * Output: 6.0 SCFM
- * Tank capacity: 27.0 gal., 155 psi max
- * Motor: 1.9 rhp
- * Warranty: 1 yr.

[E] **MSRP: \$299; Best Price: \$299**

>> No other moderate-duty air compressor that's in this price range delivers a better combination of air output, running horsepower and tank capacity than the **does**. In addition, you'd have to spend an extra \$131 to buy a moderate-duty model that weighs less than this model does (124 pounds).

Features:

- * Output: 5.1 SCFM
- * Tank capacity: 33.0 gal., 165 psi max
- * Motor: 1.7 rhp
- * Warranty: 2 yrs.

For more information about the above Best Buys, contact the manufacturers directly. See page 68.



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advantage over buying each tool separately. If you bought the Black & Decker BDCDMT120, which comes as a drill/driver, along with a jigsaw attachment and a multitool attachment, you'd pay \$140, which is half as much as what you'd pay to buy the least expensive model of each tool separately.

However, if you aim to perform high-quality work, such as making furniture, professionals say you should pay extra for separate tools instead of buying a hybrid tool. That's because the power and speed fall short of that of stand-alone tools in some functions.

A NEW TWIST. Black & Decker and DeWalt now offer cordless screwdrivers that control their direction and speed through the use of a gyroscope that's inside of the tool. Gyroscopic controls mean that no switch exists to control the screwdriver's motion (forward or reverse), and no trigger exists to adjust the speed. You just twist your wrist in the direction that you want the screwdriver to turn, and the tool head automatically moves in that direction.

Black & Decker introduced the BDCS40G 4-volt screwdriver (\$40) in October 2012; DeWalt (a Stanley Black & Decker brand) unveiled the DCF680 8-volt screwdriver (\$99) in June 2013.

Based on hands-on evaluations, we found that gyroscopic controls allow you to fine-tune the variable speed of the drill more precisely than you can with power screwdrivers that have traditional controls. However, we found that the screw wobbled out of position and off the driver bit when the driver bit that's on Black & Decker's screwdriver wasn't planted firmly into a screwhead. Gyroscopic controls worked best when we loosened or tightened screws that already were fastened. In other words, for gyroscopic controls to work their best, you'll have to get a good grip. ●

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What Is A Best Buy?



A CONSUMERS DIGEST Best Buy is a product that delivers exceptional value for a given amount of money. That doesn't mean that it's simply the least expensive product that's in its category. A Consumers Digest Best Buy is one that merits special attention from consumers based on its combination of eight criteria: performance, ease of use, features, quality of construction, warranty, efficiency, styling, and maintenance and service requirements. Because virtually all product categories cover a range of prices, there's no such thing as *the* Best Buy, in practical terms.

Of course, every product category includes many excellent, worthwhile products, but some of these we don't deem Best Buys, because their high price relative to competitive models excludes them from consideration. For us, value is defined via a simple equation: perceived quality divided by cost. Consequently, price (the manufacturer's suggested retail price, specifically—not retail prices) is a key consideration in selecting our Best Buys. As perceived quality increases and cost remains the same, value increases; likewise, as perceived quality remains the same and cost decreases, value also increases.

The process for selecting Consumers Digest Best Buys is rigorous. It begins with identifying all of the products that are available to U.S. consumers in a particular category. Often that list is long (50–100 models). We call it the product universe. All model information must derive from manufacturers, not retail, website or other sources. Manufacturers represent the most reliable source. On average, only a small percentage of all products that we evaluate are deemed Consumers Digest Best Buys.

The first step in evaluating products for Best Buy consideration is to ensure that they meet four basic criteria: national availability in retail stores or via an established online retailer; a national dealer network/service organization to support repairs/service; a manufacturer of established reputation (unless it's part of a genuinely new technology); availability for at least 6 months after the publication date of Consumers Digest's Best Buy recommendation.

The products that meet these criteria are then assessed based on the eight specific criteria listed above. This assessment is carried out in numerous ways: hands-on use; review of independent evaluation/testing; review of reports from government agencies and others; interviews of retailers and service technicians; review of evaluations from other entities. Our research methodology is based on using a product as it was designed to be used in real life. Many are the situations where Consumers Digest staff samples numerous models to include first-hand experience in the overall evaluation of various models in a category. These have included assembling and using 25 different outdoor grills; putting a half-dozen carpet cleaners through their paces; and assessing the security of entry-door locks in terms of their resistance to being picked.

When all of the hands-on evaluation, where applicable, and all other research is complete, the number of products that are under consideration for recommendation is dwindled to a select few. These are grouped by price range, because products come at multiple prices and consumers have different price levels at which they define value. The products that we ultimately deem Best Buys typically will be classified into three categories: [P] Premium selection, which denotes that a product is full-featured and delivers excellent performance but is priced accordingly; [M] Midrange selection, which indicates that a product has many desirable features and good performance at a price that's below the top of the line for the category; and [E] Economy selection, which means that a product delivers satisfactory performance via basic features at an advantageous price for cost-conscious consumers.

Every product-category evaluation is spearheaded by Consumers Digest senior editors. On each product evaluation, at least one expert evaluator/writer is hired to collaborate. In the automotive category, for example, six experts whose experience totals 137 years' coverage of autos contribute to our ultimate recommendations in 12 categories of cars, pickups, minivans, SUVs and hybrids.