

**IN SITU EVALUATION AND ADVICE ON THE PRESENT  
CONDITION OF HAULAGE ROPE OF DETACHABLE GRIP  
MONO-CABLE PASSENGER ROPEWAY AT MAIHAR, M.P.**

**EXECUTIVE SUMMARY**

In-situ study on the haulage (carrying) rope of 36 mm dia. round strand, 6X19 Seale (9/9/1) ungalvanised, Poly core, Right Hand Langs Lay, installed during January, 2016 over Monocable Aerial Ropeway Passenger Cable car installation at Maihar (Maa Sharda Devi Ropeway, Maihar), M.P., has been carried out for the *third* time during 1-3 Sept., 2019. About a length of **1316** meters has been scanned using INTRON Rope Tester, (Russian make) as per IS 17235:2019 [Magnetic Rope Testing (MRT)–Specification]. This non-destructive investigation on the haulage rope has revealed **7 (seven) flaws/initiation of flaws** at a distance of 168 meters, 254 meters, 398 meters, 598 meters, 836 meters, 1063 meters and 1208 meters respectively from the last tucking point of the conventional splicing while the rope has been moving in its usual direction.

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 at different places are: 34.37 mm, 34.57 mm, 35.21 mm, 35.20 mm, 35.92 mm, 35.08 mm, 35.17 mm, 35.75 mm, 36.13 mm and 35.05 mm respectively. The average diameter is **35.25** mm. The nominal diameter is 36.0 mm. The off-tension diameter is 36.8 mm. The first nondestructive investigation on the installed rope was carried out after 1 (one) year 6 (six) months of installation of rope. 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 with special monitoring for the spliced length and the next nondestructive investigation over this rope is suggested during **Aug.-Sept., 2020 as per IS 17234:2019 (Operation and Maintenance of All Types of Ropeways)**.

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