Electronic development laboratory
Mechanical and hydraulic research departments
Assembly shop
Machining shop
Boilerworks

All the stages of the design and production are home-made

www.rovrailwayindustry.com
ROV Développement and the World market
Our technical offer for the infrastructure

THE ADVANTAGES CAMEROV® VISIOCAT©-P

* Checks the status of the pantographs and roof without access platform
* Pantograph on each check:
  - the condition and fixing Shunts, joints
  - the setting of the bow (axes, pins) and the state of the horns
* Wear strips on the bow check:
  - the absence of disturbance (loose screw, protruding, strips)
  - the absence of very pronounced grooves
  - Assess the wear strips (statement of boot marks, warm-up)
* On the roof checking machines
  - the roof line and insulators (fracture, fixation)
  - sectioning (attachment nuts and capital, lubrication)
  - the SPD (fixing insulator)
  - absence of foreign body (pendulum)
  - research the causes of incidents
* Easing Consignations
* Avoids passing the cameras gantries
* Quick visual aid for the driver
* Assistance Maintenance Technical Visits,
* Audits of high loads to the FRET without access platform
* Monitoring and controls of work done by subcontractor or third parties
Our technical offer for the infrastructure

THE ADVANTAGES CAMEROV® VISIOCAT® LAS’CAT®

* Thickness measurement of the contact wire (accuracy 1/10eme mm)
* Exploration and identification of wear points and regeneration
* Checks of conditions of the various component parts of the catenary
* Checking of cables wear, small cable pendulums, connections....
* Creation of a database and property tracking
* Control of isolators
* Checking fins of isolators ... Searching of cracks, distortions
* See priming traces, heating traces
* Help to technical visits for maintenance: thickness measurement of guide pads of insulator, thickness measurement of wire
* Thickness statements after automatic report for lifting of doubt
* Control of pantographs condition and roof condition without access platform
* Research causes of incidents on the roof of the machines
* Observation of pantographs at enter of station (Avoid Operation Restriction Request for camera gantry)
* Observation of any wall-mounting devices (tunnels, public highways, facades ...)
* Support and strengthening of investment requests
* Checking pulleys and counterweights
* Control of flatness condition of the contact wire
* Tracking and controls of work performed by subcontractors or third parties
Our technical offer for the infrastructure

THE ADVANTAGES CAMEROV® VISIOCAT® LAS’CAT®

* Checking serial numbers on offending parts
* Control of isolation on insulated cable sheath
* Statement of annealing by variation of colors on the hard copper
* Thickness statements in common areas
* Controls of dynamic behaviors of pantographs at real speeds on installations
* Control of wear strips on pantographs
* Control of high loadings for the freight without access platform
* Checks for oil leaks on very high voltage transformers without power interruption

ADDITIONNAL APPLIANCES WITH LAS’CAT MODULE

* Height measurement of contact wire (accuracy < 10 mm)
* Measurement of X dimension (pulleys and counterweight)
* Measures side face of posts
* Isolation distances under bridge, tunnel
* Height difference in switches
* Deflection: continuous observation by video of the rail decline while the train is passing.
* Dimension of catenary
* Checking measurement of supports
* Measurement of pieces situated on catenary (bracket, return arm…)
* Height and length of line bracket……
* Catenary gauge in sections
* Distance of spacing between posts face to face
* Length of tubing
Our technical offer for the infrastructure

**CAMEROV® HDD-E® (N°DPI 15091)**

Automatic measurement system without contact for machine, trolley and rule

- Height
- Stagger
- Cant
- Track gauge

Machine ➔ [Image]

Trolley ➔ [Image]
Our technical offer for the infrastructure

THE ADVANTAGES CAMEROV® HDD-E®

Reliability and accuracy
* Details on the misalignment +/- 3 mm, height +/- 1 mm on, on the slope +/- 1 mm
* No transcription errors, measurements are stored in the PC or Tablet

Ease of use
* A single click on the wire screen picture triggers measures
* The possibility to prepare the measurement campaign before surgery reduces the field entering information to a minimum
* Automatic Editing a report before morning

Human resources
* An agent is sufficient for its implementation

Maintenance Care
* No or very little maintenance
* Consumables: battery every 2 to 3 years

USE ON TROLLEY / RULE (REGISTRATION 15092 DPI)

Ergonomics
* Little effort required to weigh all 16.9 kg (including PC)
* The carriage / folding rule into the trunk of a light vehicle.
* Station standing on the move and the measurement, no awkward position
* Very little effort to push the cart / rule that rolls being guided

Autonomy
* Several hundred measurements made between charges

Security
* No template constraint, the withdrawal out of the way is instantaneous

Specifications of carrying box:
- Length: 950 mm
- Width: 450 mm
- Height: 270 mm
- Weight: 12.5 Kg

Storage:
- Trolley/Rule
- HDD case
- Tablet or Laptop
Our technical offer for the infrastructure

THE ADVANTAGES CAMEROV® HDD-E®

Utility
* The CAMEROV ® HDD-E ®® measures the height, stagger of the catenary and the Cant of the way, in option:
  Track gauge measurement (Vehicle version)

Double use
* On trolley / or manipulated rule manually pushed
* On rail vehicle / road, in this case the CAMEROV ® HDD-E ®® can always be removed for use on truck / rule in case of immobilization of the vehicle.

Security
* The measurement is non-contact and therefore do not require recording, the pull wire may be energized
* No danger to the operator

Use in any circumstances on any network
* Airways, network 750V, 1500V, 3000V, 25000V, DC or AC
* Tunnel and tram
* Can be used in any weather conditions (rain, sun ..)
* Suitable for extreme climatic conditions (-40 ° used by Canada)

Swift action
* Dynamic measures
* regular and ad hoc measures with vehicle road / rail or truck / rule stopped
* Dozens of measurements can be made per night
Our technical offer for the infrastructure

THE ADVANTAGES CAMEROV® HDD-E©©

USE VEHICLE ROAD / RAIL

Set Up
* The CAMEROV® HDD-E©© is positioned on the front bumper of the vehicle, and additional laser sensors close to the wheel / rail
* The initial installation is very fast, half a day is enough on gear predisposed
* The withdrawal and the regular establishment take only a few seconds

Ergonomics
* The technician can operate from the cockpit in the best conditions of comfort

Autonomy
* Unlimited, the CAMEROV® HDD-E©© can be supplied by the vehicle

Maintenance Care
* The CAMEROV® HDD-E©© and laser enclosures are protected by additional aluminium housings for their avoid any kind of shock or ballast projection
* The risk of major breakdowns related to the use of a telescopic pantograph and devices (compressor, cylinders, pneumatic hoses, generator ...) are nonexistent with CAMEROV® HDD-E©©

Cost
* In standard financial economy vehicle in the choice of embedded hardware CAMEROV® HDD-E©© against the pantograph system
Customers