

Institut für Leichtbau und Seilbahntechnik  
Prof. Dr. H.-R. Meyer-Piening

Bereich Seilbahntechnik: Leitung Dr. G. Oplatka  
Fliederstrasse 23  
Durchwahlnummer 01/256 33 87  
Telefonzentrale 01/256 22 11

Postadresse:  
ETH-Zentrum (FLI)  
CH-8092 Zürich

Masto Wire Service  
c/o Mr. Tor B. Krageboen  
Industriegaten 12  
P.O. Box 1133  
N - 4601 Kristiansand S.

0332

Zurich, 28th June 1983  
el

Dear Sirs,

We herewith confirm the result of the lubrication test which was carried out with your MASTO WIRE LUBRICATOR in the presence of the undersigned. The test was arranged and realized according to our wishes, namely:

- Warr.-Seale rope, 216 wires, with steel core, ordinary lay, new, slightly lubricated
- rope tensioning force 80 kN, i.e. approx. 1/5 of the breaking force
- rope ends secured against torsion
- lubricant TEXANDO FO 20 from TEXACO
- speed approx. 1,5 m/s

After lubrication

- the rope was rubbed dry from outside with a rag, including the space between the strands;
- a piece of approx. 1/2 m length was cut out of the lubricated as well as of the unlubricated part of the rope and packed up individually.

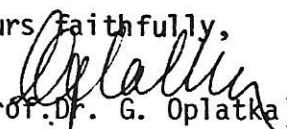
The quantity of grease which had penetrated was measured by us by comparing the weight. The results can be found in the attached table.

The table shows, among other things,

- that the quantity of lubricant inserted per m of the rope amounted to
  - 62 g in the rope
  - 20 g in the core
  - 7 g in each of the strands;
- that the quantity of lubricant which has entered the strand is distributed as follows:
  - outer layer 3,7 g per m of the rope
  - 3rd layer 2,47 g per m of the rope
  - 2nd layer 0,65 g per m of the rope
  - core wire 0,18 g per m of the rope.

This means that the lubricant has penetrated into the very centre of the strand - a remarkably good result on which we want to congratulate you.

Yours faithfully,

  
(Prof. Dr. G. Oplatka)

R/Op