
APPENDIX B WEIGHING EQUIPMENT

GENERAL

Section [2001.07](#) of the Standard Specifications covers weighing equipment and procedures. Under certain conditions equipment used to determine true net weight must be fully automatic or semiautomatic. Fully automatic systems are those that perform all required functions and print them on a ticket automatically. Semiautomatic systems must, as a minimum, be capable of determining the gross weight and printing it on a ticket automatically. The remaining functions must be entered on the ticket manually by a weighmaster.

Except for asphalt batch type plants, each load ticket is to contain all weight calculations necessary to arrive at a true net weight. This includes a printed gross weight, a printed or manually entered tare weight and a resultant printed or manually entered net weight.

Quantities for batch plants may be determined from batch counts and individual batch weights provided the batching scales have been calibrated to the accuracy required for pay quantity determination. The ticket shall indicate the batch weight, the number of batches and a net weight of the batches in each load. The ticket information may be entered by automatic printers or by a weighmaster. No tare weight is required when batch plant scales are used.

Automatic or semi-automatic printing is required when contract quantities of 10,000 tons (10,000 Mg) or more of HMA is furnished.

Scale tickets, as a minimum, shall identify project number, date, truck number and type of material (for hot mix asphalt materials, this is the mix design number). Additional requirements for specific systems are listed below.

TYPES OF SYSTEMS

A. Batch Plants:

Tickets automatically printed in a batch plant must contain, as a minimum, the total weight of material used in each batch, the number of batches and a total weight of material in each load. Most printing systems will show the aggregates and asphalt separately.

B. Storage Silo with Separate Weigh Hopper:

Tickets prepared automatically for this system shall contain, as a minimum, the gross weight of each drop weighed, a tare weight as a measure of any material left in the weigh hopper and a net weight of the material dropped. Also included shall be a true net weight of the total number of drops in each load.

C. Storage Silo/Weigh Hopper Combination:

Tickets prepared automatically for this system shall contain, as a minimum, the gross weight of material in the bin at the beginning of each weighing increment, the weight of material remaining in the bin at the end of each weighing increment as a tare weight and a resultant net weight of each increment. If weighing is in more than one increment, the ticket shall show the total net weight of all increments included in the load.

D. Truck Scales:

For Automatic Truck Scales - The scale must print the gross weight, tare weight of the truck, and net weight of the load. The tare weight of the truck is to be stored in the system, and not necessarily determined each trip. The operator must identify the truck to the recorder.

For Semiautomatic Truck Scales - The scale must print the gross weight. The tare weight and net weight shall be on the ticket, and may be added by the weighmaster by hand.

Many of the automatic systems are capable of printing much more information than the specified minimum. These are good features that may be beneficial to the contracting authority and the contractor; however, no features may be substituted for those specified.