

**IN SITU NON-DESTRUCTIVE EVALUATION AND ADVICE
ON THE PRESENT CONDITION OF HAULAGE ROPE AT
SOLANG NALLAH, MANALI, H.P.**

EXECUTIVE SUMMARY

In-situ Non-Destructive (NDT) study on the haul and track rope of 42 mm nominal dia., Warrington Seale Lay, galvanized, compact core, Right hand lang's lay installed during 2010 over Aerial Ropeway Passenger Cable Car installation (Solang Ropeway cum Ski Centre) at Solang Valley, P.O. Palchan, Manali, Distt. Kullu, H.P., has been carried out for the *first* time by CSIR-CIMFR, Dhanbad during **24-25 June, 2019**. About a length of **1861 meters** has been scanned using INTRON Rope Tester, Russian make.

Calibration of the instrument (INTRON Rope Tester, Russian make) has been carried out in air before commencement of the scanning of rope.

The diameters observed are as follows: 41.21 mm, 41.92 mm, 42.70 mm, 42.10 mm, 42.90 mm, 41.70 mm, 42.52 mm, 41.52 mm, 41.69 mm, 42.27 mm, 42.40 mm, 41.18 mm, 42.30 mm, 42.09 mm, 42.31 mm, 42.50 mm, 42.40 mm, 42.15 mm, 42.90 mm, 41.30 mm, 42.80 mm, and 42.40 mm respectively. The average diameter is **42.15** mm.

The present investigation has revealed no abnormal deviation in quantitative and qualitative analysis and hence it is recommended for further continuance of this haulage rope in the installation and the next nondestructive investigation over this rope is suggested during **Dec., 2019 - Jan., 2020**.

*This non-destructive investigation on haulage rope does not include the aspect of **fatigue** which may develop in the rope in course of time.*