Line tension of tower yarder system equipped with intermediate supports: measurement of skyline tension and intermediate support load

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A European tower yarder has been recently introduced to logging operations in mountainous forests in Japan. Japanese logging crews have few rigging experiences with intermediate supports for the skyline, which are rather normal procedures in the European countries, as well as lateral logging by the tower yarder system. Although the line drums of the tower yarder have a fail safe mechanism that is enacted by great line tensions, we thought it is important to monitor the skyline tension and load on intermediate supports during logging operations. We prepared a monitoring method both for the line tension and the load on an intermediate support. In this poster presentation, we show the outline of the monitoring method and a few examples of the monitored tension and load of a practical rigging with three intermediate supports.

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