SUCCESS STORY IN Energy Production

COMPANY XY
Orgrez

THE PROBLEM

THE HPC PROBLEM DOMAIN

CFD simulations with chemical reactions

THE SOLUTION

SCR model was tested on the geometry of the coal combustion boiler and project design data specified by the catalyst manufacturer. Results of CFD simulation were compared with task data. The main parameters were reduction of NO, pressure drop reduction of CO, and conversion of SO_2 to SO_3.

THE BENEFITS

- confirmation of the applicability of CFD for SCR design and optimisation;
- time and costs saving due to speed up of SCR design process;
- environmental impact due to optimised

EURO

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THE PROBLEM

Computational Fluid Dynamics simulations for the fast and efficient description of the catalysis process of the selective catalytic reduction technology (SCR)

THE HPC PROBLEM DOMAIN

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THE SOLUTION

SCR model was tested on the geometry of the coal combustion boiler and project design data specified by the catalyst manufacturer. Results of CFD simulation were compared with task data. The main parameters were reduction of NO, pressure drop reduction of CO, and conversion of SO_2 to SO_3.

THE BENEFITS
- confirmation of the applicability of CFD for SCR design and optimisation;
- time and costs saving due to speed up of SCR design process;
- environmental impact due to optimised SCR design leading to increase of NO_x emission reduction.

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