# CUSTOM GROUT INSPECTION VEHICLES



#### CUES OFFERS A FULL LINE OF PORTABLE AND TRUCK-MOUNTED CHEMICAL GROUT REHABILITATION SYSTEMS. GROUT PACKERS ARE AVAILABLE FOR MAINLINE AND LATERAL SEALING.

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Truck-mounted grout rehabilitation systems are available for mainline joint sealing/lateral sealing and can be equipped with the latest CCTV equipment for television inspection. Applications include joint testing and sealing of mainline and lateral joints, manholes, junction boxes, large diameter pipes, or any other low pressure waterproofing application. All systems can be configured to run Urethane, Acrylimide and Acrylate grouts. Dry freight box (for export) and trailer-mounted systems are also available.



### **CUES CUSTOM** Grout Vehicles

Features & Benefits



CONTROL PANEL	Easy Grout computer program, graphic user interface, intuitive, easy to train, lower operational cost.
CHEMICAL TANKS	Chemical resistant, polypropylene, clearly labeled, can order 30 or 60 gallon capacity with heaters.
FLOORING	Lonseal lonplate industrial-rated vinyl throughout.
WALLS	Kemlite, scratch, dent and chemical resistant; white finish makes the interior brighter.
GROUT TANK MOTOR & HEATER	Variable-speed, pnuematic, with small stainless steel propellers located near the bottom of tank to eliminate air from entering the grout hoses.
TUBING/FLOOR/REEL FRAME	Stainless steel construction on all grout-related equipment and components.
CAT PUMPS	Custom build, chemical resistant, explosion proof, nitrogen-charged pulsation dampers and pressure regulators to ensure even pumping for ideal chemical mixture.
CAT PUMP MOTOR	3 hp, 3 phase, variable speed, stainless steel, chemical resistant, motor.
FLUSH LINES	Automatic, simply move a shut off/bypass valve to divert the chemcals/water back to the tanks.
CHEMICAL FILTERS	Black to eliminate premature chemical set-up.
TRUCK SIZE	Available from 16' to 24' custom design builds for contractors or municipalities.
AIR COMPRESSOR	2.0 hp with 30 gallon tank.
GENERATOR	Typically Onan 10Kv or higher depending on the pump requirement.
PENTA HOSE	3 lengths to choose - 500', 650', and 800' for manhole, mainline and lateral grouting.
WATER TANK	Non-metallic, can be heated, 75 gal to 125 gal capacity.
CONTROLS	Computer program and K2, wireless for camera and packer, can control lateral packer using our wireless handheld controller.



Stop Leaks in sewers, manholes, tanks, vaults, tunnels, and many other applications.



Chemical grouting is the least expensive rehabilitation method available and also the least disruptive.



Best, longterm defense against infiltration of groundwater into structurally sound sewer systems.



Test & seal operation can be recorded for a permanent record of the exact pipeline condition.

Plenty of room for packers & grout material.

Climate-controlled office.

<u>Contractor-grade.</u>

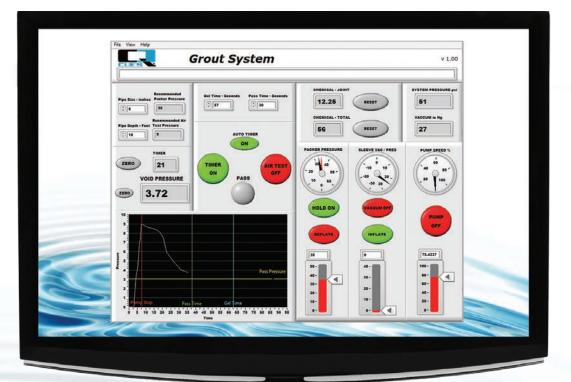
Retrofit any vehicle or trailer.

Combo trucks are available for TV, Cutter & Easy Grout.

Do not need an office using wireless Easy Grout.

### **EASY GROUT** Computerized Grout Control System



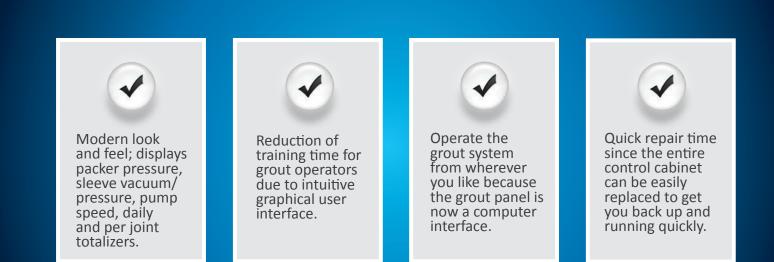


#### THE CUES EASY GROUT SYSTEM IS A COMPUTERIZED GROUT CONTROL SYSTEM DESIGNED TO CONSOLIDATE ALL VALVES, ELECTRICAL CONTROLS, ETC., INTO AN INSTRUMENTATION CABINET THAT CAN BE MOUNTED IN ANY LOCATION.

The Easy Grout graphical user interface (GUI) leads you intuitively through the grouting process. Easy Grout includes help files and tool tip descriptions to assist new users and refresh users who have been away from operating for some time. Automated entry logic provides recommended settings for the grouting process automatically based on the basic inputs of pipe size, depth etc. Because the grout panel is now a computer user interface, it is no longer physically tied to the grout process equipment and can be located virtually anywhere a computer connection, wired or wireless, can be made.

# **EASY GROUT** System







EASY GROUT INCLUDES INTEGRATED HELP FUNCTIONS TO WALK NEW OPERATORS THRU THE GROUTING PROCESS, WHICH REDUCES TRAINING TIME AND MAKES GROUTING LESS INTIMIDATING.



- Modern look and feel of the computer interface makes grouting more appealing to new users.
- Graphical, real-time, trending, display of void pressure aids in the grouting process by allowing the operator to "see" what is happening in the void, making the grouting process much easier to perform.
- Automatic calculation of recommended settings based on field conditions and pipe size makes it easier to set up and get to work.

- Automatic totalization of grout volumes pumped per joint and per job eases the job of recording information.
- The wall mounted, replaceable, control cabinet makes for easy maintenance access and repair. In the event of a system failure, a new cabinet can be replaced in the field by the customer to get back up and running quickly.
- The modularity of the system allows the user to operate the grout equipment from another vehicle or use a wireless controller.

## CHEMICAL SEALING PACKERS Low Void Packers

CUES LOW VOID PACKERS ARE LOW-VOLUME, CHEMICAL INJECTION, MULTI-GROUT PACKERS. LOW VOLUME PACKERS WORK WITH ACRYLAMIDES, URETHANE, AND OTHER COMMON CHEMICAL GROUTING MATERIALS.

CUES low void packers are fully compatible to and intended to be used with acrylamides, urethane and other common chemical grouting materials. Other design features include the ability to air or water pretest, grout seal, and re-test without the need for repositioning. Its low profile design insures a minimum grout ring residue remaining at the joint with maximum dispensing efficiency of the grout material.



## PACKERS - Low Void Chemical

### Features & Benefits



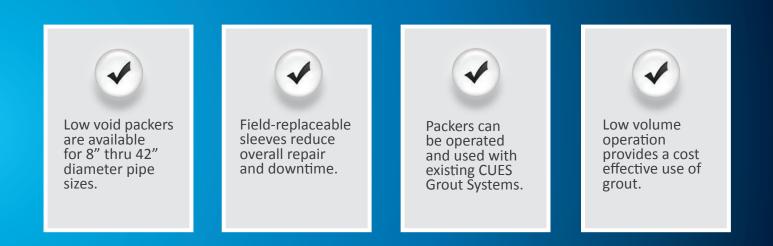
Both water and air-testing capabilities.

Fully compatible for acrylamides, urethane and other chemical grouts; multi compatibility saves the cost of different packers for different grouts.

Minimum residual grout ring remaining assures maximum flow in the sewer after grouting; low volume operation provides a cost effective use of grout. Operates with existing grout systems.

Field-replaceable sleeves reduce overall repair and downtime.

Combination pressure test and seal efficiency; dual pressure and seal capability minimizes operational time required for inspection, seal and check.





CUES IS THE INDUSTRY LEADER OF PORTABLE, TRUCK, AND TRAILER MOUNTED GROUT REHABILITATION SYSTEMS FOR MAINLINE, MANHOLE, AND LATERAL JOINT SEALING.

### CHEMICAL SEALING PACKERS Compact Collapsible Packers





#### CUES OFFERS THE MOST ADVANCED LINE OF JOINT SEALING PACKERS FOR LARGE SIZED SEWERS - THE CUES COMPACT/COLLAPSIBLE PACKER. THESE PACKERS CAN BE QUICKLY DISASSEMBLED TO PROVIDE EASY INSERTION INTO THE MANHOLE.

Save time, labor and money over conventional style packers. CUES compact/collapsible packers are rugged, but lightweight for easy handling. The packers compact design, along with the collapsible feature, means any of the CUES large pipe sized packers can be inserted through a minimum 21" standard manufactured manhole without having to remove the ring or cone. The savings in time, labor and money are significant over conventional style packers.

# PACKERS - Compact Collapsible







CUES GROUT REHABILITATION VEHICLES ARE AVAILABLE FOR MAINLINE JOINT SEALING/LATERAL SEALING AND CAN BE EQUIPPED WITH THE LATEST CCTV EQUIPMENT FOR PIPELINE INSPECTIONS.

- All CUES packers, beginning with the 18" size, are compact with the maximum width being 19.5". The packers beginning with the 24" size are collapsible.
- Packers can be quickly disassembled to provide easy insertion into the manhole.
- The cylinder is aluminum to minimize corrosion.
- The single sleeve is made of multi-ply rubber for increased strength and flexibility.
- The compact feature, along with the collapsible feature, means any of the CUES large pipe sized packers can be inserted through a minimum 21" standard manufactured manhole without having to remove the ring or cone.
- The 3/4 inch rubber thickness means the sleeve will not easily stretch out of shape, which so often occurs with some of the thin type sleeves available.
- The multi-ply wrap resists cuts and abrasions while in the sewerline.