

# Modular Simulation tool for in-service behavior prediction of the cooling water systems of the steelmaking industry



## PROJECT DETAILS

Funding Programme:  
Research Fund for Coal & Steel  
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Steel Research  
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## PROJECT DESCRIPTION

The objective of this proposal is to develop a tool/software for predicting the in service behavior of cooling water circuits. Experimental data from laboratories and data mining analyses will be used to create a data base of circuit elements (pipes, elbows, pumps, venturis, etc.), operation parameters (temperature, flow, pressure, etc.) and control parameters (corrosion rate, scaling risk, bio fouling and heat efficiency). The results of this data base will be specific circuit units with defined characteristics and parameters associated. These units will be used for developing software based on Finite Element Method to simulate the behavior of the cooling water circuit under operation condition.

## PROJECT PARTNERS

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**Belgium**  
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