



ELOTEX[®]

**ELOTEX[®]
FLOWKIT73
&
FLOWKIT74
for SLCs**

June 2008

New Elotex products for cementitious self-levelling floor compounds (SLCs)

- **ELOTEX® FLOWKIT73 (New FLOWKIT)**
- **ELOTEX® FLOWKIT74 (New FLOWKIT)**
- **ELOTEX® FL4200 (New Redispersible Powder)**

ELOTEX® FLOWKIT-Types for SLCs

ELOTEX® FLOWKIT **combines** the properties of

ELOTEX redispersible powders,
synthetic or natural superplasticizers,
stabilizers, water retainers and defoamers ...

... **in a single, unique product range (for SLCs)!**

New Elotex FLOWKIT-Types for SLCs

ELOTEX® FLOWKIT73

- Redispersible powder with very strong fluidifying effect
- For SLC formulations with **medium viscosity**
- Dosage recommendation 0.50 - 1.00 % (by total weight)

ELOTEX® FLOWKIT74

- Redispersible powder with very strong fluidifying effect
- For SLC formulations with **rather high viscosity (excellent reduction of separation and bleeding)**
- Dosage recommendation 0.50 - 1.00 % (by total weight)

Summary of current and new ELOTEX® FLOWKIT-Types

ELOTEX® FLOWKIT Type		Performance Properties		
		Fluidification and Water Reduction	Defoaming	Reduction of Separation and Bleeding
Current Types	51	++	++	0
	52	++	++	+
New Types	73	+++	++	+
	74	+++	++	+++

0 low + basic ++ strong +++ excellent

New Elotex Redispersible Powder for SLCs

ELOTEX[®] FL4200

- based on VA/VeoVa/Ac (Vinylacetate / Vinylversatate / Acrylate)
- synergistic rheological effects with synthetic superplasticizers
- hardened SLC (improved mechanical properties):
 - improved adhesion & cohesion & flexibility
 - improved abrasion resistance
 - improved wet resistance (VeoVa based polymer)
- VOC reduced (for SLCs according to GEV / EMICODE EC-1)

STARTING FORMULATION –

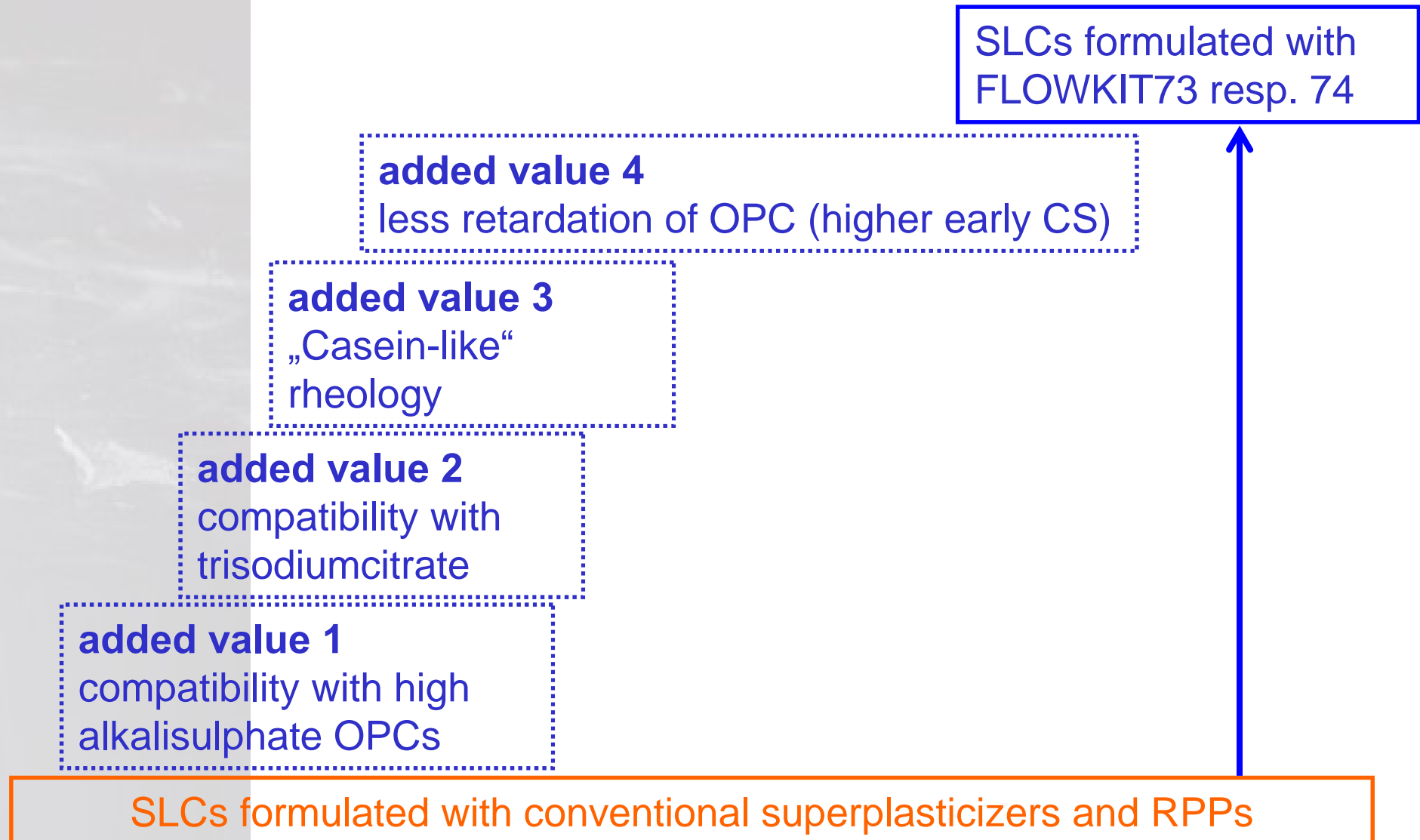
Self-levelling floor compound with ELOTEX FLOWKIT73 or 74

Formulation	Parts
Portland Cement (CEM I 52.5 R)	21 – 25
High Alumina Cement	11 – 13
Hydrated Lime	0 – 3
Gypsum Alpha Hemihydrate	3 – 5
Quartz Sand (0.1 – 0.3 mm)	40 – 50
Calciumcarbonate (20 – 80 µm)	8 – 12
Trisodium Citrate	0.1 – 0.3
Lithium Carbonate	0.0 – 0.3
Defoamer	0.1 – 0.2
Cellulose Ether (200 – 500 mPa.s)	0.04 – 0.06
ELOTEX® FL4200 (Redispersible Powder)	0 – 3
ELOTEX® FLOWKIT73 or 74	0.3 – 1.0
Water	21 – 23%

Applications

Self levelling floor underlayments applied up to 5 mm thickness. For thickness greater than 5 mm, blending the formulation with 50 - 100% quartz sand is suggested.

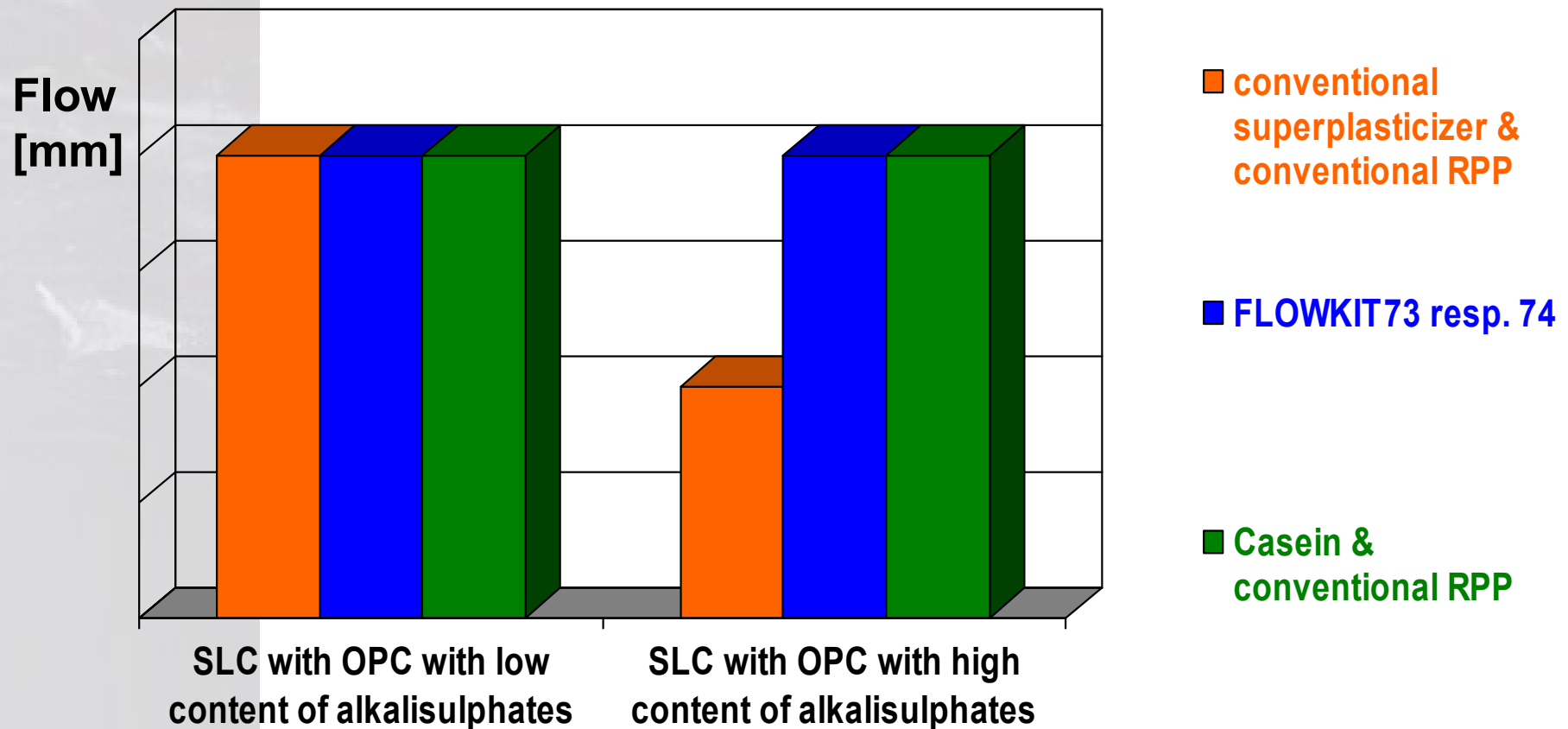
Value Proposition



Added Value 1 - Compatible with high alkalisulphate OPCs

Benefit with FLOWKIT73 & 74

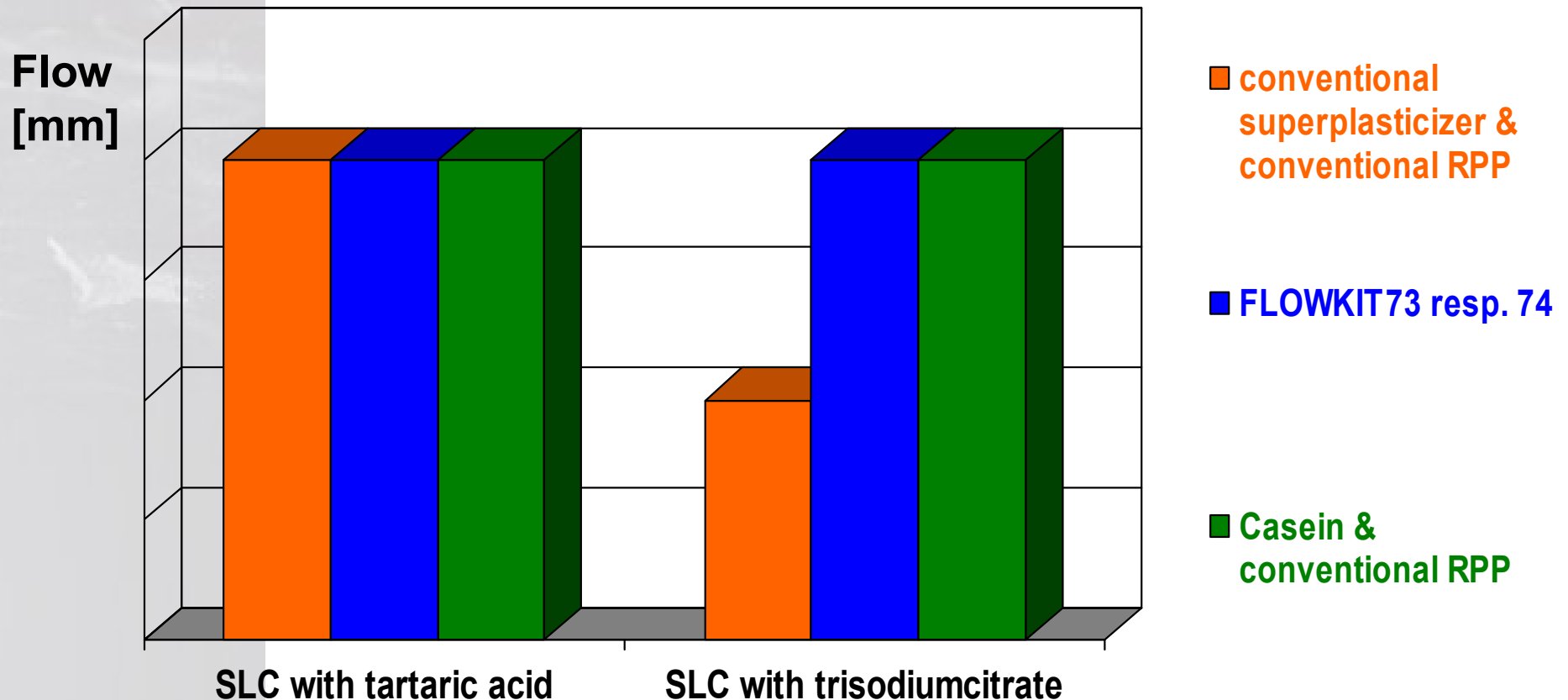
- Good fluidification also with changing OPC qualities



Added Value 2 - Compatibility with Trisodiumcitrate

Benefits with FLOWKIT73 & 74

- Trisodiumcitrate can be used which is cheaper than tartaric acid.
- Trisodiumcitrate gives better hardening properties than tartaric acid.



Added Value 3 - “Casein-like” Rheology (low yield point & high viscosity)



Flow [mm]



Viscosity (Efflux Time [s])

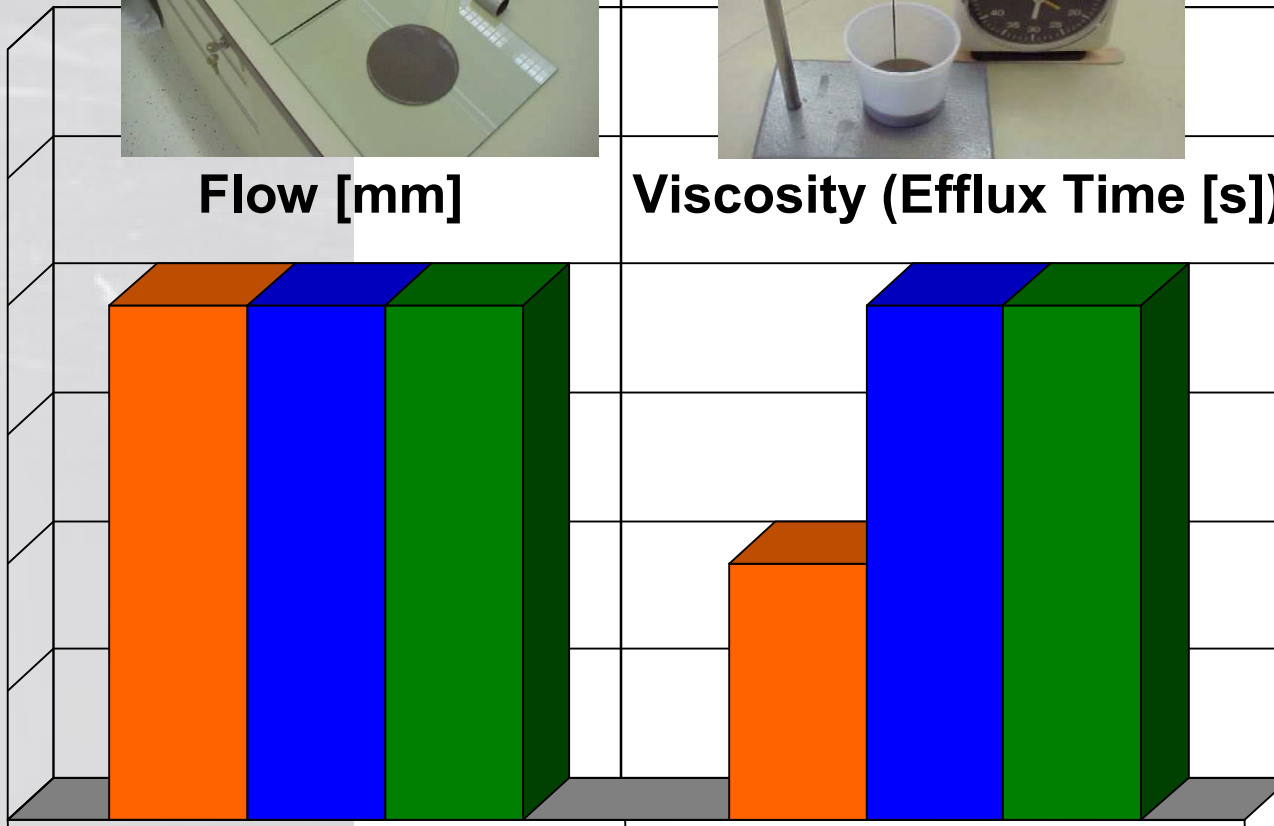
Benefits FLOWKIT73 & 74

- high viscosity
- stability & anti-bleeding

■ conventional
superplasticizer &
conventional RPP

■ FLOWKIT73 resp. 74

■ Casein &
conventional RPP

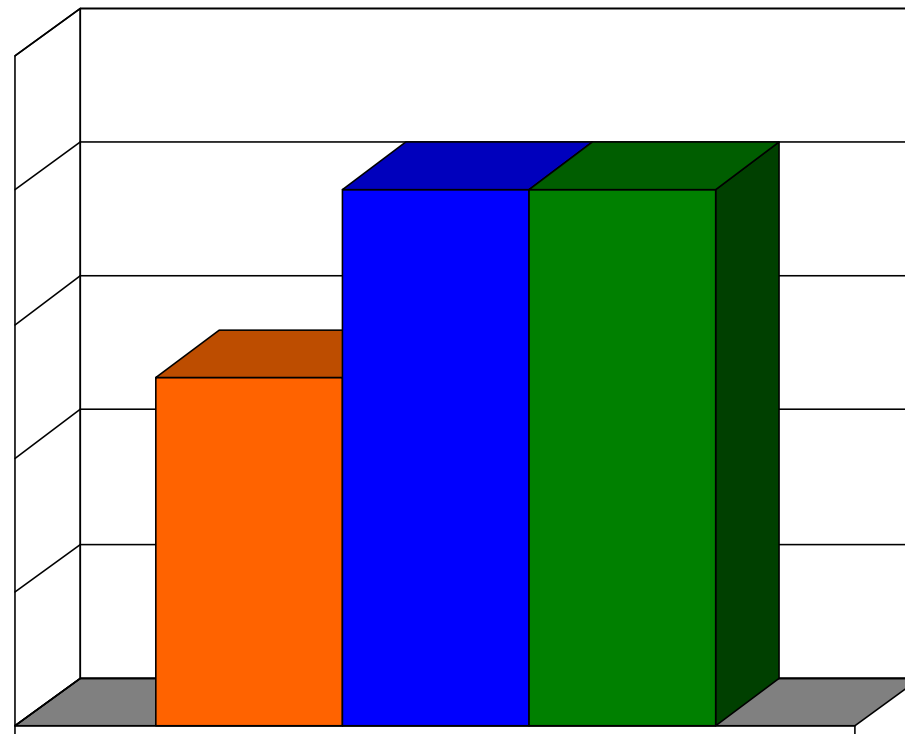


Added Value 4 - Less Retardation of Cement Hydration (higher early CS)

Benefit with FLOWKIT73 & 74

- Fast cement hydration, high strength development

24h-CS
[N/mm²]



■ conventional
superplasticizer &
conventional RPP

■ FLOWKIT73 resp. 74

■ Casein &
conventional RPP

Value Proposition - Summary of Benefits

SLCs formulated with FLOWKIT73 resp. 74 ...

- compared with other superplasticizer based SLCs -

1. better fluidification (more compatible with changing OPC qualities)
2. better compatibility with retarders like citric acid and trisodiumcitrate
3. higher viscosity & better stability (anti-bleeding), robustness of the SLC and similar rheology like casein (replacement of casein)
4. less retardation of cement hydration (higher early CS)

- compared with casein based SLCs -

- very efficient (⇒ cost savings compared with casein!)
- synthetic polymers (no biodegradability, no ammonia emission, no mold formation, very low VOC emissions, constant quality)