

Finally, the VM-4A can't operate in deep snow or on soft ground because of its design. It is also difficult to operate at night. The majority of the LP-19s in the "Krasnoyarsklesprom" Association, on the other hand, operate on a multi-shift schedule. Furthermore, by using the LP-19s to place the logs in bundles, the loggers are markedly increasing the labour productivity of the chokerless tractors and are preserving the undergrowth between the skidding trails. The mean-time-between-failures for the LP-19 is 40 engine-hours - much higher than the MTBF for the VM-4A.

Why have previous comparisons frequently favoured the VM-4A? This is because they were based on data obtained on operations in the Angara-region enterprises where there are better forest-growing and soil conditions. The data on the LP-19 and LP-18 units were taken from results in spruce-pine stands with weak soils. We only had to carry out some tests under equal conditions for the LP complex to reveal its superiority immediately. Thus, for example, when loggers from the Inbakhinskiy logging enterprise used LP-19 and LP-18 units in the logging sites instead of VM-4As they saved 23 kopecks per cubic metre of logged timber.

Local authorities have known this for a long time. Machinery maintenance engineers and logging enterprise directors are becoming more insistent in their demands that the VM-4As be replaced by LP-19s and LP-18s. The "Krasnoyarsklesprom" Association has asked the Ministry to do this on several occasions but no extra funds for the multi-unit machines have been allotted. In January of 1987 a commission made up of A.G. Yakunin, Chief of the Technical Administration of the USSR Ministry of the Timber Industry, A.A. Goncharov, Chief Design Engineer of