

# Lie-Nielsen Low-angle Jack Plane

Quite possibly the perfect plane.



Photo by Al Parrish

I've used many different planes, but none is as versatile, easy-to-use and robust as the Lie-Nielsen low-angle jack plane.

This 14"-long plane is based on the collectible Stanley #62 plane, which has not been manufactured since the 1940s. Unless you're a collector, there is little reason to seek out the old Stanley version because it's more expensive and less durable than the Lie-Nielsen, which sells for \$225.

Essentially the low-angle jack plane is what would happen if you wedded a block plane with a bench plane. You have the mass and length of a jack plane, but you also have the simpler mechanism, adjustable throat and bevel-up blade design of a block plane.

For beginners especially, the combination is hard to beat. Here's why:

The standard Bailey-style bench plane has more adjustments than the low-angle jack. While these adjustments allow for more finesse among advanced users, they also make the tools more difficult for beginners to use.

For example, if you're working with figured wood and want to close up the mouth of a bench plane to reduce tear-out, you have to adjust the plane's "frog" forward. (The frog is the chunk of machined metal that supports the tool's blade.) This operation involves a screwdriver and sometimes requires disassembling the tool. With the low-angle jack plane, there is no frog to adjust. All you

do is unscrew the front knob a bit and adjust a lever to open or close the mouth.

Another advantage of the low-angle jack's design is that the cutting bevel of the blade faces up, unlike a bench plane where the bevel faces down and has a chipbreaker.

If you purchase a couple of replacement blades for this plane, you can grind different cutting angles on the blades to make your plane do some amazing tricks. The stock blade has a 25° bevel and sits in the plane at 12°. Add those two numbers together and you have a 37° cutting angle (also called the "pitch"). This pitch is great for end grain and decent for most long-grain planing.

Grind a 33° bevel on the blade and the plane will have a standard 45° pitch (33° plus 12° equals 45°). Grind a 38° bevel and you have a high-angle pitch of 50°, which is great for planing difficult woods. Grind off the bevel entirely at 90° and you have a scraper plane. There's no way you could do that with a Bailey-style bench plane without some major modifications.

So what can you use this plane for? In the modern power-tool workshop, this plane can handle a lot of chores. It's great for planing down doors and drawers to fit (the low pitch of the blade is great for the end grain of door stiles and drawer fronts). You can remove saw marks from the edges of boards.

You can even use it as a smoothing plane to remove the machining marks from the faces of your boards. Hand-tool purists might turn up their noses at this notion and say you need a shorter smoothing plane for this operation because it gets into the hollows of the board. But I've found that if you surface

## SPECIFICATIONS

### Lie-Nielsen Low-angle Jack Plane

Street price: \$225

**Nice features:** Easily adjustable mouth; exceptionally durable ductile-iron body; and the tool can be modified easily to do many different workshop operations.

**Recommended modifications:** Buy a couple of extra blades to see what this tool is capable of with different cutting angles.

Lie-Nielsen Toolworks: 800-327-2520 or [lie-nielsen.com](http://lie-nielsen.com)

your lumber with a power jointer as well as a planer, it's flat enough for this plane to work rather well as a smoother.

No matter how you use this plane, you'll find that it exceeds your expectations. The machining is impeccable. The cherry knob and tote are perfectly formed and comfortable to use. And the exceptional way the blade has been heat-treated allows it to take and keep a superior edge. The body is made of unbreakable ductile iron (standard gray iron planes can shatter if you drop them) and the blade cap is bronze.

With almost every tool I own there is always something small I wish was improved or a bit different. But that's not so with the low-angle jack, which I've been using for more than three years. As the handles of this tool patinate with age and the blade gets progressively shorter, I find it more and more useful. And I occasionally wonder how I ever did without it. PW

— Christopher Schwarz

**ABOUT OUR ENDURANCE TESTS** Every tool featured in our Endurance Test column has survived at least two years of heavy use in the *Popular Woodworking* shop.