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ASTM F10 Committee Work Progresses
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The initial work of ASTM Committee F10 on Livestock, Meat, and Poultry Evaluation Systems is progressing and nearing completion. The Committee's task is to develop standards for the design, performance, use, and predictive accuracy of devices currently being used or being tested for evaluating various constituents to determine the value of an animal carcass at the time of harvest (slaughter).

Within the main F10 Committee are four subcommittees: F10.10 Design Speci-fication, F10.20 Device Performance Criteria, F10.30 User Requirements, and F10.40 Predictive Accuracy. Each sub-committee has developed a draft standard to address one area of the entire measurement or evaluation process used to determine the value of carcasses or carcass portions at the packing level.

The statement of scope for each subcommittee follows:

Subcommittee F10.10: This specification covers the requirements for design and construction of electronic devices or systems for measuring composition or quality constituents of live animals, livestock, and poultry carcasses, and/or individual cuts of meat. Examples include but are not limited to half and whole carcasses, primals, subprimals, and boxed meat.

Subcommittee F10.20: This standard covers the test methods used to determine the accuracy of electronic devices that evaluate characteristics of livestock, meat, and poultry. These characteristics may or may not be used to determine a value. Companies with new devices are encouraged to contact ASTM to request modification of this standard to include its new technology.

Subcommittee F10.30: This standard covers the operational requirements for users of livestock, meat, and poultry evaluation devices used on live animals, carcasses, and individual cuts of meat when those devices provide data used in determining value for livestock and carcasses. Areas covered include installation, operator training, calibration, inspection and maintenance of these evaluation devices, and documentation of procedures for verifying raw data.

Subcommittee F10.40: This specification establishes standardized methods to collect and analyze data, document the results, and make predictions by any objective method for any characteristic used to determine value in any species using livestock, meat and poultry evaluation devices or systems.

All four of the standards have been through the subcommittee ballot process and are currently being posted for ballot by the entire F10 membership.

Subsequent updates of the Committee's work will present detailed information regarding the economic impact of the device currently being used to determine payment value for more than 80 percent of swine purchased in the United States. The USDA has estimated the value of swine produced in 2002 to be $7,486,000,000. Future updates will also outline the impact of the potential use of electronic devices for determining the purchase value of other species.

A study of the grade and yield characteristics of 149 lamb carcasses recently completed by Colorado State University compared the determinations from a Lamb Vision System with the determinations made by experienced human graders. A preliminary review of the data indicates that the electronic system is capable of providing grade and yield data that is more accurate than data provided by human graders.   Look for an in-depth review of this study in the near future.

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