

# Medellín, Colombia

## Translohr STE5



On March 31<sup>st</sup> 2016, the city of Medellín, in Colombia, inaugurated the first tyre-based tram line in Latin America. Equipped with 12 tramways Translohr STE5 (39 m), the Ayacucho line serves 9 stations on a route of 4.2 km.



### A significant line for the Translohr tramway

The Ayacucho line, first tramway on tyres line in Latin America, is also the first line to feature the Translohr tram's ability to mesh with existing street systems in a unique topographic environment with:

- some segments having a maximum grade of 12%,
- curves with a turning radius of 20 m.

This line is part of the «social urbanization» project being undertaken by the Medellín city government to connect far-flung neighborhoods to the downtown area using green-electric mass transit, like the Metrocable and now the tramway.

### «Corredor Verde», a social urbanization project

Believing that the violence in the city was being caused by deep social inequalities, since 2004 the Medellín city government has been conducting a policy of «social urbanization» primarily targeting the poorest neighborhoods.

The transportation aspects of this original approach have involved the construction of a «Corredor Verde» («green corridor») with a tram line and two urban cable car lines, the Metrocable.



### Key data of the Ayacucho line

- Altitude: **1500 m**
- Length of the line: **4.2 km**
- Number of stations: **9** (two central)
- Number of passengers expected per day: **85 000 people**
- OCS along **100%** of the route
- Minimal radius: **20 m**
- Maximum grade: **12%**
- Average grade: **5%**
- Number of tramways delivered: **12**
- Model: **STE5** (39 m long)
- Contract signature: **April 2012**
- In operation since: **March 31<sup>st</sup> 2016**





## Translohr tramway on tyres of Medellín

### Main characteristics

	Unit	STE5
Lifespan	ans	30
Number of passenger modules/axles		5/6
Number of motorized axles		3
Total length	m	39
Total width	m	2.22
Total height at pantograph	m	3.05
Floor level	m	0.25
Minimum turning radius	m	10.5
Maximum speed	km/h	70
Number of doors		10
Power consumption	kWh/km	3 to 5
Acoustic level	dB(A)	69/75
Mass when unoccupied	T	35.7
Number of EL6 passengers (6 pass/m <sup>2</sup> )		311

### Benefits of Translohr tramways on tyres



**10.5 m**  
Short turning radius



**5.18 m**  
Narrow clearance gauge



**13%**  
Run up slopes



**25 cm**  
Integral low floor



Slient running



0 CO<sub>2</sub> emissions



### Interior arrangement



▲ Translohr tamways on tyres of the Ayacucho line can carry up 311 passengers (6 pass/m<sup>2</sup>).