***Tensile properties of Two Old Railroad Steel Bridges in Connecticut***

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**Abstract**

Most of the railroad bridges in service in the New England area were built more than a century ago using ASTM A7 steel, which was later withdrawn and replaced by ASTM A36 in 1967. So, it is imperative to understand the mechanical behavior of such outdated material to avoid any possible catastrophic failure.

Here we present the tensile properties of the critical members from the Devon and the Cos Cob bridges obtained from the tensile test (monotonic loading to failure). Thus obtained results are compared to the predefined values in ASTM A7-39 specifications and the results in the report published by the Fritz laboratory. The comparison shows that the results are closely related.







 Figure 1: Tensile test result (Cos Cob Bridge, CT) Figure 2: Tensile test result (Devon Bridge CT)

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