

VISCO TOP UT



Special Thickening Agent [VISCO TOP UT] for NATM

NETIS No. KT-200035-A

Improving tunnel work conditions with Kao's surfactant technology

Economical, dust-reducing powder-type accelerator (high early strength)

Advantages

- Significant dust reduction
- **Additional admixtures unnecessary**
- Fresh state improvement (high compatibility with aggregates)

Properties

- Appearance White powder
- Dosage 0.05~0.3% of cement by weight
- Packaging 10kg box

Dust Reduction Experiments

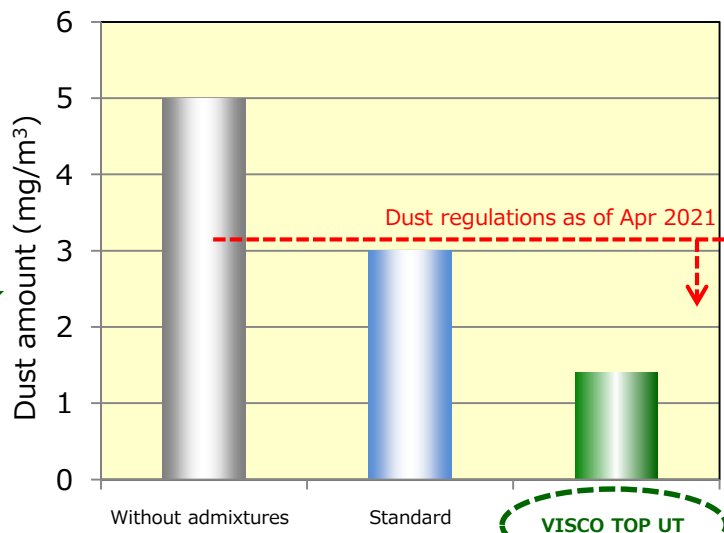
Shotcrete mix example

SL (cm)	W/C (%)	s/a (%)
15	60	60

Powder accelerator 9% (by wt)

Excellent

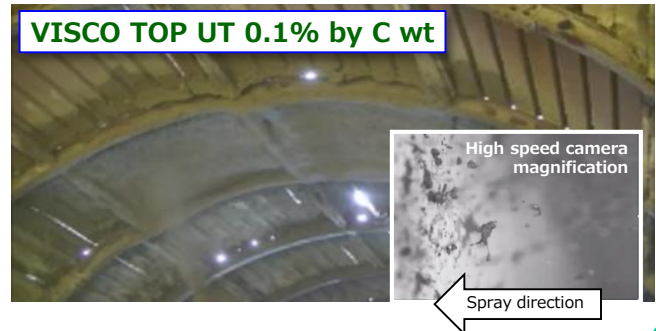
Unit weight (kg/m ³)					UT (g/m ³)
W	C	S	G	SP	
216	360	1068	734	-	360



Without special thickeners



VISCO TOP UT 0.1% by C wt



The information and recommendations in this publication are to the best of our knowledge reliable. However, nothing herein is to be construed as a warranty or representation. Users should make their own tests to determine the applicability of such information or the suitability of any products for their own particular purpose. For more enquiries, please contact the following.

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Shotcreting video here →

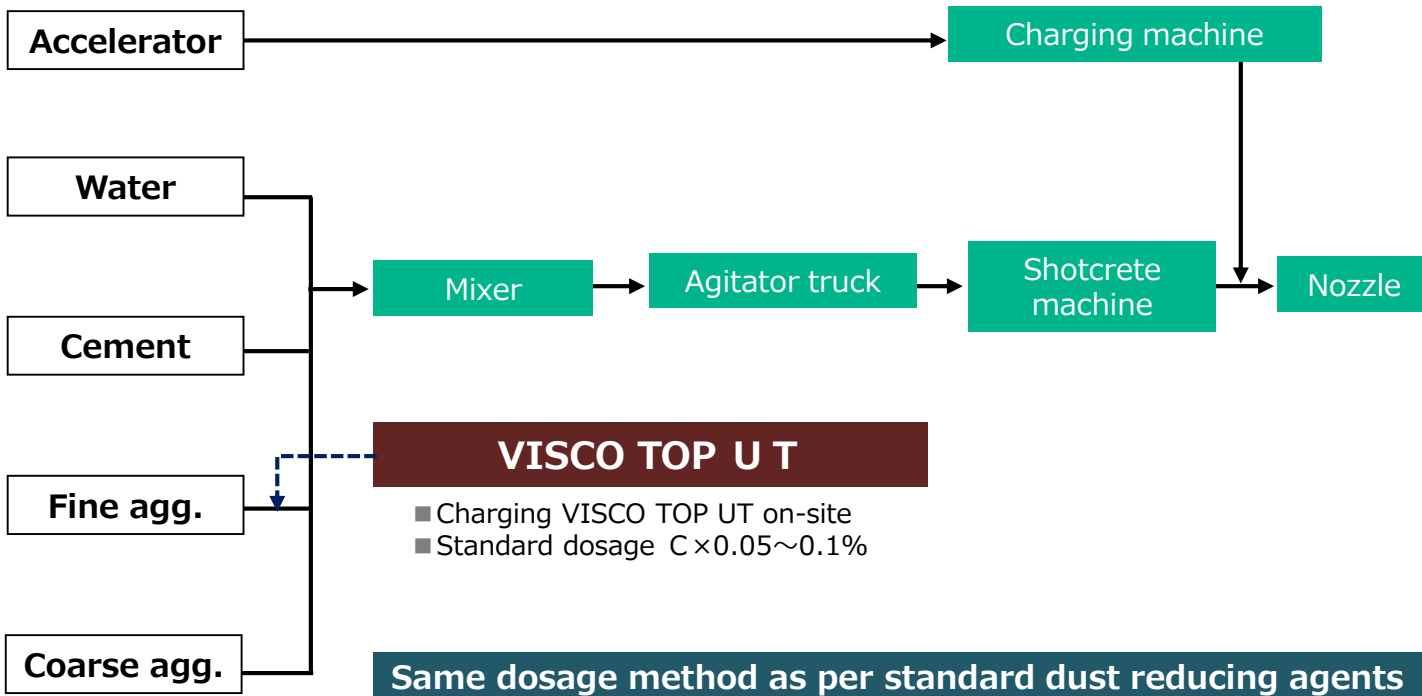
Mail : chemical_eif@kao.com



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VISCO TOP UT Dosage Method

- Charge into the on-site plant aggregate belt conveyer
- Standard dosage $C \times 0.05 \sim 0.1\%$



Standard dust-reducers / VISCO TOP UT Cost Comparison

	Dust reducing agents (standard)		VISCO TOP UT	
	Without admixtures	With additives Above : Dust-reducer Below : Admixtures	* Additional admixtures unnecessary	
Design unit price	3,600 yen/kg	3,600 yen/kg 350 yen/kg	6,000 yen/kg	
Dosage	0.1%(by C wt)	0.1%(by C wt) 0.7%(by C wt)	0.05% (by C wt)	0.1% (by C wt)
Cost	1,296 yen/m ³	2,178 yen/m ³	1,080yen/m ³	2,160yen/m ³
Dust amount	3.0mg/m ³	3.0mg/m ³	2.0mg/m³	1.5mg/m³

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