

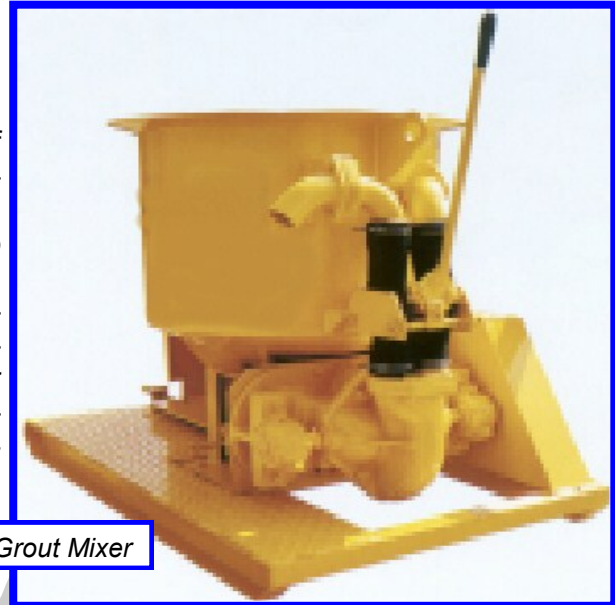


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Colloidal SD-6 Mixer

Mixes a Range of Materials on the Job Site

This machine is a single drum high speed, high shear unit designed for the efficient production of cement based grouts. The product exhibits colloidal properties and is nearly immiscible in water. The machine can handle cement/sand ratios of up to 1:3 by weight and produce pumpable mixtures. It will mix a wide range of materials such as cement/PFA, pre-blends, bentonite, lime or chemicals. The machine illustrated is a skid mounted for tunnel or mining applications. Design and construction is extremely strong to withstand hazardous site conditions.



Single Drum Colloidal Grout Mixer

General Specifications

Length:	1.3 m
Width:	0.85 m
Height:	1.25 m
Weight:	500 kgs
Power Unit:	11 kW electric motor 15 hp diesel motor
Output:	2.5 m ³ /hour Pressure 2.0 bar
Batch capacity:	The mixing batch capacity is 120 litres

Pressure Discharge

The pumping action of the mixer enables rapid transfer of mixed materials out of the mixer into a storage tank or directly to the point of use.

Proven Design

Keller Colcrete has been producing high shear mixers for over 50 years and they are now accepted as an industry standard worldwide, having been supplied to over 60 countries.

Reliability

The combination of robust design and ready availability of spare parts ensures long life and reliability for the equipment.

Higher Strength

The high shear mixing action is capable of mixing grouts of lower water/cement ratios, resulting in higher strength grouts

Cost Savings

The combined effect of the highly efficient mixing action and the ability to mix low water/solids ratios allow reductions in the cement content for a given strength requirement. The cement is replaced by a less expensive filler such as sand or PFA.

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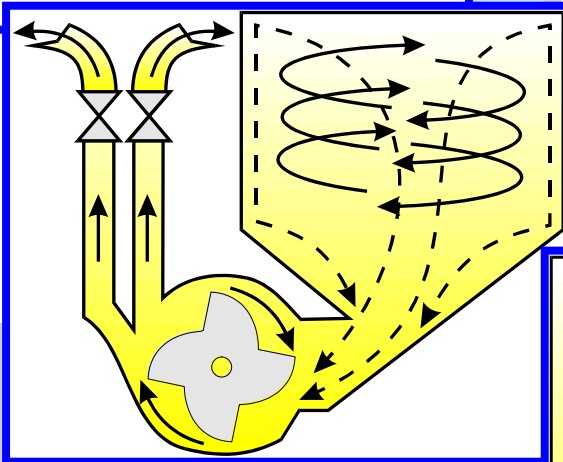
Colloidal Mixer SD-6 with Agitator Tank

Optimum Mixing

The unmixed grout is repeatedly re-circulated through the zone of high shear within the mixer. This breaks down the clusters of dry particles (agglomerates) and ensures maximum inter-dispersion of fluids and solids.

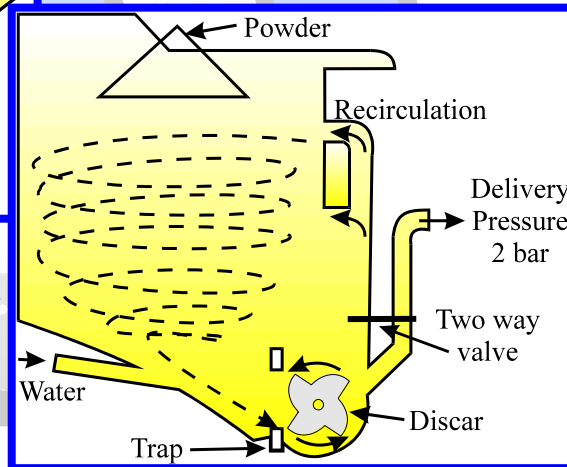
Minimal Bleed

The combination of low water/cement ratios and efficient mixing ensures that more of the water is absorbed by hydration thus minimizing bleed.



Immiscible with Water

The colloidal properties of the mixed grout render it virtually immiscible with water, and ideal for underwater grouting.



Minimal Dilution by Groundwater

BS8081 recommends the use of high shear mixing for the grouting of anchors in water bearing ground conditions because the dilution is minimized.

Speed

The vortex action inside the mixing tank rapidly assimilates the powder materials into the high shear mixer. This results in very rapid mixing of a batch, in as little as 15 seconds.