

Körting Hannover AG – Your competent partner for innovative and reliable firing technology

Are you planning new plants or firing concepts, or perhaps utilisation of new fuels?

Why not contact us? Together we can develop an efficient and low pollutant design to meet your requirements.



Körting Hannover AG starts its new testing facilities

Early in 2010 Körting Hannover AG began operation of new research and development facilities with the aim of executing future target-, application- and customer-oriented plant and fuel trials.

The plant consists of a multitude of equipment assemblies with which multifaceted questions concerning modern firing technology can be examined from a scientific as well as a practical approach. All types of pulverised, liquid and gaseous fuels can be used. It is also possible to examine particular applications with different types of combustion chambers. This opens up numerous possibilities of finding optimally matched firing systems and plant components for fossil and renewable fuels as well lean (poor) gases.



Pilot plant diversity

With easy and uncomplicated change-over possibilities the testing facilities can be adapted to respective demands and duties. The nucleus is formed of 2 combustion chambers, a refractory-lined chamber and a steel combustion chamber onto which the burner with a thermal firing output of 1,6 MW can be mounted.

Model calculations allow the results to be projected to any required firing performance.

What the new testing facilities can do

The plant has been designed in such a manner that it can investigate a very large spectrum of industrial firing technology. This pilot plant covers the whole range starting from the burner system over the equipment assemblies up to plant technology.

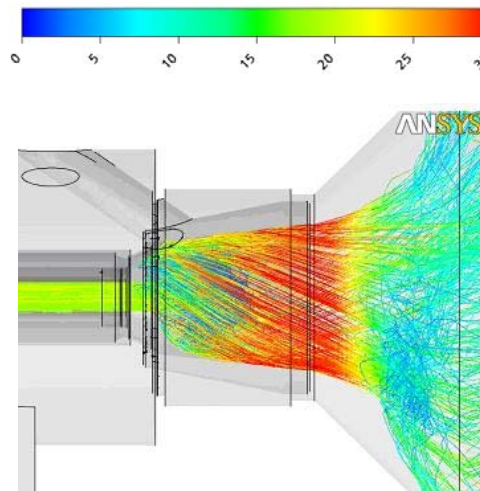
So all supply and exhaust disposal features belonging to an industrial firing plant can be considered as a whole. Flame geometries and temperature profiles for pulverised and gaseous fuels and their respective effects can be realised for any air figures.



CFD simulation with the aim of reducing Nox and CO emissions

Knowledge won from simulation calculations concerning particle size influences, flow and mixing fields leads to constructional burner optimising. The aim of these optimisations is,

amongst others, a smoother mixing of fuel and combustion air and achieving so combustion with lower temperature peaks and resulting lower NOx emissions. In this respect the testing facilities offer numerous possibilities of verifying the results from CFD simulations.



Efficiency and environmental compatibility

Reducing operating emissions and increasing efficiency is the central point of all trials. For example, primary and secondary emission reduction measures such as fuel and air staging, different scrubber technologies, injection of lime, urea, NH3 or steam can be examined and evaluated for individual fuels with regard to their effectiveness.

