KENTUCKY MANDOLINS ... in Japan



Ryohei Tahara presides as master luthier at the Kentucky factory in Maruko.



New mandocellos designed by John Monteleone await completion.



The Monteleone-designed DAWG series has a distinctive peghead shape.

By Wade Hampton Miller

ARUKO IS A small town in the heart of the Japanese Alps, within the Nagano Prefecture — a region noted for its low humidity and other conditions favorable for instrument-building. Ten of Japan's major guitar manufacturers have plants in the region, including Ibanez, Morris, Fender Japan, and Aria. But it is also here that the best Kentucky brand mandolins are made.

Saga Musical Instruments [P. O. Box 2841, South San Francisco, CA 94080], Kentucky's parent company, has two other factories in Japan building the lower-priced Kentucky models. However, their finest carved-top and carved-back instruments are produced at the Maruko plant, beginning with the KM600 Astyle mandolin and the KH600 A-style mandola, and going up through the KM-DAWG series designed by American luthier John Monteleone.

There's a picture planted in the American imagination, depicting the typical Japanese factory as a huge, cavernous place with hordes of uniformed employees singing the company song, living in company housing, with children attending company schools. That stereotype is far from the realities of operations at the Kentucky Mandolin factory.

The building itself is small. Although the sign outside announces "The Kentucky Mandolin & Guitar Manufacturing Co.," no guitars are made here — only mandolins and a handful of banjos. "We were trying to go back to the 'Golden Age' of instrument building," Saga president Richard Keldsen explains, "and back in the '20s Gibson was called the 'Gibson Mandolin & Guitar Manufacturing Company,' That's the era we wanted to recreate."

To someone used to large, bustling factories, the plant seems more like a workshop, with little in the way of power tools or automation. There is a tidy little front office, a storeroom for drying wood, two main workrooms, and a lacquering booth — all comprising a floor space of about 5,000 square feet. Upon enter-

ing, the American visitor is struck by the presence of both the familiar and the unfamiliar; the familiar being the comfortable clutter of instrument parts and tuners and pinups on the wall, the unfamiliar being the distinctive Japanese tools (such as the nokogiri saws and kanaa planes), and the teapot steaming away on the kerosene room heater.

There are four luthiers at the Maruko plant, and they alone build the thirty mandolins a month that the Maruko plant produces. Rather than being responsible for a specific area of production, each man will work on any phase of the construction. Any phase, that is, except the lacquering, which is done by Shigenori Tahara, shop supervisor and son of the company's founder. His father is Ryohei Tahara, acknowledged as the first man to build quality carved top mandolins in Japan. Tahara-san, as the elder luthier is respectfully known, is "semi-retired" now, which means that he only works for several hours every day. This is called "coming by to help."

The senior Tahara began his instrument building career after World War II. He had built guitars and mandolins for fun as a teenager, before going into the military, and this early fascination stayed with him. Upon his discharge from the service he turned down an offer of a teaching job, preferring to build instruments, It was around this time that he obtained an old Kay mandolin. He made a copy of it and took it around to the big music stores in Tokyo, hoping to drum up some orders. His offers were rudely declined. "There's no market for this junk," he was informed.

So from 1947 to 1967, Tahara built guitars and string basses instead. He marketed them under the "Genken" ("String Laboratory") brand name. But in 1967, as bluegrass music became increasingly popular in Japan, Tahara decided to return to his first love, the mandolin. He began production of the "Jumbo" brand mandolins, which quickly became the most popular line in Japan. Prior to the introduction of these Gibson copies, all mandolin production in Japan was limited to classical Neapolitan-

KENTUCKY MANDOLIN











From top: Bending machine used to prepare mandolin sides; blocks and sides before and after gluing in a wooden form; master wood-carver Eiichi Sumi scraping the binding on a mandolin scroll; Sumi cleaning up a finished instrument prior to shipping.

style roundback instruments. Japanese pickers found the roundbacks woefully inadequate for bluegrass, and so when the Jumbos were introduced, their acceptance was immediate.

Sales were up, business was good, and the company grew to offer a range of instruments extending from plywood A-style models up through F-style models with carved tops and backs. Then catastrophe struck in the form of a bad check, for a huge figure, from a wholesaler who was going bankrupt. The financial repercussions forced Tahara to close his factory and declare bankruptcy himself.

Undeterred, Tahara-san came to Maruko and built the small factory that is now the Kentucky plant. He brought with him his son Shigenori and another luthier, Tsuyoshi Aruga. It is Shigenori who is credited with bringing about the decision that the new firm would concentrate on premium grade mandolins. They were joined by Eiichi Sumi, a graduate of one of the famous woodcarving schools located in the Maruko area. Sumi had become intrigued with the idea of mandolins as functional, musical sculptures in wood. The fledgling company began by building one model only, a Gibson F-5 copy called the "Grassland," sold strictly to the domestic Japanese market.

In 1978 Richard Keldsen visited the plant, accompanied by associate Tom Hosokawa of Saga Japan. They contracted with the Taharas to begin making mandolins under the Kentucky label, for export to the United States. Keldsen assisted the product development by sending technical information on mandolin construction, and a visitor to the factory today is likely to see a well-worn copy of Roger H. Siminoff's book How To Build A Bluegrass Mandolin [Hal Leonard Publishing Corp., 8112 West Bluemound Road, Milwaukee, WI 53213] near the workbench.

From the outset, the Maruko factory limited its Kentucky production to high-end mandolins. As the instruments' popularity increased in the U. S., more and more of the factory's production was devoted to the American market, and correspondingly less was devoted to Grassland models. Finally, in December 1982, Saga bought the factory outright.

Currently, there are eleven models produced at the Maruko plant: The KM600 and KM900 model mandolins; the KH600 A model mandola; the KM1000 F-style mandolin; the KM1500 mandolin, an F model with tone bars slightly longer than those on the KM1000; the KMDAWG mandolin, KHDAWG mandola, and KKDAWG manocello, all designed by John Monteleone [Frets, Apr. '81] (who personally supervised the start-up of their production); and the new KH1300 F-mandola and an as yet unnumbered F model mandocello.

The materials for the Kentucky mandolins come from all over the world. The tops are made of Sitka spruce, shipped in log form from the Pacific Northwest to the port city of Nagoya and then brought to a sawmill in Nagano Prefecture, where the cutting is supervised by the senior Tahara.

The spruce, which has been aged for at least two months prior to being cut into bookmatched blanks, is allowed to age for another four months before the matching pieces are glued together with Titebond glue. These soundboard blanks are aged another two months before being shaped with the Japanese kanaa planes, (which operate on a pullstroke instead of a push-stroke) into roughcut tops. Another six months passes before each top is shaped further, this time with both the kanaa and scrapers, into a semi-finished state, and yet another three to four months pass before the top is considered seasoned enough.

The backs and sides of all Kentucky Master Model mandolins are of curly maple, obtained from the same forest in upper Michigan where Lloyd Loar [Frets, July '79], Gibson's celebrated acoustic engineer in the mid-'20s, bought maple for the instruments produced under his supervision. The wood is boardcut in the U.S. and aged a minimum of four to five months before being shipped to Japan, where it is further aged 27 months.

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Ebony for fretboards comes from India, already cut into blanks. It is dried in that form for a year, then cut to size and seasoned for another year before use. The aged mahogany for the neckblocks comes from Honduras. Fretwire and tuners for the instruments are produced in Japan. The tuners on the Master Model series have a patented reverse-gear design, duplicating with modern materials the hardware used on mid-'20s Gibsons.

The construction of a Kentucky mandolin begins when Tahara-san starts to carve the spruce blank that will become the top. Using kanaa and scrapers, he works with a basic idea of how thick the top should be, varying each soundboard according to the characteristics of its wood. As he carves, he stops and tests his progress by tapping the top and listening to the tone it produces. After all the aging spells are past, the last thing he does before the final carving is to glue the tone bars in place (this alters the shape of the top).

The tone bars are two long, slender pieces of wood, running lengthwise along the under side of the soundboard. They serve not to brace the top structurally, but to transmit vibrations form the bridge to the further reaches of thge soundboard. At the Kentucky factory, the length of the tone bars depends on the model. On the DAWG models, the tone bars are 246mm long. On the traditional F-5 style instruments, they are 225mm long. (Monteleone feels that the longer tone bars transmit the sound better, making for a more balanced response.)

After the sides of a Kentucky mandolin are cut to shape, they are placed in boiling water for seven minutes, to soften the wood. Handled carefully with tongs, the sides are then put into a sidebending machine for another seven minutes. From there they go to a jig, where the headblock and tailblock are glued in, and then the kerfed mahogany lining is attached.

Now the top is glued to the sides. The luthiers use white glue for this step, because its drying time is longer than that of Titebond. This allows more time for getting the top positioned.

Meanwhile, the neck has been rough-finished. The fretboard has been shaped and is in place, but is not yet fretted; the peghead veneer has been attached and inlayed, and the binding has been inletted and glued. Now the neck is joined to the body, by means of a dovetail joint, and is affixed with hot hide glue. Tahara-san explains that the hide glue works better than does Titebond in binding the rougher planes of the dovetail together.

Next the back is glued on, and the excess mahogany in the inside curl of the scroll is cut out - first with an electric jigsaw, and then fine-carved by hand with knives and scrapers. Binding is glued to the sides and scraped smooth, and frets are installed in the fretboard. The instrument is now finish-sanded.

The mandolin is colored by hand, following a process outlined in the Siminoff book. Using alcohol-based stains, the luthiers apply color lightly at first, and then selectively build up deeper concentrations. The alcohol-based stain allows the color to actually work its way into the wood. Coloring is applied all over the instrument, with heavier emphasis out toward the body edges. To accentuate the "sunburst" motif, an alcohol-moistened cloth is used to remove some of the color from the center.

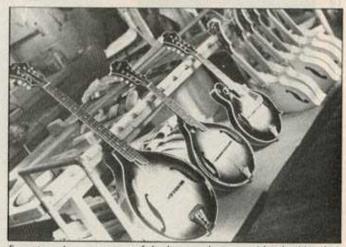
Shigenori is elegant and meticulous at the helm of his spray gun. He drops in the yellow of the sunburst with the first finishing coats. Four coats of color are applied with the gun before the coats of clear lacquer are started. Seven coats of clear nitrocellulose lacquer go on each instrument. Each coat is sprayed, allowed to cure overnight, and rubbed down by hand before the next is applied. The last coat is allowed to dry from three to seven days, depending on weather conditions. Then the instrument is rubbed down, fitted with its bridge and tuners, and strung.

In the future, Kentucky expects to build more mandolas and mandocellos in F model body styles. "Realistically, we don't expect to sell all that many mandocellos," says Keldsen. "They were developed because of the involvement of John Monteleone and David Grisman [Frets, Mar. '79, Feb. '81]. We're hoping that the people playing New Acoustic Music will pick up on them, and that they'll catch on with the Irish musicians as well.'









From top: An assortment of the kanaa planes used by the Maruko luthiers; Tahara-san cuts excess wood from a scroll; small spring clamps holds kerfed lining in place for gluing; finished DAWG modfrom left, A-style mandocello, A-style mandola, and KM-DAWG mandolin.



FRETS Looks At...

Kentucky KM-Dawg Mandolin

NEARLY THREE YEARS ago, in our May '80 issue, we looked at luthier John Monteleone's "Grand Artist" model mandolin. The distinctive instrument had become associated with "dawg music." innovator David Grisman, and Grisman's personal Grand Artist appeared on the cover of his poll-winning Quintet '80 album.

The plot thickened in April of last year, when in What's New we announced that Kentucky Mandolins and its U.S. distributor, Saga Musical Instruments (Box 2481, South San Francisco, CA 94080), were beginning production of the KM-Dawg model, by agreement with Monteleone

replicating all the characteristics of Grisman's album-cover Grand Artist. This month we are evaluating a KM-Dawg model from one of the first shipments out of Kentucky's workshop in central Japan.

Our sample instrument was shipped directly to us from Saga's San Francisco warehouse, in a plush-lined hardshell case. The instrument has a bookmatched Sitka spruce soundboard, with streamlined f-holes in the Monteleone style. Another Monteleone characteristic is the instrument's elongated scroll.

White/black purfling borders the soundboard, and the body corners are bound in grained ivoroid. The bookmatched back and the sides are curly maple and the back, like the top, is edged with white/black purfling. Curly maple also is used for the neck. Grained ivoroid binds the ebony fretboard. The binding is finished up to the fret ends. The scalloped fretboard extension is another Monteleone hallmark, and the fretboard itself is arched — following Grisman's preference.

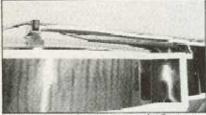
Single pearl-dot position markers appear at the 3rd, 5th, 7th, 10th, and 15th frets, with double dots at the 12th fret. Black dots appear in the binding at corresponding intervals. The nut is solid mother of pearl. Jet-black synthetic material is used to face the headstock, which is decorated by a vase-and-flowers inlay of brass wire and engraved mother of pearl. A pearl Kentucky logo appears above that.

The engraved gold-plated tuners are Saga's vintage-style reverse-gear models, with simulated pearl buttons. Two small gold screws secure the bell-shaped black plastic cover over the truss-rod nut pocket.

The back of the headstock, like the front, is overlaid with a thin veneer of jet black synthetic material. The front is edged in white/black purfling and bound with ivoroid. The headstock shape is similar to the Grand Artist motif, but its cleft top follows a design chosen by Grisman.

The adjustable ebony bridge has a com-

Instrument Checklist	
Model	
Retail price	
Hardshell case	\$129.00
Availability	dealers
Weight (on strap)	2 pounds, 7-1/2 ounces
Weight (in case)	9 pounds, 8 ounces
Back material	curly maple
Rim material	curly maple
Soundboard material	Sitka spruce
Neck material	curly maple
LIUMS ICHLASSICS CONTRACTOR	modestorus
Frethward material	abony
Fret height	
Bridge	ebony, adjustable
Tadpiece	Monteleone-style
Hardware	Sogo
Plating	sing, and a single sing
Scale length	
Neck width at nut	
Body width	10"
Body length	
Body depth	
Overall length	



An ebony arm (above) supports the finger-res



pensated saddle and small brass adjustment wheels. Two other pieces of hardware manifest the Monteleone influence. The free-standing black plastic finger-rest, which is supported by a single arm of ebony (projecting out from the fretboard extension), follows the same binding motif as the body, using white plastic in place of ivoroid. The finger-rest is designed to be easily detachable. Finally, there is the triple goldplated tailpiece, with its distinctive shape and rough-finished string-anchor bed. The ebony endpin has a single pearl dot.

Inside, we noted that the workmanship was very clean. The kerfed lining is mahogany. The body, neck, and headstock of the instrument are stained in a sunburst motif,



and the instrument is finished with a highgloss lacquer.

Critique

We were impressed by the general high level of craftsmanship represented by our sample KM-Dawg. In hands on playing, we found it to be a loud, bright instrument. However, we found that the structural tuning of its body had an E pitch — which we didn't judge to be a good choice, because the sympathetic resonance tended to give unwanted extra emphasis to A and E chords. We also felt that the backboard seemed stiff, and perhaps a trifle heavy, contributing to a slightly brittle edge on the tone and producing a bass end with less responsiveness than we would have liked. That caused us to take off some points on both tone and balance.

Manufacturer's Response

Saga Musical Instruments president Richard Keldsen replies, "When you get into mandolins in this price bracket, judgments about sound and tone color can become pretty subjective. We'd suggest that anyone interested in one of the KM-Dawg models try one out personally."

The paragraph above and chart below reflect the consensus of Frets editorial staff, based on our collective experience, on the sample instrument as reunval from the maker or supplies. The instrument was evaluated on its own merits and scored on commercial acceptability in today's market against other matuments in the same price (2006).

