



FuturZement C.1 | FuturBeton C.1

nanostructured cement/concrete

high strength ☀ CO2-low ☀ super durability

all advantages for EUR 7,00 / ton of concrete

(additional full cost, CM900, Germany 2012-10)



Industry:

construction-industry

with FuturBeton can build more faster | sleeker | higher | cost-effective | durable | environmentally friendly with | better surface and | less steel

steel-industry

the today's semi-waste GGBS turns into a super-activated high value product (30% additive to OPC > FuturZement)

Product/innovation 100% ready to market proved:

technologically

→ public bridge in Germany !

economically

→ +7,00 EUR/ton as of 43.000 tons p. a. (1x Simoloyer® CM900)

ecologically

→ 20 % CO2-emission savings in cement manufacturing process

Technical advantages:

strength

100-120 MPa after 28 days

early strength

40 MPa on the first day

durability & surface

super fine pores, to date full performance after 1 year under water

application

except Simoloyer® plant, common cement/concrete processing route

Cost advantages:

higher strength

→ less material, replace steel

higher early strength

→ build faster

higher durability

→ less material, build less often

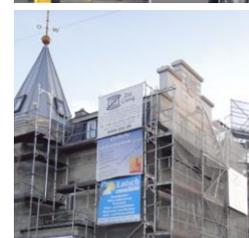
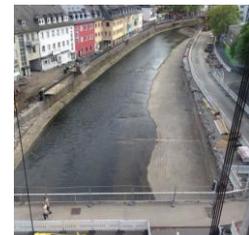
better surface

→ can represent cost-advantages as well

CO2 savings

→ can represent cash earnings/savings as well

Schedule & volumes	option (a)	option (b)	option (c)
equipment scale Simoloyer®:	CM100	CM400	CM900
estimated annual production and CO2-saving capability [t]			
GGBS	240	960	2.160
good for FuturZement/cement	800	3.200	7.200
good for FuturBeton/concrete	4.800	19.200	43.200
results in an annual CO2-emission saving	95	380	855
cost approximates and schedule			
additional product cost per ton of concrete, based on German full-cost calculation, 10-2012	€ 22,00	€ 10,00	€ 7,00
time-scale, set-up/start of the new production/product line	10 months	16 months	20 months
total cost at partner Zoz [Mio€]	1,0	2,1	3,2
total cost at partner a, b.. [Mio€]	tbc	tbc	tbc



the bridge "Rosenthal" at Olpe/Germany established on November 14, 2012



12 ton roof balustrade, Villa ZCS at Siegen/Germany established on June 21, 2013