



Collection system via catenary

- Setting up: (2)
 - The lift device and contact wires are practically in the same vertical plane and, since in a curve the lift device has a polygonal shape, this **catenary** setup is called **polygonal**.
 - In order to guarantee current collection at high speed (>100 km/h), the conductors must be maintained at a constant tension (**tension-regulated catenary**) within the temperature ranges derived from the usage (environmental conditions and conductor heating by the Joule effect). The constant level in mechanical tension is obtained by dividing the catenary into mechanically interdependent pieces (**compensating block**) and by joining the conductors in the centre of the block to a fixed point and, at the edged, to a **tension unit** made up of **pulleys** and **balance weights**.