



CONVEYOR AND
ROPEWAY SERVICES

CURVO

URBAN TRANSPORTATION SYSTEM

SUSTAINABLE MOBILITY SOLUTION





Prototype Of Curvo Ropeway,
Kolkata, India.



■ CURVO

CURVO is a non-linear and unique innovation in urban connectivity which is here to address the need for a solution that saves commuters from living the daily nightmare of commutation.

CRSPL, being in the field of aerial transportation for decades and it's Founder and Chairman, Mr. Shekhar Chakravarty, through his vast experience of over 55 years in the field of aerial ropeways in India and abroad felt the need to introduce the ropeway for transportation in urban areas with compatibility to the existing infrastructure while following organic road networks.

Mr. Shekhar Chakravarty
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Chairman, Conveyor & Ropeway Services Pvt. Ltd, Kolkata
 Chairman, Breco Ropeways Limited, London
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 Fellow, Institution Of Mechanical Engineers, London
 Member, OITAF (International Organization for Transportation by Rope), Rome
 Fellow Member, The Institution of Engineers (India), Kolkata
 International Patent Holder on Non Linear Ropeway Technology

■ A REVOLUTION CALLED CURVO

Over time, Cities experienced gravitation of population towards them for economic reasons. Consequently, they grew at a rapid pace, and thus urban commutation posed critical problems for governance.

Vehicular Transport, Metro Railways, and Monorail etc. brought relief to a large extent in Metros. Automobile services, in particular, provided tremendous benefit in connectivity, comfortable traveling and aiding public transport. But, it also lent to:-

- Pollution leading to Human ailments**
- Congestion causing loss of time and Human productivity**
- Accidents claiming Human lives**
- Excessive investments in implementation to take care of increased vehicle tare.**
- Increasing rate of road damages and repair thereof**

However, with time, as road space became frozen, vehicular transport in the face of onslaught from the burgeoning metro populace, failed to shift gears efficiently enough to contain the commuter rush in the cities.

Introduction of Metro Rails and Monorails as also construction of Flyovers could address the urban commutation conundrum in parts only, at the same time contributing to wide infrastructural displacement, adversely, too.

Thus, pitifully, today, urban commutation is becoming a nightmarish challenge, not only for the hapless commuters, but also for the concerned Urban Development Department & its planners.

It was, therefore felt, that, **we are parked at the crossroads for seasonable innovation in Urban Commutation, which could favourably alleviate the daily grouse of Urban Commutation.**

Anticipating such an exigency of modern times & rising to the occasion, **CONVEYOR & ROPEWAY SERVICES PVT. LTD. (CRSPL)**, an internationally pioneering Ropeway company under the able stewardship of Sri Shekhar Chakravarty, Managing Director, has through years of astute research and meticulous engineering invented a Ropeway System, which we aptly baptize as **“A Revolution called CURVO”**.

It is a path breaking invention by the company & is termed as the **CURVO Ropeway**, an innovating concept for the first time in the history of Aerial Ropeway, permitting the system to be considered as an alternative mode of Urban Commutation because of the fact, that the pioneering technology assumes an improvisation, whereby the overhead Ropeway, for once, can be made to follow a non-linear route along the urban roads.

CURVO Ropeway, thus, is an answer to alternative **Urban Commutation System**. It is adaptable and amenable to bends, being able to follow existing road routes, travelling overhead without consuming or interfering with road space below and the vehicular traffic that plies through it. It is safe, pollution free, both in terms of emission and noise. It runs on electricity and does not use organic fuel. It is also accident proof having automated Drive System, instead of multiple human controls behind the wheels as is the case with vehicular transportation system in vogue.





■ FEATURES OF CURVO

CURVO Ropeway concept is a unique non-linear concept permitting Ropeway, for the first time in the world, to be amenable & adaptable to bends & curves of city roads.

- It will be an elevated and aerial mode of urban transport.
- It will run along existing arterial & other roads on steel portal frames spaced at 90-100 mtrs. supporting the ropes.
- It will need nominal ground space for stations & rope supporting portal frames.
- It will have no interference with road spaces & the vehicular traffic below, or with the pedestrian flow.
- Running on electricity CURVO eliminates the polluting effect of poisonous & green house gases as systematically spewed by vehicular transport. By the same token the CURVO being reasonably noiseless, wages no decibel war.
- Cabins aesthetically designed and spaced at 22/25 seconds interval, cruise by overheard, beholding public at large in comparison to vehicular congestion below.
- Terminal stations will be equipped with a Drive or Tensioning Device. Operation control will be from Drive Station. Sections will be interlocked for simultaneous operations.

■ SPECIFICATIONS



System :

Monocable Gondola Non-Linear System with Vertical Detachable Grips



Carriers :

Cabins of 8 seater capacity with automatic door opening and closing, will travel at 20 second intervals.



Speed :

Top Speed of 20 km/hr
Average Speed of 16 km/hr



Transport Potential :

Capacity 1500 to 2500 passengers per hour (PPH) each direction and 3000 to 5000 (PPH) both direction



Power :

For 5 km, estimated power needed is 300 KW.
For a 200 km city network, it will amount to 10MW.

■ SOCIAL IMPACT OF CURVO

CURVO revolutionizes urban transportation with its innovative second-tier aerial system along existing road routes. It enhances commuter mobility, improves safety, reduces congestion and carbon footprint, and promotes sustainability. By providing efficient transportation, Curvo reduces reliance on congested mass transit and improves daily commutes.

It also helps in diverting traffic above ground, reducing congestion and emissions. Curvo's green technology lowers the city's carbon footprint and improves overall urban mobility, catalyzing social change and paving the way for a safer, greener, and more connected future. 70% OF CURVO equipment are produced in local and thus will provide local employment potential to a large extent.





■ CRSPL AS AN ENTITY

A pioneering Engineering company in India in the field of Aerial Ropeways. Founded in 1975, with 5 decades of experience in design-engineering, manufacture and execution of turnkey projects, provides an end-to-end service all under one roof through DBFOT/PPP and has technical expertise in undertaking O&M of ropeways since mid 80's.



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