

The Nashville Sound— Plating for Music's Stars

For most guitarists and guitar lovers, the name Gibson brings to mind quality and innovation in electric guitars. For more than 100 years, the high standards set by Orville Gibson, the company's founder, have been more than specifications. Quality has become a tradition that has made Gibson the most famous name in electric guitars. The hand-crafted care used to make each instrument is evident in every step of manufacturing. The plating process for the metal hardware receives the same careful attention as all other areas. If it's going to be used on a Gibson, it has to be right.



Gibson USA, Nashville, TN, makes electric guitars that are used by musicians all over the world. Among those who play or have played Gibson guitars are B.B. King, the Beatles, Aerosmith, Chet Atkins, Guns N' Roses, Pearl Jam, and guitar pioneer Les Paul, who designed a Gibson model in the 1950s. That model developed into the company's most popular series and carries the famous entertainer's name. Whether country, jazz, blues or rock, most of the great stars have played a Gibson.

In the early 1980s, recession took its toll on many companies, and Gibson was no exception. Then owned by Norlin Industries, the company's reputation began to slip. "The company had become too sluggish and inefficient," said John Higgins, senior buyer for the Nashville plant. "In 1986, it was purchased by a team of new owners, headed by Henry Juskiewicz and David Berryman, who were willing to try new things. A lot of changes took place, and we made a transformation on the same order of Harley-Davidson (U.S. makers of the Harley-Davidson motorcycles). We started to pay attention to the things that made Gibson successful in the first place," Higgins said.

This Les Paul Standard, "Jimmy Page Signature" guitar has many of the same features as the Les Paul Classic Plus outlined in the accompanying table.



Special control buttons were made depicting "Gibson 100" for use on the Gibson Centennial Collection. This photo shows how buttons appeared before (left) and after plating with 24-karat gold.

A People Company

Gibson practices total quality management (TQM) throughout the plant, and many of the company's suppliers also subscribe to TQM practices.

Emphasis is placed on teamwork, and the company hosts family-oriented activities throughout the year. The concept has resulted in a working-family atmosphere at the plant.

"We really are the Gibson family," Higgins said. "It's that kind of close-knit relationship between employees, and extending to include families of employees, that makes our entire staff very special. Many are musicians, so it's more than just a job for them."

The family concept has worked so well that suppliers are now included in the company's inner circle. Suppliers are encouraged to visit the plant, attend company functions, discuss production with employees, and become more involved with the company's mission. "We've found that the more our suppliers know about us, the better job they can do for us. And, it makes it easier to work with suppliers that you know. When I call a supplier with a problem, I want an answer in 10 minutes," Higgins said.

What's So Special About a Gibson?

"Gibson quality comes with a lifetime warranty," says Higgins. "They're made to perform and last. We only use the highest quality materials and we know that if the quality is there in

our products, our products will always be in demand."

Wood is the primary material in the guitars. The company uses only the best mahogany and curly maple available for the bodies and necks. Rosewood and ebony are used for fretboards (fingerboards). Wood is purchased from areas all over the world, and each piece is selected to meet Gibson's requirements.

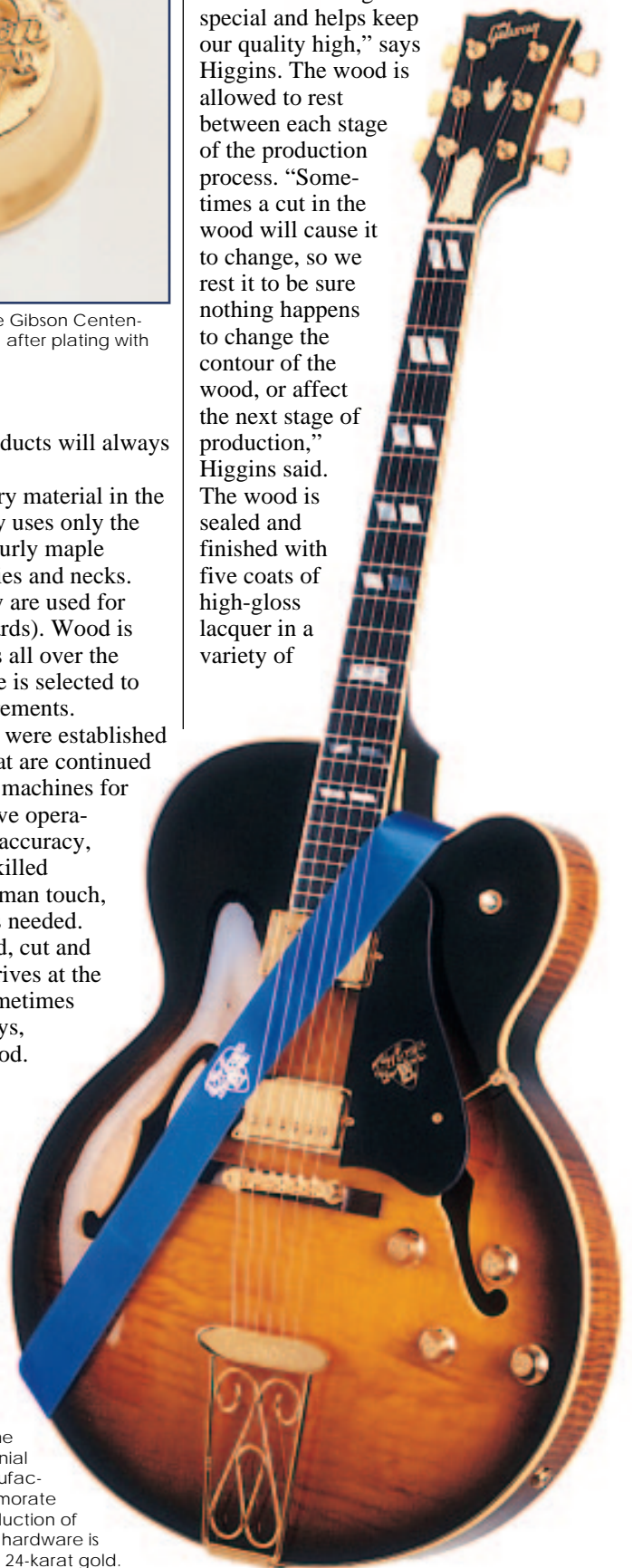
Two basic policies were established by Orville Gibson that are continued today: Buy or invent machines for dangerous or repetitive operations requiring great accuracy, and employ highly skilled workers when the human touch, or a musician's ear is needed.

The wood is planed, cut and kiln-dried when it arrives at the plant. Drying can sometimes take as long as 10 days, depending on the wood. Tops and backs are matched and glued together to produce "blanks."

Precision machines are used to cut each blank into the desired shape for a particular kind of guitar body or

neck. From there, each step of the manufacturing process is mostly completed by hand. "It's that individual, hand-crafted touch that makes each guitar special and helps keep our quality high," says Higgins. The wood is allowed to rest between each stage of the production process. "Sometimes a cut in the wood will cause it to change, so we rest it to be sure nothing happens to change the contour of the wood, or affect the next stage of production," Higgins said.

The wood is sealed and finished with five coats of high-gloss lacquer in a variety of



A limited number of the Gibson Centennial Collection was manufactured in 1994 to commemorate 100 years of production of Gibson guitars. The hardware is plated with 24-karat gold.

colors, depending on the model.

The material for all parts in the hardware of Gibson guitars is specified and manufactured only for Gibson, according to Higgins. "Any variation will affect the sound of the guitar, so we are very particular about quality and consistency," he said.

At each stage of the manufacturing process, the parts are checked and re-checked. Each finish goes through a series of inspections. When complete, each guitar is checked, tuned, and played by a guitarist on staff. It has to be perfect. Every guitar produced in the plant is given a final check by a seasoned guitar player. If it passes inspection, it becomes a Gibson.

Metal Finishing

Because he likes to work closely with all suppliers, Higgins stays with companies that consistently deliver high quality. He uses only two metal finishers for plating hardware—Electro Chemical Finishing, Inc., Wyoming, MI; and Advanced Plating, Nashville, TN. Both are jobshops that have enjoyed a long relationship with the guitar maker.

Some of the parts are made of zinc diecast, while others are made of brass, depending on its use. The metal pickup covers are made of a proprietary alloy.

Other plated parts include tail pieces, jack plates, and ABR bridges that were initiated by Gibson. In the music industry, the company is known for innovation and a willingness to try new things.

The basic finishes required for parts are gold, silver, nickel and chromium. Some models, however, are available with black chromium hardware.



The Fall 1995 edition of Gibson's Les Paul Classic comes in a variety of colors. The user-friendly features make it the most popular model produced by the company.

The Les Paul® Classic Premium Plus

The 1960 Les Paul Standard was the first Gibson to feature the modern "slim taper" neck. With a thickness graduation of only about a tenth of an inch from the first fret to the twelfth, while maintaining a precisely controlled width-to-thickness ratio, the "slim taper" neck promotes speed while reducing player fatigue. For this reason, many players consider the 1960 Standard the best version of the Les Paul.

The Les Paul Classic Premium Plus features the 1960 neck pattern and blends it with a select grade AAA, two-piece flamed maple top on a solid mahogany back.

Features

- Slim-taper '60 neck specs
- Hot ceramic magnet Gibson pickups
- Premium grade AAA, bookmatched maple top

Pickups: Rhythm: 496-R ceramic magnet HB

Treble: 500 T ceramic magnet HB

Controls: Two-volume, two-tone, 3-way switch

Hardware: Nickel

Scale/Nut width: 24 3/4 in./1.6875 in.

Fingerboard/inlay: Rosewood, 22 frets/
"Aged" Trapezoid inlay

Neck shape: 1960 "slim taper" LP

Binding: Body/Neck

Bridge/Tailpiece: Tune-o-matic/stop bar

Material: Two-piece grade AAA figured maple top

Mahogany back

Mahogany neck

Finish: Heritage Cherry Sunburst, Honey Burst, Translucent
Amber, Translucent Red, Translucent Purple, Vintage
Sunburst.



Advanced Plating owners Sheri and Steve Tracy pose in the lobby of their shop, where a number of refinished antique car parts processed at the facility are displayed.

Advanced Plating

At Advanced Plating in Nashville, owners Steve and Sheri Tracy say that preparation of parts is the key to the quality finish required by Gibson. “We do a lot of polishing, cleaning and buffing,” says Steve Tracy.

All parts go through an alkaline soak cleaner, and are hand-cleaned with toothbrushes prior to being plated with copper. The shop uses a cyanide-copper solution because it provides the best results. The copper finish is polished to eliminate imperfections, and to remove excess deposits that could keep parts from fitting properly. After buffing and inspection, the part goes through another alkaline cleaning process, a mild acid etch and bright nickel, followed by the final finish of either gold, silver, or chromium. Only 24-karat gold plating is used. Each part is plated by hand, except for screws and nuts, which are barrel-plated to match the colors of the hardware they will be used with.

“I consider Gibson’s requirements to be a jewelry-type fin-

ish,” said Tracy, whose primary business is built around plating parts for antique automobiles. “It’s very high-quality and requires a lot of hand work.”

Electro Chemical Finishing

About 75 percent of Gibson’s hardware is plated at Electro Chemical Finishing, which has two jobshops in Wyoming, MI. The shop that finishes guitar parts processes only high-quality plating with an all hand-dipped process. The plant has more than 200 customers and also handles a variety of parts for the federal government.

Electro Chemical’s Betty Painter says the company has been plating Gibson parts for many years. “We go way back, so Gibson is a very special customer for us,” she said. Founder Orville Gibson started his business in Kalamazoo, MI, in 1894, so the company has had close ties to the area for years.

Electro Chemical provides mostly gold, nickel or chromium finishes for the guitar parts. Plating thickness varies, depending on the part, with

some of the gold deposited at up to 10 mil. Last year, the jobshop plated the special centennial hardware in 24-karat gold that was used on the limited Gibson Centennial Collection guitars—some of which are priced at more than \$200,000.

Electro Chemical also plates parts for Gibson’s other plants. Tobias and Steinberger guitars are made in Nashville, where the company’s Custom Shop is also located. Two plants are located in Bozeman, MT—Gibson’s Acoustic Factory that makes acoustic guitars, and Gibson’s Flatiron Factory that makes banjos and mandolins. Another plant is located in California, where Dobro guitars are manufactured.

Both plating shops provide Gibson with parts that meet its high standards. Higgins says all parts on a Gibson must be polished smooth, free of blemishes and pits, and without manufacturing marks. The final shape and size of the parts are also critical, because they must fit and operate properly.

“We’ve worked with both of our platers for a long time,” Higgins says. “They know what we expect, so we have very few rejects. If we do have a problem, they’re always here to fix it.”

They Just Get Better

Good music is the real drive behind Gibson guitars, but there is something to be said for their value as collector items. They appreciate over time.

When Gibson introduced the first Les Paul model in the 1950s, little did the company know that it would become the standard of the industry. That first model sold for \$240 each. Today, those same guitars, in good condition, are selling for \$50,000–\$100,000. Even Gibson guitars that are only a few years old will sell for as much or more than their original purchase price.

“Remember, our guitars come with a lifetime warranty,” says Higgins. “If a part ever does wear out, we replace it free. That’s why we put so much care and quality into the construction. If you take care of a Gibson, it just gets better with time.” ee

