References



Industry	Customer	Project	Country	Accomplished goal			ent	ility		
					Efficiency	Safety	Environment	Sustainability	Future	Strategy
Lime	Kiln manufacture	Development of mathematic models for calculation of the temperatures of solid and gas streams in the lime kiln in cooperation with the University	Italy	Calculation of the length of single process and temperature zones for reducing the kiln height	Х		X		Х	
	Kiln manufacture	Metrological recording of lime kilns to establish the real state	Italy	For defining the potential for optimi- zation or check if changes were done successfully	X	X			Х	
	Lime group	Planning of a lime plant on the green field	Russia	supply of a PCC plant; despite having all permissions project not realized	X		X		X	
	Lime group	Evaluation of the lime kiln type adjusted to the lime quality / lime application	Russia	for fulfilling the specification of lime application; project was successfully implemented	Х			Х	Х	
	Lime plant	profitability assessment regarding the fuel change from gas to lignite in a lime kiln	Germany	For the consideration of risks and costs for the investigation; the firing change was done successfully	Х	Х	Х	Х	Х	X
	Lime group	Evaluation of concepts for using secondary fuel in a lime kiln	Bosnia- Herzegovina	For checking the system expenditure versus operation costs	X	Х	Х	X	X	Х
	Lime group	Implementation of the fuel firing from gas to lignite	East Europe	For saving energy cost; goal was successfully reached	X	Х	X	Х		
	Lime group	Development of a time sheet during optimization measures of a lime plant, which should be up to sale	East Europe	For assessment of the profitability of the project; no feedback	Х	Х	Х	Х	Х	X
	Lime plant	Optimization of the production cost of the lime process	Germany	For getting a better profitability	X	X	X	X	X	
	Lime plant	Strategic consultation for securing locations of lime plant	Germany	For the timely imitation of measures; not yet realized	Х	Х	Х	X	Х	Х
	Lime plant	Structuring of projects in the kiln production	Germany / abroad	For defining project cost, use of resources and expected results	Х	Х	Х	Х	Х	Х
Steel	Lime plant in steel plant	Consultation in fitter technology regarding a waste heat boiler behind a lime rotary kiln	Bulgaria	For fulfilling EU regulations; solution was found, project not realized	Х	Х	Х			
	Lime plant in steel plant	Support of a installation of a lime plant in a steel plant until commissioning of the lime plant	Russia	Control during installation; planning of personal resources; lime plant was commissioned	Х	Х	Х	Х	Х	Х
Sugar	Sugar plant	presentation of processes during lime production in a kiln	Germany	Training	Х	Х	Х	Х	Х	
	Sugar plant	Optimization of the lime kiln operation and evaluation of investment	Germany	Efficient and safe kiln operation; interpretation of measured data; after modifi-	X	Х	Х	X	Х	
	Sugar plant	Assessment of measurement equipment at a lime kiln	Germany	Interpretation of measured data; training of the team at site; team is more safer in						
	Sugar plant	Training of operational team of a lime kiln	Germany	Know How extent ion	Х	Χ	Х	Χ		
	Sugar plant	Consultation in the choice of lime stone type	Germany	operational safety	Х		Х			
	Sugar plant	Consultation in the choice of solid fuel (coke and anthracite)	Germany	operational safety, estimation of risks	Х		Х			
Diverse	Chalk plant	Optimization of drying plant in a chalk plant	Germany	Presentation of the profitability and savings reached up to 30 %	Х	Х	Х	Х	Х	
	Chalk plant	Carrying out of planning approval process	Germany	safeguard of the resources	Х	Х	Х		Х	Х

- Working method:

 1 Indentify the current status
 1.1 Metrological recording of the lime processes
 1.2 Creating a heat and mass balance

- 2 Comparison with similar plants, benchmark
 3 Evaluation of a customer specific solution under the view of the entire process
 4 Structuring the project with defining costs, resources, milestones and expected results