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5- Lanford B.L., Sobhani H., Stokes B., 1990, Tree-length loading production rates for Sotheren pine, Forest product journal, 33 (10)



## Assessment of two loading machines, GMC and front loader VOLVO BM4500 (Case study: Sari Area – 2001)

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### Abstract

The purpose of this study was to estimate the production rates and the cost of loading with the two machines: GMC and front grapple loader VOLVO BM4500. The results indicated that the most operational delays were caused by the lack of suitable landings, lack of proper log preparation, and scattering of logs. Most of the delays of GMC loaders related to technical reasons since these machines are too old and have been primarily designed as a lorry rather than for working in forests. Though using GMC machines imposes higher loading hourly costs the production rate is lower as compared to the front grapple loader.

**Keywords:** GMC loader, work study, time study, loading system, delay