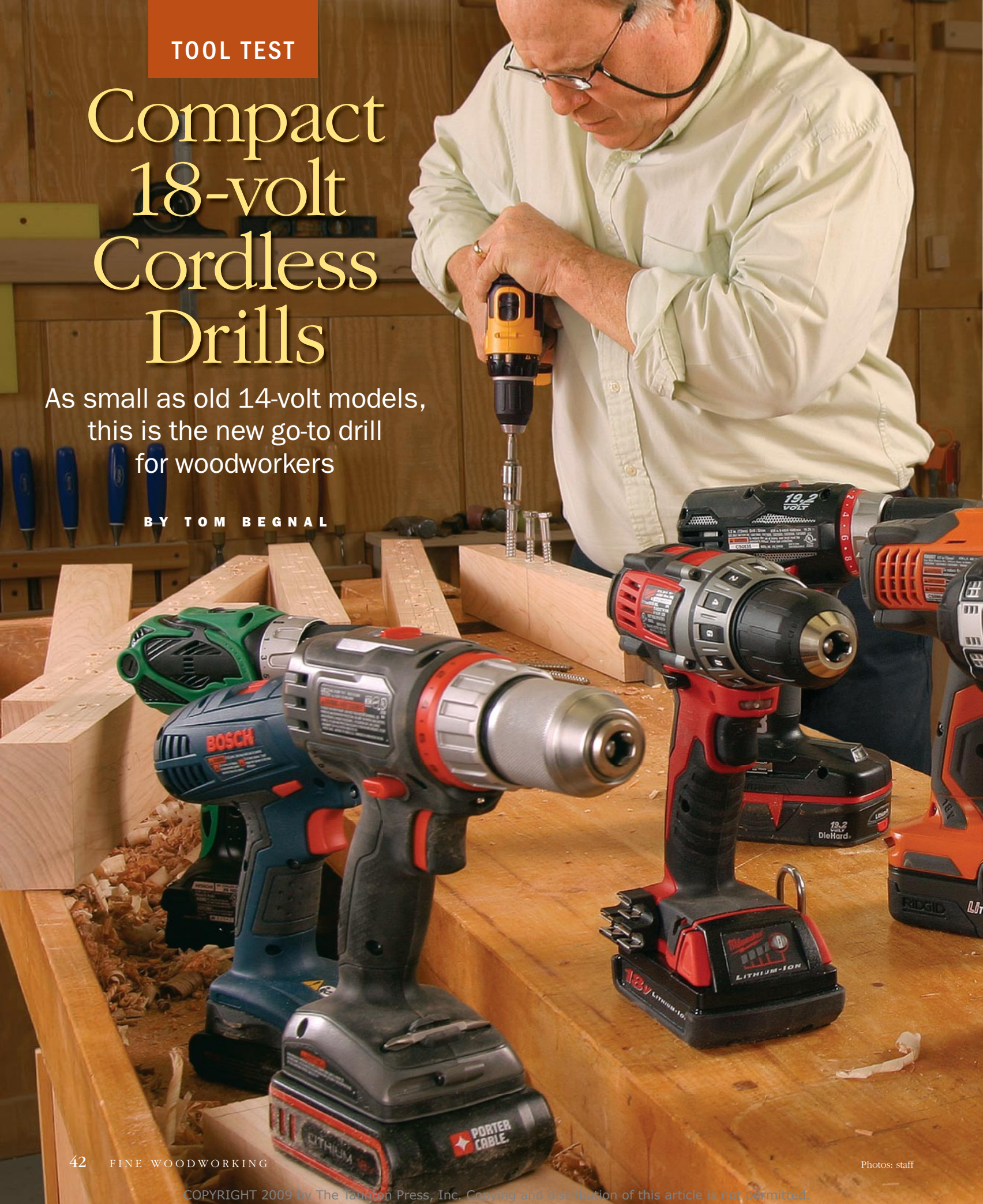


TOOL TEST

# Compact 18-volt Cordless Drills

As small as old 14-volt models,  
this is the new go-to drill  
for woodworkers

BY TOM BEGNAL





Cordless drills and salad dressing have something in common. When you go shopping for them, the choices seem endless. Indeed, you can find more than 100 cordless-drill models on the market, and while some are me-too products, many have a unique place in the food chain.

With a host of features and power levels to consider, it's challenging to find the single category of drill best suited not only for your workshop/furniture-making needs, but also for the many other miscellaneous home-improvement projects that every woodworker does. The ideal do-it-all drill would be compact, so it's easier to get inside small cabinets and other tight spots. It would be relatively lightweight, to be easy on the hands and arms, while allowing the control you need to drive the smallest of screws. But it would also have the power for all those odd jobs that require more muscle, such as building a shed, deck, or picket fence.

### Compact 18-volt drills do it all

So I set about looking for cordless drills that were compact, light, and powerful. I hit that trifecta with a relatively new class of drills—compact 18-volt models powered by lithium-ion batteries. These are lighter and smaller than other 18-volt drills past and present, even lighter and smaller than the 14.4-volt models *Fine Woodworking* has favored in the past. And they have power for almost any big task.

I now consider 18-volt lithium-ion cordless drills to be the new go-to drill for woodworkers.

I ended up with 10 of these new drills in the shop. The Craftsman has a 19.2-volt battery; the others are 18-volt.

Except for the Skil, which had a 3/8-in. chuck and one battery, the drills had

1/2-in. chucks and came with two lithium-ion batteries. All included a battery charger. Extra batteries for all the drills are available separately.

### Choosing a champ

I tested the drills for power, battery life, and control. The Makita had strong scores across the board, making it my best overall. It's reasonably priced, so I also consider it a best value.

*Tom Begnal is an associate editor.*



Old 18-volt drill

## New batteries are the key

Thanks to lithium-ion batteries and smaller bodies, this new class of 18-volt drills is easier to handle yet has almost as much power as its larger 18-volt ancestors.

New 18-volt drill



**Less is more.** These new drills can get into places other 18-volt drills can't.



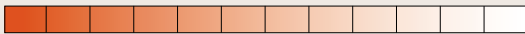
**Plenty of power.** These compact drills send lag screws home without any fuss.



# Real-world tests

Begnal used real drilling and driving tasks to reveal the top performers.

## TORQUE



Begnal used each drill to drive six 3/8-in.-dia. by 3-in.-long lag bolts into hard maple. A well-undersize (3/16-in.-dia.) pilot hole ensured that all the drills would stall at some point before being able to fully drive the bolts. Then he measured the exposed length of the six bolts to see how far they had been driven. After recharging the batteries, he repeated the test. The rating in the chart is based on the average of 12 bolts.



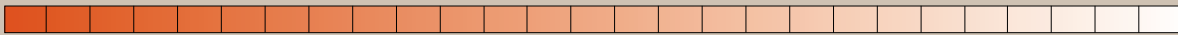
## RUN TIME



To compare the battery life, Begnal used a 1 1/2-in.-dia. spade bit to bore as many holes as he could through 1-in.-thick red oak on a single battery charge. Then he compared the hole counts. The test was repeated twice.



## CLUTCH



When using the clutch to drive a bunch of same-size screws, it's annoying when some screw heads end up deep while others are shallow. So, Begnal drove ten 1 5/8-in.-long sheetrock screws into 2-in.-thick MDF and adjusted the clutch to see how consistently each drill could drive screws flush with the surface. All did a good job, so he left this factor out of the chart.

## Online Extra

To watch a video of our battery-life test and torque test, go to [FineWoodworking.com/extras](http://FineWoodworking.com/extras).



**BOSCH**  
36618-02



**CRAFTSMAN**  
11910

MODEL/SOURCE	STREET PRICE	WEIGHT
<b>Bosch 36618-02</b> <a href="http://www.boschtools.com">www.boschtools.com</a>	\$205	3 lb. 9 oz.
<b>Craftsman 11910</b> <a href="http://www.craftsman.com">www.craftsman.com</a>	\$180	3 lb. 11 oz.
<b>DeWalt DCD760KL*</b> <a href="http://www.dewalt.com">www.dewalt.com</a>	\$230	3 lb. 10 oz.
<b>Hitachi DS18DSAL</b> <a href="http://www.hitachi.com">www.hitachi.com</a>	\$180	3 lb. 4 oz.
<b>Makita BDF452HW</b> <a href="http://www.makita.com">www.makita.com</a>	\$200	3 lb. 6 oz.
<b>Milwaukee 2601-22</b> <a href="http://www.milwaukeetool.com">www.milwaukeetool.com</a>	\$190	3 lb. 15 oz.
<b>Porter-Cable PCL180DK-2</b> <a href="http://www.deltaportercable.com">www.deltaportercable.com</a>	\$180	3 lb. 12 oz.
<b>Ridgid R86007</b> <a href="http://www.ridgid.com">www.ridgid.com</a>	\$190	4 lb. 4 oz.
<b>Ryobi P815</b> <a href="http://www.ryobitools.com">www.ryobitools.com</a>	\$170	3 lb. 12 oz.
<b>Skil 2895LI-02</b> <a href="http://www.skiltools.com">www.skiltools.com</a>	\$110	3 lb. 12 oz.

**BEST OVERALL CHOICE**  
**BEST VALUE CHOICE**

\*available in October 2009





DEWALT  
DCD760KL\*



HITACHI  
DS18DSAL



MAKITA  
BDF452HW

AUTHOR'S  
CHOICE  
**BEST OVERALL**

AUTHOR'S  
CHOICE  
**BEST VALUE**



MILWAUKEE  
2601-22

LENGTH	CHARGE TIME (MINUTES)	TORQUE	BATTERY LIFE	COMFORT	COMMENTS
9¼ in.	21	Fair	Good	Very good	Fastest charge time. Clutch is a bit weak at its highest setting.
9 in.	47	Fair	Excellent	Good	Best battery life—makes up for long charge time.
8½ in.	35	Excellent	Good	Very good	Second-best torque.
8¼ in.	36	Very good	Good	Excellent	Lightest. Most comfortable. Clutch is a bit weak at its highest setting.
8½ in.	25	Excellent	Very good	Very good	Best torque. Second lightest. Third-best charge time. Second-best battery life.
8¼ in.	40	Fair	Fair	Very good	Second heaviest, but very compact. Worst battery life.
9¼ in.	23	Good	Good	Very good	Not as compact as others. Second-fastest charge time.
8 in.	28	Very good	Very good	Very good	Shortest length, but heaviest. Third-best torque.
8¾ in.	49	Very good	Good	Good	Second-longest charge time.
9¼ in.	80	Fair	Good	Very good	Best price by far, but smallest (¾-in.) chuck. Short battery life and long charge time.



PORTER-CABLE  
PCL180DK-2



RIDGID  
R86007



RYOBI  
P815



SKIL  
2895LI-02