

The concentrated loads are to be placed so as to cause maximum effect.
Selection of Live Load.

Class A Bridges, H20 loads
Class B Bridges, H15 loads
Class C Bridges, H13 loads . . ."

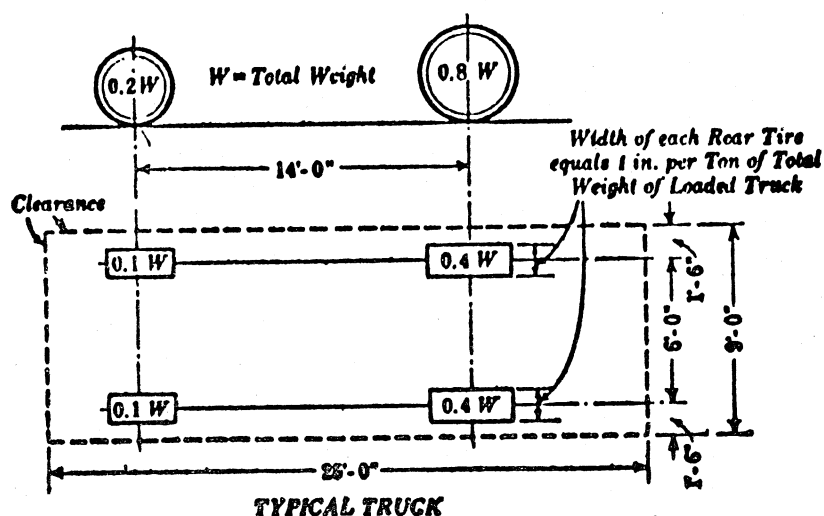


Figure 1.

Typical trucks shall have total loaded weights distributed as in figure 1.

This is the *first reference to H15 Loading*. It must be emphasized that when we refer to the standard truck or H15 design truck that this is a *design loading*. It is not a composite truck or typical truck of the present and it has never been intended that it represent an actual truck. It is just a selected design truck for application of live loadings for purposes of design. It is not to be confused with the Type 2 or Type 3 or any other types listed in the AASHO "Policy on Maximum Dimensions and Weights of Motor Vehicles to be Operated Over the Highways of the United States", or any trucks presently in operation on the highways. The problem now and always has been is how to rationalize design load with safe load carrying capacity.

The 1935 AASHO Specifications provided for trucks and truck trains and also the equivalent lane loadings.

The present AASHO Specification states the system of lane loads was developed in order to give a simpler method of calculating moments and shears than that based on wheel loads of the trucks.

In 1944 the HS series of trucks were developed. These approximate the effect of the corresponding 1935 truck preceded and followed by a train of trucks weighing $\frac{1}{4}$ as much as the basic truck.

The traffic classification of bridges as shown for the 1926 AASHO Specifications has been removed from the Specifications and for the past 30 years (approximately) the load classification has been a function of the State Highway Department, the Bureau of Public Roads, and other agencies. Some states followed the policy of using heavier design loads, say H20 for Primary and H15, etc. for Secondary, etc. Present AASHO Minimum Loading for trunk highways, or for other highways which carry, or which may carry, heavy truck traffic, the minimum live load shall be the HS15 designated therein. It is shown that the so-called H15 has been the governing design load for approximately all bridges built prior to 1935 and has been the basic design load for all except major and interstate bridges since 1935.

The use of a standard truck say H15 for purposes of design provide a convenient method for design, but leads to problems when comparing with the actual traffic patterns and loadings.