

ChemGrout[®]

The World's Widest Selection of Grouting Equipment

Heavy Construction

Slurry Trenches & Walls

Undersealing

Tie-Backs

Tendons

Ground Anchors

Foundations

Marine/ Offshore

Bridges & Foundations

Dam Grouting

Underwater

Erosion Protection

Mining & Tunneling

Void Filling

Waterproofing

Rock Bolts and Anchors



Colloidal Grouting Equipment

Featuring
ChemGrout's
"TurboMix"
Colloidal Mixer



ChemGrout's "TurboMix" Colloidal Mixers

Specially designed tanks and mixing pumps make ChemGrout colloidal mixing efficient and profitable for the owner. Water and solid materials are drawn through the high speed diffuser type pump rotating at speeds of up to 2,000 RPM to prevent flocculation and achieve complete particle wetness. Mixing time is significantly reduced by the high shear action of the colloidal mixing pump, aided by a unique powered bridge breaker device which enhances flow rates through the pump. These high shear colloidal mixers have been shown to increase apparent fluidity of slurry mixes by 20% over paddle mixers, an important advantage for dam, rock and soil grouting where the ability to penetrate tight formations is necessary. For very sensitive applications such as post tension grouting, the highly efficient colloidal mixer makes possible water to cement ratios down to 0.35 by weight, resulting in very high strength grouts with little or no bleed water release.

Materials

- Neat cements – all types
- Ultra/Micro-fine cements
- Bentonite slurries
- Fly ash
- Post tension grouts



CG-600 Colloidal Grout Plant

20 gpm

The CG-600 is a heavy duty, high volume colloidal grout plant favored for heavy construction projects such as dams and tunnels, as well as for precision post tension grouting. This unit features a high speed mixing pump that thoroughly wets each particle and discharges the mixed material into a 13 cubic foot capacity agitating holding tank. A direct coupled progressing cavity pump delivers slurries at a rate of up to 20 GPM and pressures of up to 261 PSI. The unit easily mixes and pumps slurries of portland cement, fly ash, bentonite, and lime flour. All controls are conveniently located on the operator platform for easy one man control. Power options are air, hydraulic, electric/hyd or diesel/hyd.

Specifications

PUMPS

Grout Pump	3CL6 progressing cavity
Colloidal Mixing Pump	2 X 3 X 6 diffuser-type centrifugal

PHYSICAL SPECIFICATIONS

Air

Weight	~1550 lbs.
Size	90"L x 60"W x 74"H
Power Required	300 cfm, 100 psi

Hydraulic

Weight	~1550 lbs.
Size	90"L x 60"W x 65"H
Power Required	Dual circuit 12/16 gpm, 2400 psi

Electric/Hydraulic

Weight	~2600 lbs.
Size	90"L x 60"W x 72"H
Power Required	3 Phase, several voltages available

Diesel/Hydraulic

Weight	~2650 lbs.
Size	86"L x 34"W x 41"H
Power Required	Diesel/electric start



CG-680 Series

CG-6880 shown above

**CG-680 & CG-6880
Large Colloidal Grout Plants**

44 gpm; single or double pump models

Specially designed as a highly mobile or portable high capacity plant, the CG-680 series machines are ideal for large, heavy construction sites. The double pump model (CG-6880) minimizes downtime and enhances efficiency with a reserve second pump for emergency standby, which may (upon request) be configured as a water testing pump. Both units utilize a 17 c.f. mix tank, with cleanout, as well as a 17 c.f. paddle agitating holding tank. The skid mounted models are available with hydraulic or electric power.



Specifications

PUMPS

Grout Pump 680	3CL8 single pump, progressing cavity
Grout Pump 6880	3CL8 dual pump, progressing cavity
Colloidal Mixing Pump	2 X 3 X 12 diffuser-type centrifugal
Output/Pressure	Dual Speed 35 & 45 gpm, 261 psi

PHYSICAL SPECIFICATIONS: CG6803CL8

Hydraulic	
Weight	~2400 lbs.
Size	108"L x 60"W x 73"H
Power Required	Dual circuit 12/16 gpm, 2000 psi

Electric/Hydraulic	
Weight	~3600 lbs.
Size	108"L x 60"W x 73"H
Power Required	3 Phase, several voltages available

Diesel/Hydraulic	
Weight	~3600 lbs.
Size	126"L x 60"W x 73"H
Power Required	Diesel/electric start

PHYSICAL SPECIFICATIONS: CG68803CL8

Hydraulic	
Weight	~2800 lbs.
Size	97"L x 60"W x 73"H
Power Required	Dual circuit 12/16 gpm, 2000 psi

Electric/Hydraulic	
Weight	~3800 lbs.
Size	138"L x 60"W x 73"H
Power Required	3 Phase, several voltages available

Diesel/Hydraulic	
Weight	~3800 lbs.
Size	138"L x 60"W x 73"H
Power Required	Diesel/electric start





CG-600 Compact Colloidal Series

The CG600/8CF combines the latest advances in colloidal grouting in a compact design. These field proven grout plants feature ChemGrout's 8 cubic foot capacity "Turbomixer", along with a rotating bridge breaker, nine cubic foot capacity vertical shaft paddle agitator, and a 3-stage size 6 closed throat progressive cavity pump. Mixer and pump are mounted on a single skid (transportable by pick-up truck) for quick, easy set-up and immediate operation.

Specifications

PUMP

Pump Type	3L6 progressing cavity
Output/Pressure	20 gpm, 261 psi

COLLOIDAL MIXER

Mix Tank	8 c.f. with bottom cleanout
Mixing Pump	2 x 3 x 6 diffuser-type centrifugal
Holding Tank	9 c.f. or 13 c.f. paddle agitating

PHYSICAL SPECIFICATIONS

Air

Weight	~1200 lbs.
Size	88"L x 34"W x 59"H
Power Required	300 cfm, 100 psi (air)

Hydraulic

Weight	~1200 lbs.
Size	88"L x 34"W x 59"H
Power Required	Dual Circuits, 12/12 gpm, 2000 psi

POWER PACKS

Electric/Hydraulic

Weight	Varies
Size	Varies by Voltage
Power Required	3 Phase, several voltages available

Diesel/Hydraulic

Weight	~1750 lbs.
Size	74"L x 34"W x 37"H
Power Required	Diesel/electric start



CG-460 High-Pressure Grout Plant

The versatile CG460/2X8 is a skid mounted, high-pressure grout plant that is designed to mix and pump neat cements at high-pressures. It features two high shear colloidal 70 gallon mixing tanks, and a double acting, high-pressure plunger type grout pump. Dual 70 gallon colloidal mix tanks allow for independent mixing of flushing and structural grouts. Each mixer uses variable speed, high-efficiency, high shear disks, rotating at speeds up to 3,000 rpm that provides rapid and thorough mixing. The grout pump is a double acting, positive displacement plunger style pump. The CG460 is available in a number of power options listed below.

Specifications

PUMP

Pump Type	2 x 8 Double acting plunger
Output/Pressure	15 gpm (57 lpm), 2000 psi (138 bar)

PHYSICAL SPECIFICATIONS

Air

Weight	~1400 lbs.
Size	96"L x 40"W x 56"H
Power Required	375 cfm, 100 psi (air)

Hydraulic

Weight	~1320 lbs.
Size	108"L x 40"W x 56"H
Power Required	3 Circuits, 6/6/16 gpm, 2400 psi

POWER PACKS

Electric/Hydraulic

Weight	1240 lbs.
Size	85"L x 36"W x 46"H
Power Required	3 Phase, several voltages available

Diesel/Hydraulic

Weight	~1450 lbs.
Size	85"L x 36"W x 46"H
Power Required	Turbo Diesel Engine



CG-600(HP) High Pressure Grout Plant Colloidal Mixer

As with the CG-600 Series rotary pump models, the CG-600HP features the same high efficiency 13 cubic foot colloidal mixer and a matching 13 cubic foot agitating holding tank. The holding tank discharges directly into the suction port of ChemGrout's time-tested HP-2 or HP-3 double acting high pressure plunger pump. Using only a few parts, the pump can be field modified from one configuration to another with ease.

Specifications

PUMP			
Pump type	Double acting plunger		
Output/Pressure	2X8	15 gpm (57 lpm)	2000 psi (138 bar)
	3X8	20 gpm (76 lpm)	1000 psi (69 bar)

PHYSICAL SPECIFICATIONS

Air	
Weight	~2100 lbs.
Size	97"L x 60"W x 68"H
Power Required	375 cfm, 100 psi

Hydraulic	
Weight	~1800 lbs.
Size	97"L x 60"W x 68"H
Power Required	Dual circuit 12/16 gpm, 2400 psi

Electric/Hydraulic	
Weight	~2600 lbs.
Size	97"L x 60"W x 68"H
Power Required	3 Phase, several voltages available

Diesel/Hydraulic	
Weight	~3150 lbs.
Size	121"L x 60"W x 72"H
Power Required	Diesel/electric start



CG680(HP) High Pressure, High Capacity Colloidal Series

Mixes and pumps slurries of cement, fly ash, bentonite and lime flour. Commonly used in tunneling, mining, dam foundations, soil compaction and encasements. Units feature both a 17 cubic foot colloidal mixer and agitating storage tank.

Specifications

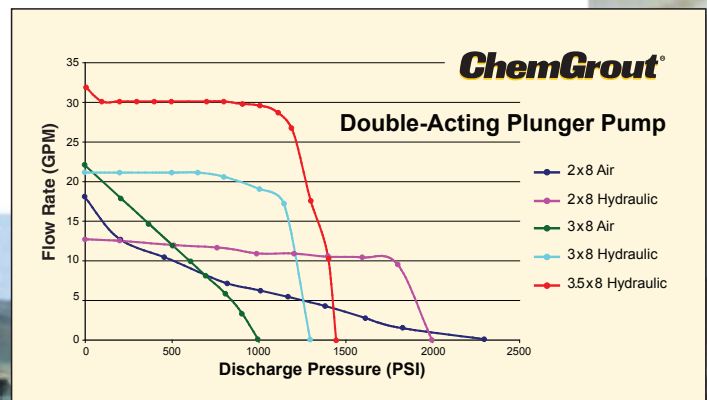
PUMP	
Pump type	3.5 x 8 Double acting plunger
Output pressure	32 gpm/1500 psi

PHYSICAL SPECIFICATIONS

Electric/Hydraulic	
Weight	~3200 lbs.
Size	109"L x 60"W x 70"H
Power Required	3 Phase, several voltages avail.

Diesel/Hydraulic	
Weight	~3800 lbs.
Size	121"L x 60"W x 79"H
Power Required	Diesel/electric start

ChemGrout offers both manual and automatic pressure controls (pictured above) on the CG680 Series.





Custom Colloidal

ChemGrout CG5X8DBL/EHT

High-Pressure Plunger Pump
Output 50 GPM (200 LPM)
Pressure 870 PSI (200 LPM,
60 Bar)



CG3L10 Grout Pump

3 Stage, Size 10 Progressive
Cavity Pump. Two Speed
Hydraulic Motor Outputs:
40 GPM (150 LPM) or
80 GPM (300L)
Pressure: 300 PSI (20 bar)



CGMIX150CF/H Agitator

Triple Blade Paddle,
Maximum 60 RPM
Capacity: 1,125 Gallons Total,
1,050 Effective



CCM40 Colloidal Mixer

Colloidal Mix Tank:
450 Gal., 300 Effective Gal.
High Speed Centrifugal Mix
Pump: 1,400 RPM
Programmable
Batch Controller
Mounted on Load Cells



CG-620 Colloidal Mixer

The CG-620 is a stand-alone colloidal mixer, usually used with other ChemGrout agitating/pumping equipment, such as the CG-500 grout plant. These skid mounted units all feature the ChemGrout "TurboMix" colloidal mixing pump, and are available in three convenient sizes, from 8 cubic feet, suitable for applications where space is at a premium, to 13 cubic feet for general applications, through 17 cubic feet for high volume applications.

CG-630 Colloidal Mixer/Agitator

The CG-630 is a combination colloidal mixer teamed with an appropriately sized agitating reservoir tank, both mounted on a common skid frame. These units feature the same ChemGrout "TurboMix" mixing pumps described above, and are available in the same mixer sizes as the CG-620. The vertical shaft paddle agitators are sized to accept the product of the mixers, and are configured to supply grout to a variety of different pumping units.

Specifications

COLLOIDAL MIXER 620

Mixing Tank	Mixing Pump
620 8 c.f.	2 x 3 x 6
620 13 c.f.	2 x 3 x 6
620 17 c.f.	2 x 3 x 12

COLLOIDAL MIXER 630

Mixing Tank	Mixing Pump	Holding Tank
630 8 c.f.	2 x 3 x 6	10 c.f.
630 13 c.f.	2 x 3 x 6	13 c.f.
630 17 c.f.	2 x 3 x 12	17 c.f.

DRIVE POWER	620	630	
Air*	185	250	(cfm, 100 psi)
Hydraulic, Dual Circuit	12/16	12/16	(gpm, 2000 psi)
Electric			15/20 HP

Contact factory for specifics on Gasoline or Diesel power options.

*Not available for 17c.f. units.

PHYSICAL SPECIFICATIONS

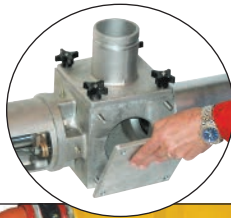
Dimensions (620)	56" - 69"L x 42"W x 50"H
Weight (620)	~1050 pounds
Dimensions (630)	72" - 92"L x 48"W x 48"H
Weight (630)	~950 pounds

Pump Options

Progressive Cavity Pumps

- 3CL6 – 20 GPM, 261 PSI
- 3CL8 – 44 GPM, 261 PSI

Higher pressures available

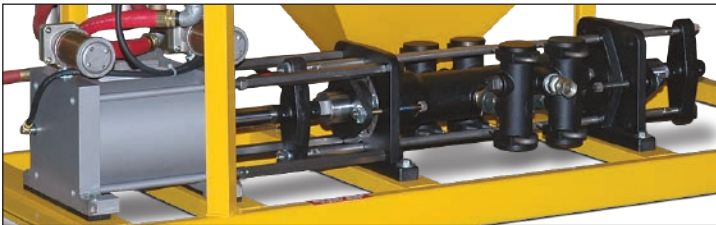


ChemGrout's closed throat aluminum alloy progressive cavity pump provides easy access to all four sides of suction housing, providing easy clean-up and maintenance.

High Pressure Plunger Pumps

- 3.5 x 8 – 32 GPM, 1500 PSI
- 3 x 8 – 20 GPM, 1000 PSI
- 2 x 8 – 15 GPM, 2000 PSI

ChemGrout HP Plunger Pumps deliver a unique combination of high flow and high pressure.



Colloidal Mix Pumps

- 2 x 3 x 6
- 4 x 6 x 12
- 2 x 3 x 12
- diffuser-type centrifugal



2 x 3 x 6 Mixer pump

2 x 3 x 12 Mixer pump

4 x 6 x 12 Mixer pump

Power Options

Air • Hydraulic • Electric/Hydraulic • Diesel/Hydraulic



Electric/Hydraulic



Diesel/Hydraulic

Power packs shown mounted on separate skids.

How to select a Colloidal Grouting System:

Step 1

Think about your application and the materials you plan to use. Normally colloidal mixers are used with neat cements and bentonite products. Sand may be added to the agitated storage tank; adding sand to the colloidal mixer will prematurely wear your colloidal mix pump.

Step 2

Determine the maximum volume or flow rate (gpm) and grouting discharge pressures (psi) needed for your application.

Step 3

Select the best grout pump based on your flow rate and pressure requirements.

- 3CL6 Progressing Cavity Pump = 20 gpm, 261 psi
- 3CL8 Progressing Cavity Pump = 44 gpm, 261 psi
- 3.5x8 Plunger Pump = 32 gpm, 1500 psi
- 3x8 Plunger Pump = 20 gpm, 1000 psi
- 2x8 Plunger Pump = 12 gpm, 2000 psi

Step 4

Select the size of your colloidal mixer and agitating storage tank. The production rates for typical 1:1 water to cement ratio (by weight) grout mix using bagged cement and a 50 gpm water metering system are:

- 13 cubic foot system = 8 cu yd/hr = 26 gpm
- 17 cubic foot system = 12 cu yd/hr = 40 gpm

Step 5

Select your power system. The power options are Air, Hydraulic, Electric/Hydraulic and Diesel/Hydraulic. Most of the larger systems require Electric/Hydraulic or Diesel/Hydraulic power systems. Power packs are also available mounted on separate skids. This reduces the noise and vibration for the operator and helps keep the power pack clean.

Step 6

Select the Model Number (example CG600/3CL6/EH)

The first part is the mixing system:

- CG600 = 13 CF Mixing Tanks
- CG680 = 17 CF Mixing Tanks

The second part is the pump:

- 3CL6 Progressing Cavity Pump = 20 gpm, 261 psi
- 3CL8 Progressing Cavity Pump = 44 gpm, 261 psi
- 3.5x8 Plunger Pump = 32 gpm, 1500 psi
- 3x8 Plunger Pump = 20 gpm, 1000 psi
- 2x8 Plunger Pump = 15 gpm, 2000 psi

The third part is the power system:

- A = Air Powered (requires an Air Compressor)
- H = Hydraulic (requires an external hydraulic power source)
- EH = Electric/Hydraulic (requires 3 phase current, various voltages and frequencies)
- DH = Diesel/Hydraulic (self-contained)

ChemGrout®

The World's Widest Selection of Grouting Equipment

ChemGrout:

We keep it simple for your success

After spending decades in the field, we've learned that in a world of complex technology, keeping things simple can be a good thing.

That's why ChemGrout equipment is engineered to be user-friendly and trouble-free. Every ChemGrout system incorporates all the technological advances you need to deliver maximum efficiency even in the most difficult job environment—without ever compromising ease of operation or maintenance.

It's this philosophy that has made ChemGrout a leading name in grouting equipment and accessories for virtually every application. Our standard and custom-built grouting equipment handles a diverse range of materials with capacities from 1 to 75 GPM and pressures from 50 to 2000 PSI. All can be skid or trailer mounted and are available with air, gasoline, diesel, electric or hydraulic power.

Our patented high pressure pumps handle pressures to 2000 PSI and flows to 50 GPM. Look to ChemGrout for all your grout pump needs:

- Progressive cavity pumps
- Double-acting plunger pumps
- Piston pumps
- Colloidal mix pumps

In addition to our ChemGrout line of equipment, we carry a full inventory of standard parts and accessories to give you a one-stop support for all your grouting needs. Looking to service your existing system? Our expert service technicians will keep you up and running.

For the best grouting equipment, service and accessories available the choice is simple.

ChemGrout. Simple solutions to your most complex grouting needs.

Our Promise to You...

When you purchase ChemGrout, you purchase uncompromising quality. ChemGrout, Inc., guarantees that our equipment is free from defects in material, workmanship or components.*

This warranty is limited to the replacement of components that have been proven to be faulty. No claims for consequential damages will get recognized. We proudly give you a full 90 day warranty from the date of purchase.

*All normal wear resulting from the mixing and pumping of abrasive slurries, or any damage to the equipment resulting from improper use is excluded from this warranty.



ChemGrout®

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