

**IN-SITU EVALUATION AND ADVICE ON THE PRESENT
CONDITION OF TRACK AND HAULAGE ROPES OF PASSENGER
ROPEWAY ACROSS RIVER BRAHMAPUTRA AT GUWAHATI FOR
M/S GUWAHATI METROPOLITAN DEVELOPMENT AUTHORITY,
ASSAM**

EXECUTIVE SUMMARY

In-situ study on **four numbers of track ropes** [each of 36 mm dia., full locked coil construction, Usha Martin Limited make] and **one number of haulage rope** [24 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 Guwahati Metropolitan Development Authority, Guwahati, Assam, has been carried out using INTRON Rope Tester, Russian make during **9-11 September, 2019** for monitoring their suitability in the installation depending on the condition of track and haulage ropes as per **IS 17235:2019 [Magnetic Rope Testing (MRT) – Specification]**. All the track and haulage ropes were stated to have been installed during January, 2019. The present non-destructive investigation on track and haulage ropes is for the **first 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 portions of the haulage rope. It is suggested to have next nondestructive investigation on the track and haulage ropes within **Sept. – Oct., 2020** 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.*