New, Higher-Fi
Stereo Disc Cutter

By G. L. AUGSPURGER

LATEST VERSION OF FAMOUS WESTREX SERIES CUTS CLEANER STEREO DISCS.

AN IMPROVED STEREO DISC CUTTER AND associated 75-watt driving amplifiers, the 3D Stereodisk System, has been announced by the Westrex Div. of Litton Industries.

The new components were shown and demonstrated at the spring 1964 Audio Engineering Society convention in Hollywood.

The new cutter includes a number of improvements in performance and ease of operation as compared to Westrex's previous model 3C. Of primary interest to high-fidelity enthusiasts are the 3D's increased dynamic range and smoother frequency response, especially in the high-frequency range. Westrex claims that the 3D system can make a recording which exceeds the capabilities of even the best pickups presently available.

Record companies can have their earlier-model Westrex cutter systems altered to the new configuration, and it is expected that they will do so. Because a high percentage of domestic stereo records are cut with Westrex equipment, owners of stereo reproducing systems will ultimately benefit from the changeover. Recording engineers will be glad to know that the I/R losses in the new cutter have been reduced by 25%, increasing overall efficiency by the same amount.

One interesting point, in view of the recent interest in a standardized 15° vertical cutting angle (see Radio-Electronics' March 1964 cover story, page 32), is that the Westrex 3D cutter retains the same 23° vertical stylus angle as its predecessors. According to Westrex engineer C. S. Nelson, the cutting head can be mounted to give any desired vertical angle, but the decision about which to use is considerably more complicated than the average audiophile is apt to realize.

"Because of the forces involved during the cutting of the master disc, the effective vertical angle at which the groove is cut may possibly be only 15° even though the geometrical angle of the cutting stylus is considerably greater," said Nelson.

I checked with a number of other recording engineers and pickup manufacturer, and they agreed that while standardization of the vertical cutting angle is desirable, the problem is not as cut-and-dried as some recent publicity would indicate. One cartridge manufacturer even stated that he had experimented with wide variations in vertical playback stylus angles with no significant differences in performance.

Westrex's position is that, when the recording companies ask for a different cutting angle, it will be a simple matter to produce it by the way the cutter is mounted to the recording lathe. In the meantime, the model 3D will retain the same internal geometry as the previous Westrex stereo cutters.