AUCOTEC – press release
08 April 2015

Class: certified and documented!
TÜV tested pipe classes for rapid and assured engineering

At Achema 2015, Hanover-based software system supplier Aucotec is giving a first look inside the next expansion of the "smart" piping feature in the Engineering Base (EB) platform. Besides consistent structuring and segmentation of pipes there is an option for a workflow based on pipe classes. Not only does it provide for rapid selection of materials guaranteed to match a given pipe class, but also pipe classes certified by TÜV Rheinland as meeting current national and international standards, including their documentation.

The pipe classes define which media the pipes must withstand and under which conditions. With its new function, once the choice of class has been made for a certain pipe, EB presents only the appropriate, quality-checked materials: from the pump right through to the correct flange bolts. This puts engineers on a safe footing; errors, time-consuming corrections and unnecessary downtime are all prevented.

Tested and certified
These days, material assignments are often still made within the enterprise. This implies a very heavy outlay of time for research and calculations from which emerges the correct material to satisfy the requirements of the relevant pipe class. For each class there could be thousands of components to check. During component selection in the engineering process it is then unclear whether the previous calculations are correct. In cases where there is doubt or, for example after a change to the medium, the designer has to revisit the figures.

The Aucotec solution will significantly reduce this effort. All pipe classes can be procured with a TÜV certificate. In addition the pipe classes are fully documented. This can run to hundreds of pages because besides containing many thousands of parts, documentation of this type will also contain, for example, tables listing all the applicable elbows or bend variants. If applicable the documentation is also certified.

New workflow
Working in EB with the pipe class-based workflow, the engineer begins to specify the correct pipe class for the already determined pipework. A wizard assists him in the selection of all necessary parameters such as medium, pressure and temperature. From this EB determines the suitable TÜV tested class and marks the process connection appropriately in the P&ID. In this way the pipe "knows" automatically the points between which this class definition is valid, including the topology of all sub-segments and a standard-compliant connection representation. When inserting devices into the pipework, EB then presents only those components that are authorised with this pipe class, including their documentation. Without lengthy searches, without recalculation.

Aucotec at ACHEMA: Hall 9.2, Stand B12

Image (Aucotec):

Wizard for pipe class definition in Engineering Base

Aucotec AG develops engineering software for the complete life cycle of machines, plants and mobile systems – with more than 30 years of experience. Solutions range from flow diagrams via process control and electrical engineering for large-scale plants to harness design in the transportation industry. Aucotec software systems are in use worldwide. Aucotec, with headquarters and main development center in Hanover (Germany), is represented in all major markets like USA, China, UK, France, Italy, Poland, Sweden and Austria. A global network of dedicated partners ensures local support worldwide.