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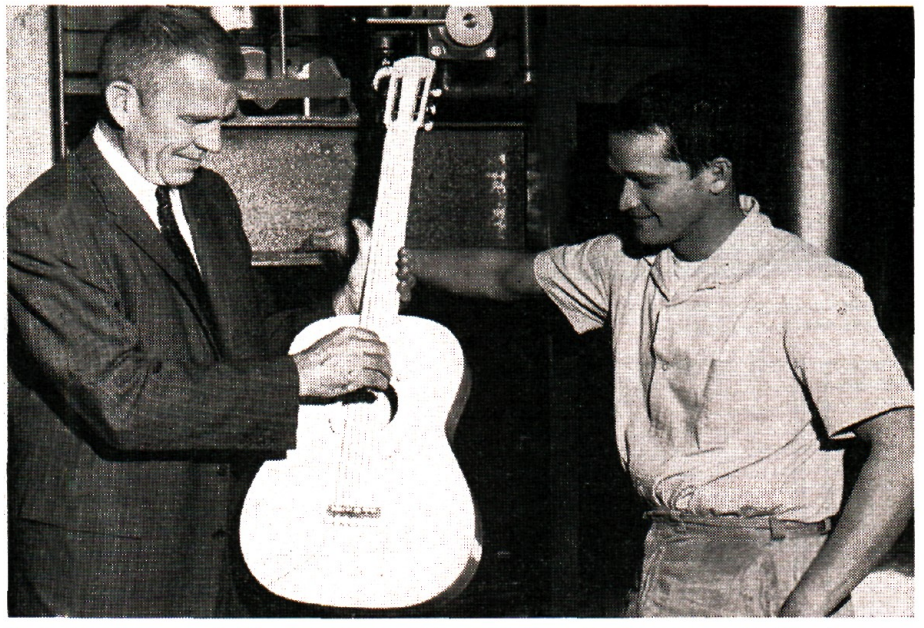
REPORTS & INTERPRETS

Plastic Electronic Guitar Gets Raves

No toy, instrument developed by Salt Lake firm rates high as symphonic tone maker



C. Richard Evans (left), president of Star Valley Electronics, and Kay Ruggles, engineer who designed mold for guitar body, stand in front of 64-ton press that makes body shell

THE stigma of inferiority usually associated with plastic musical instruments may be on its way out with a giant step forward by Star Valley Electronics, Inc. The Salt Lake City firm is winning kudos in the world of music for its new classic electronic guitar, molded from fiberglass and isophthalic polyester resins. The instrument's high quality of tone lies in its fine plastic "top," the part of its body that vibrates sympathetically when the strings are plucked.

Most classic guitars are made of wood, come from Europe and Japan. Quality depends strongly on the thickness of the top—the thinner the better. Problem is that the wooden top can be made just so thin. Beyond a certain point there arises the danger of splitting. Other drawbacks of wooden guitars include a tendency to warp at the neck and difficulty in maintaining uniformity of tone from one instrument to the next.

Chief advantage of plastic in making the guitar: It permits close control over physical dimensions. "We may not achieve qualities comparable to an Amati, but we come pretty close," says company president C. Richard Evans. All dimensions of the plastic guitar are uniform, and tolerances can be maintained so that maximum playability is ensured, he says.

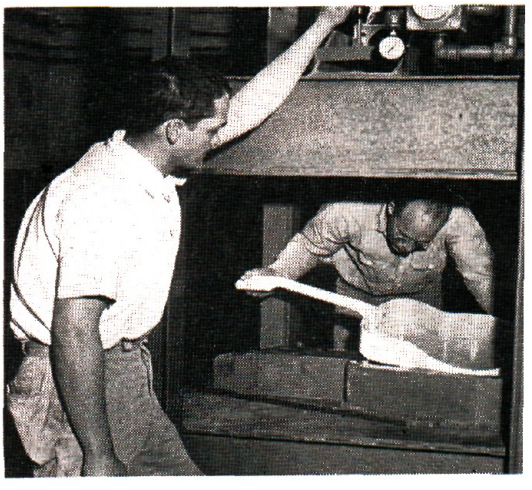
The New York City Classic Guitar Society hails the plastic instrument as "a new system of sound production, permitting it to be clearly heard as a solo instrument over a full symphony orchestra, without distortion or loss of quality."

For those who cannot number themselves among the musical *cognoscenti*, the classic guitar differs from the jazz guitar in two major respects. The jazz guitar uses steel strings, its classic counterpart uses nylon or gut. In addition, the jazz version has a narrower neck that restricts intricate finger movement in favor of the so-called "cliche chords," strummed in accompaniment to popular ballads.

Electronic jazz guitars have been popular for many years because their steel strings were easily adaptable to amplification by simple magnetic pickup. Star Valley Electronics claims its instrument is the first modern classic electric guitar, made possible by what it describes as a "unique electrified bridge" that hooks into a basic tone amplifier and can be used with any type of string.

The new guitar by itself sells for $100. Cost including the pickup is $150. The entire system—guitar, pickup, and electric amplifier—goes for $650. The company can turn out as many as 2000 per year, hopes to double this figure and cash in on the booming ($300 million annually) U. S. musical instrument market.

J.S.



Design engineer Ruggles and coworker stand by as guitar shell emerges from 64-ton press