aixprocess

established 2001 from Aachen University of Technology by Dr. Martin Weng, Markus Hufschmidt

located in Aachen / Germany international partner network





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CEMENTENGINEERING SOLUTIONS

Tailored Services for Processdesign, -optimisation, -digitision and -decarbonisation

OUR SERVICES

combine deep cement We process expertise, with a broad digital engineering toolkit, to tackel the industries urgent challenges like decarbonisation, alternative fuels, energy efficiency, hydrogen, calcined clay, concrete recycling.



OUR VALUE PROPOSITION

optimising your cement production with expert knowledge and experience from optimisation projects and advanced AI solutions. From debottlenecking to innovative concepts, we drive your processes to peak efficiency.



CFD Digital Twin





Control Strategy **Optimisation**



Plant & Data **Audits**



Combustion & Emission **Engineering**



KILN AlxperT RealTime Optimiser



Integrated Heat & Mass Balances



Supplier-Agnostic **Equipment Selection**



Conceptual **Design**



Process of Tomorrow Hydrogen, **Syngas & Oxyfuel**

Process Consultancy

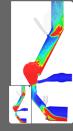
- Plant & Data Audits
- Production up-rating
- Alternative fuel
- Maximization
- Sustainability concepts
- CO2 & emission reduction
- Hydrogen Integration & OxyFuel

Engineering

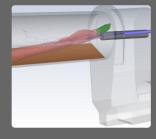
- Cement process details
- Flow dynamics
- Combustion of lumpy alternative fuels, Syngas & hydrogen
- Pneumatic transport of materials
- Chemical impact

Tools & Facts

- Computational Engineering CFD & Flow Sheet Digital **Twins**
- Lab furnace combustion tests
- Alternative fuels characterisation







+90% AF UTILISATION **BOOST**

-40% **FUEL COSTS**

+10% PRODUCTION GAIN

+15% **EFFICIENCY** RISE

+500 CUSTOMERS

+1000 COMPUTATIONAL **ENGINEERINGS**

+20 **YEARS EXPERIENCE**