

**IN-SITU INVESTIGATION AND ADVICE ON THE PRESENT CONDITION
OF FOUR NOS.OF TRACK ROPES AND TWO NOS. OF HAULAGE ROPES
OF PASSENGER CABLE CAR AERIAL ROPEWAY INSTALLATION OF
M/s TIMBER TRAIL, ASIA RESORTS LIMITED, PARWANOO (H.P.)**

EXECUTIVE SUMMARY

In-situ study on **four numbers of track ropes** [each of 30 mm dia., full locked coil construction, Usha Martin Limited make] and **two numbers of haulage ropes** [each of 18 mm dia., 6X19S (9/9/1) construction, polypropylene core, ungalvanised, right hand Lang's lay] of Passenger Cable car Aerial Ropeway installation of M/s Timber Trail, Asia Resorts Limited, Parwanoo (H.P.), has been carried out using INTRON Rope Tester, Russian make during **26-27 December, 2019** as per **IS: 17235: 2019 [Magnetic Rope Testing (MRT) - Specification]** for monitoring their suitability in the installation depending on the condition of track and haulage ropes. The two track ropes (PT3 & PT4) were stated to have been installed during January, 2006 and the rest two track ropes (PT1 & PT2) during January, 2005. The haulage rope inner was stated to have been installed during 22.08.2019 whereas haulage rope outer during 24.10.2019. The present non-destructive investigation on PT1 & PT2 is for the **14th time** whereas on PT3 & PT4 track ropes are for the **13th time**. The present non-destructive investigation on inner and outer haulage ropes are for the **1st time** after installation.

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

Keeping in view of the observations, condition of all the track and haulage ropes have been found to be satisfactory and may be recommended for further continuance in the installation till the next non-destructive investigation having close visual watch of the portions of the track ropes which were not covered under this investigation and the flaws and splicing portions of the haulage ropes. It is suggested to have next nondestructive investigation on two haulage ropes and on four track ropes during **Dec., 2020 – Jan., 2021 as per IS 17234: 2019 (Operation and Maintenance of All Types of Ropeways)**.

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