NEW VISION Technologies

Measures and Controls by Optical Systems,
Experts to Your Service

Catenary measurement :

Functions and principles of control

- Line scan cameras: ⇨ **Wear on catenary**
- Stereovision : ⇨ **Position and catenary height**
- LASER scanning: ⇨ **Zone survey around catenary**
- DOPPLER sensor: ⇨ **Position measurement**
- LASER profilometers: ⇨ **Correcting train movement, in reference with both rails**

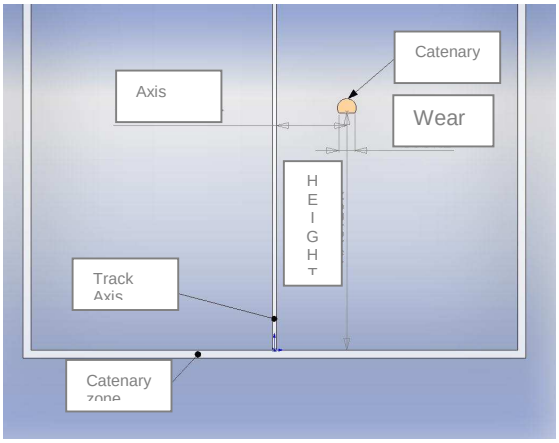
Conditions of measurement

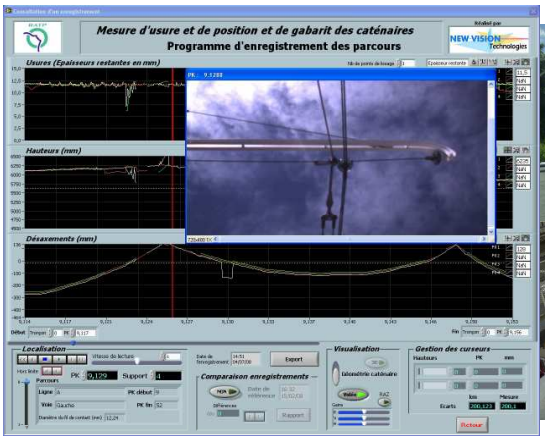
Maximum speed: 80km/h – 49mph
Climatic conditions

- Temperature: from 0 to 40℃ – 34 to 104℉
- Humidity: from 20 to 80% without condensation
- Period of sunshine: From sunset to sunrise by dry weather or every weather in tunnel

Measurement features

Name	*Base of measurement*	*Measurement zone*	*Unit*	*Precision*	*Sampling step*
Height of overhead wires	Height of overhead wires perpendicular to track axis	From 4,60 to 6,20	m	± 10mm	50 mm
Axis	Distance between overhead wires regardind track axis	± 300	mm	± 1mm	50mm
Wear of overhead wire	Thickness of unwear wire (FC of 107mm²)	8 to 12.24	mm	± 0.1mm	50mm
Video recording	Record the measured field	~1 x 0,75	m	640x480 pixels	Triggered with measurement
Catenary zone	Object detection around catenary	From 4.60 to 6.20	m	± 10mm	50mm





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