

Project Status Report: CEE-2017CPST-009: HSS Triangular Section Evaluation

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<p>1) Summary of technical/non-technical challenges encountered</p> <ul style="list-style-type: none">• Determining how we will test dog-bone specimens for perpendicular to weld orientation.• Determining dog-bone specimen sizes and how to fit them to the machine has caused delays.	<p>2) Team approaches/resolutions to overcome challenges</p> <ul style="list-style-type: none">• We are investigating different ideas on how to provide sufficient area for the machine to grip.• We are discussing ideas for how we could test the curved specimens from the circular tube.
<p>3) Status of challenge resolutions & potential project impacts</p> <ul style="list-style-type: none">• We believe that we have found a solution, welding additional material to each end to increase the overall area that can be gripped. CAD drawings for welded dog-bone sections from all but the circular tubing were sent today.• We are still investigating how to test circular dog-bone specimens to determine how to best fit them on the tensile machine without affecting the results.	<p>4) Project Status & Summary</p> <ul style="list-style-type: none">• FEA models for fixed-fixed and cantilever bending have been completed. We will now begin interpreting the data and will update ATP with preliminary comparison results as they are completed.• At this point we are on schedule with our FEA analysis but are now approximately two weeks behind schedule in regards to physical testing.