

# Mountain Monorail

## A New Solution For High Inclination



**Tschuggen Express,  
Switzerland**



**INTAMIN**  
TRANSPORTATION



Intamin Transportation is one of the leading companies in the "People Mover" business with over 40 years of experience. Working all around the world Intamin has developed a number of transport systems in the monorail category for different applications. In response to the specific requirements in the famous Swiss ski resort of Arosa a new and advanced monorail system was required to cope with the topographical challenges in this mountainous area. Capable of travelling on steep gradients of up to 50% or even more, the trains are running on a lightweight rail system allowing of following the terrain closely. The trains are independently self driven with motors and controls on board. The pinion drive is a special development, designed to provide a smooth and virtually noiseless ride, even at higher speeds. This is particularly important in noise sensitive areas and for night time operation. The trains are of a modular design, and the number of cabins per train can be selected to meet the hourly capacity of each specific application. The cabins are spacious with wide automatic doors which allow a comfortable entry into the cabin. This easement of entry and exit also improves the transport capacity due to the shortened loading / unloading time at the stations. Thanks to the automatic and independent operation of each train, maintenance can be done without closing the entire system as it is necessary for cable pull systems. The system is designed such to operate under adverse winter conditions with ice and snow fall, without requiring costly snow removal equipment. In order to keep the operational costs low, a fully automated system can be implemented. As an option automatic cabin leveling as well as heating, air-conditioning and an audio-visual information system is available.



#### Technical Data

#### MOUNTAIN MONORAIL

<b>Rail length</b>	approx. 510 m
<b>Height difference</b>	approx. 156 m
<b>Capacity per cabin</b>	up to 20 passengers
<b>Max. speed</b>	approx. 5m/s



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