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### Simulating the effect of wire rope “safety” clamps on rope terminations

Some technical regulations require an additional safety clamp to secure the spelter socket end connection of aerial tramway ropes. The authors wondered whether this additional clamp would really increase the safety of the termination and therefore conducted a series of tests.

This paper reports on tensile fatigue tests conducted on Ø16 mm six-strand and full locked coil (FLC) ropes with and without a rope safety clamp installed. It has been found that the tensile fatigue performance of the six strand rope is *reduced by* about 60% and that of the FLC by about 80%. The authors describe the tests undertaken and discuss the failure mechanism of the ropes with the clamps installed.