

APPLICATIONS

WHEEL SET

ARTIFICIAL VISION WHEELSET PARAMETER MEASURING EQUIPMENTS (EVA)

Controlling the wheelset profile and the measurement of its parameters is an essential requirement for any railway maintenance activity. In keeping with the innovative spirit that characterises Talgo, we have developed the EVA (Artificial Vision Measurement System) to measure, among others, the following wheel parameters without any mechanical contact:

- Flange height
- Flange thickness
- qR factor
- Distance between inner sides (DCI)
- Distance between active sides (DCA)
- Wheel diameter, calculated.


TECHNICAL CHARACTERISTICS

System resolution (mm):	< 0.1
Speed of passage for measurement (Km/h):	0 – 15
Maximum speed of passage through the facility (Km/h):	20
Height of flange (mm):	+/- 0.1
Thickness of flange (mm):	+/- 0.1
qR factor (mm):	+/- 0.1

- High speed of passage through the facility (up to 20 km/h. without obtaining measurements).
- The measurements can be made at variable speeds (it is not necessary to maintain a constant speed)
- There is no physical contact with the wheel.
- Minimum system maintenance.
- Greater number of controlled parameters.
- Exportability of data to other systems.
- Easy to assemble (minimum civil works).
- Possibility of interconnection with the Talgo pit lathes.
- Comparison of the controlled profiles in relation to the last turning.
- The wheels are perfectly controlled so that any variation in wear and tear or any deterioration is rapidly detected.
- The inspection of the wheelset is carried out automatically and does not require human intervention, which represents an advantage in terms of cost and quality.
- Single and complete database for all the wheels, containing information about deteriorations, causes of turning, etc., increasing our knowledge of the wheelset and, consequently, enabling us to optimize its duration, quality and safety.

REFERENCES

- RENFE (Spain)
- METRO BILBAO (Spain)
- METRO MADRID (Spain)
- METRO PORTO (Portugal)
- CMC INTERNATIONAL TENDERING (China)
- METRO KIEV (Ukraine)
- TRANVÍAS FRIBURGO (Germany)
- SNCB (Belgium)
- ETECO (Korea)

