

PAUL WURTH SERVICING**MECHANICAL ANALYSIS OF COKE OVEN PLANTS****EFFECTIVE AND COST SAVING!**

A coke oven plant is subject to very high stresses. As the structure is not rigid, deformations inevitably occur.

A continuous analysis including the monitoring of this situation will avoid compromising the coke oven plant functionality. A professionally performed mechanical monitoring of the coke oven in addition to a status analysis will lead to an action plan for maintaining the plant reliability at 100%.

Mechanical analysis of coke oven plants

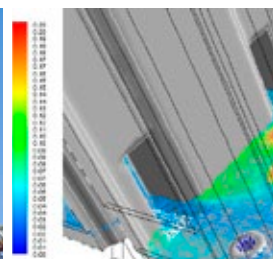
The analysis proposed by **Paul Wurth** includes:

- Inspection of the general conditions of the plant, in particular with regard to the structural and mechanical parts
- Identification of any component subject to instability that might evolve over the time
- Inspection of all mechanical parts and their tuning/adjustment. We control in particular the bracing system, wall protection plates, doors and doorframes.
- Analysis of the bracing system “as it is” and verification of design data. This includes the verification of possible visible emissions, also through roof, doors, charging lids, ascension pipes. Such activity is strictly tied to emissions of benzopyrene (PAH).

Your benefits

A regular mechanical analysis of the coke oven plant brings following benefits to the customer:

- improved battery reliability
- optimised maintenance procedures
- long life duration of the coke oven plant components
- minimisation of ovens “out of service” times
- balanced conditions / lifecycle management of multiple batteries





MECHANICAL ANALYSIS OF COKE OVEN PLANTS

Field of application

This servicing activity can be performed for any Coke Oven Battery supplied by Paul Wurth or by another company.

Given Paul Wurth's comprehensive know-how in coke making technology, the analyses are independent from the type of charging system (top or stamp charging) or from other specific coke plant characteristics.

Why to charge Paul Wurth with this activity?

As a global leading technology provider for the primary stage of integrated steelmaking, Paul Wurth has developed a sound expertise in coke making technology.

By supplying and commissioning coke oven plants and batteries worldwide, Paul Wurth has accumulated large experience and dedicated skill to give assessment on COP conditions and suggest the appropriate remedies.

What do you get from this service?

Reports and documents that highlight:

- Identification of the components that need maintenance/replacement/improvement with relevant description
- Suggested improvements to mechanical parts
- Possible improvement of the maintenance activities
- Elaboration of Paul Wurth bracing mathematical model and prescription of the needed regulation activities. If necessary, finite element simulation.
- Advantages of installing Paul Wurth SOPRECO® valves
- Advantages of installing Paul Wurth doors and other specific proprietary items
- Instructions for renewing the bracing system
- Instructions for the installation of gas type doors (Paul Wurth design)
- Maintenance training