Summary

In this research of a steel wire rope of Lang lay on a traction sheave has been analysed for three common traction ratios (1,25 , 1,35 en 1,45). The wire was tested with these traction raitos with and without wire rope lubricant. To obtain a clear view on creep of steel wires, Three quantities are important:

- the creep angle
- the creep distance
- the creep velocity

During the research the three quatities have been determined for the different tration ratioos using a PC with a frame grabber. The frame grabber stores the pictures, made by the videocamera, in the memory of the PC. To determine the creep quantities the computer progam TIM offers the possibility to analyse the different pictures and to calculate creep distance and creep velocity.

The result of the research is the following conclusions and recommendations:

- The creep and creep angle are bigger during lifting when applying the same traction ratio.
- The creep and creep angle are bigger with greater traction ratios.
- The creep is bigger with a wire rope of Lang lay than with a wire rope of ordinary lay when applying the same traction ratio.
- To make the results more reliable, the number of tests increased for each ratio.
- The the speed of mesuring can be increased when the creep distances are stored automaticly.
- The setup of the reseach equipment has be changed to make the influence of the starting