



## PRODUCT CATALOG

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[avantigrout.com](http://avantigrout.com)



# AVANTI

Stop leaks. Stabilize soil.  
Control groundwater. **Permanently.**

MUNICIPAL • INDUSTRIAL • GEOTECHNICAL

**Product**

**Description**

**Applications**

**Advantages**

**AV-100® Chemical Grout**

Viscosity:  
1-2 cP @ 72°F (22°C) in 10% solution

Ratio: 1:1

Ultra-low viscosity, two-component solution used to stop water infiltration into manholes, mainlines, laterals and lateral connections, tunnels, mines, and other underground structures by creating a gel/soil water barrier on the exterior of the structure. Travels anywhere water can travel and cures in controllable set times from seconds to several hours. Once cured with soil, it creates an effective, long-lasting water barrier while providing superb soil stabilization. Used with AV-101 Catalyst T+ and AV-102 Catalyst AP.

- Stops water infiltration in mainlines, joints, laterals, lateral connections via remote packer, and manholes via curtain, probe or tube-a-manchette (TAM) grouting
- Soil stabilization and ground modification in tunnel and mining projects for prevention erosion of existing soil properties

- 40+ years of successful use
- Ultra-low viscosity
- Higher strength compared to acrylates; greater longevity compared to silicates
- 50+ year service life
- Mix design can alter based on desired grout concentration
- Optional additives available
- Available in granular or liquid form

**AV-118® Duriflex**

Viscosity:  
1-2 cP @ 72°F (22°C) in 10% solution

Ratio: 1:1

Ultra-low viscosity, two-component acrylic monomer solution used as an alternative to AV-100 to stop water infiltration into manholes, mainlines, laterals and lateral connections, tunnels, mines, and other underground structures by creating a gel/soil water barrier on the exterior of the structure. Travels anywhere water can travel and cures in controllable set times from seconds to several hours. Once cured with soil, it creates an effective, long-lasting water barrier while providing superb soil stabilization. Used with AV-101 Catalyst T+ and AV-103 Catalyst SP.

- Stops water infiltration in mainlines, joints, laterals, lateral connections via remote packer, and manholes via curtain, probe or tube-a-manchette (TAM) grouting
- Soil stabilization and ground modification in tunnel and mining projects for prevention of landslides or erosion of existing soil properties

- Ultra-low viscosity
- Higher strength compared to acrylates; greater longevity compared to silicates
- Will not undergo syneresis
- Contains less acrylamide

**AV-150 Acrylate Gel™**

Viscosity:  
15-20 cP @ 77°F (25°C) liquid resin

Ratio: 1:1

Low viscosity, high solids, fast setting acrylate solution. Can be used for crack injection, curtain grouting of brick and concrete structures, soil stabilization, tunnel grouting and other types of permeation applications. Once cured, it creates an effective, strong, long-lasting water barrier and can provide superb soil stabilization. The higher solids content can also provide increased chemical resistance compared to other grouts. Used with AV-101 Catalyst T+ and AV-103 Catalyst SP.

- VPAT for crack injection in below-grade structures
- Stops water infiltration into manholes, sewer mainlines, joints, laterals, tunnels, mines, and various other underground structures by stabilizing soils.
- Ground stability for prevention of landslides, erosion where site conditions dictate modification of the existing soil properties

- Non-toxic
- High solids content grout
- Greater longevity compared to silicates
- Improved chemical resistance in harsher environments

**AV-160 Supergel™**

Viscosity:  
1-2 cP @ 72°F (22°C) in 10% solution

Ratio: 1:1

Ultra-low viscosity, two-component acrylamide-free acrylate grout used to stop water infiltration into manholes, mainlines, laterals and lateral connections, tunnels, mines, and other underground structures by creating a gel/soil water barrier on the exterior of the structure. Travels anywhere water can travel and cures in controllable set times from seconds to several hours. Used with AV-101 Catalyst T+ and AV-103 Catalyst SP.

- Stops water infiltration in mainlines, joints, laterals, lateral connections, and manholes
- Soil stabilization and ground modification in tunnel and mining projects for prevention of landslides or erosion of existing soil properties

- Non-toxic
- Ultra-low viscosity
- No suspended solids
- Greater longevity compared to silicates

ACRYLIC GEL CATALYSTS

Required for use with AV-100, AV-118, AV-150 and AV-160. See mixing instructions at [avantigrout.com](http://avantigrout.com) for further information.

**AV-101® Catalyst T+**

AV-101 Catalyst T+ or Triethanolamine (often referred to as Cat T) is a colorless liquid used as an accelerator for the reaction of Avanti's acrylic gel grouts. The special blend of ingredients in AV-101 has a freezing point of -3°F and enables acrylic grouts to gel quickly. AV-101 is added to Tank A - Grout side.

**AV-102® Catalyst AP**

AV-102 Catalyst AP or Ammonium Persulfate (often referred to as AP) is a white crystalline solid used as the initiator for the radical polymerization reaction of acrylic monomers. AV-102 is a strong oxidizing material which decomposes over time. AV-102 is added to Tank B - Catalyst side.

**AV-103® Catalyst SP**

AV-103 Catalyst SP or Sodium Persulfate (often referred to as SP) is a white crystalline solid used as the initiator for the radical polymerization reaction of acrylic monomers. AV-103 is a strong oxidizing material which decomposes over time. AV-103 is added to Tank B - Catalyst side.

ACRYLIC GEL ADDITIVES

Optional additives for use with AV-100, AV-118, AV-150 and AV-160. See mixing instructions at [avantigrout.com](http://avantigrout.com) for further information.

**AV-105 Gel Guard™**

Designed to reduce the freezing point of Avanti's acrylic gel and hydrophilic urethane gel systems and enhances compressive strength without reducing permeation capabilities. Use as a freezing point reducer for cold weather applications. Adding 10% can lower freezing temperatures by as much as 9°F/5°C.

**AV-257 Icoset™**

Low-viscosity, gel strengthening or adhesion modifying agent for use with Avanti's acrylic gels and hydrophilic urethane gel systems. Provides cured material with improved hydrostatic pressure resistance, better low-temperature plasticity, and improved adhesion.

**Potassium Ferricyanide**

Potassium Ferricyanide (also known as KFe) is a chemical compound used in small quantities to extend gel times for Avanti's acrylic gel systems. Only small quantities are required for effective results – 100 ppmw (parts per million by weight) can extend gelation times to nearly four minutes.

**Tracer Dyes**

Used extensively with Avanti's gel systems for leak detection and tracing grout paths. Assists in monitoring permeation of soil/rock formation and determines permeability of soil/rock formation to be treated. Available in blue, green, red, yellow, and in powder or tablet form.

## Product

## Description

## Applications

## Advantages

### AV-202® Multigrout AV-202-NTP Multigrout NTP™

Viscosity:  
3,200-6,000 cP @ 77°F (25°C)

Water to Resin Ratio: Preferred  
1:1, up to 10:1

Versatile, single component resin that uses water as its activator. Designed to seal small, active water leaks to large, gushing leaks in cracks or joints in concrete structures. Can absorb up to 10x its weight in water. Cures tough and impermeable with superb adhesive qualities at a 1:1 water to resin ratio, or gel at a 10:1 water to resin ratio.

- EGP Technique - sealing large cracks or joints in concrete with Oakum or Resin Rod
- V-PAT for crack injection
- Used in manhole sealing and pipe penetrations
- Can be used in underwater applications

- Free rise expansion: 400-600%
- Absorbs up to 10x its volume
- Great for moving cracks and joints
- Non-potable version (NTP)
- **NSF/ANSI/CAN 61: Drinking Water System Components**

### AV-202-LV Multigrout LV™

Viscosity:  
650-800 cP @ 72°F (22°C)

Water to Resin Ratio: Preferred  
1:1, up to 8:1

Low viscosity version of the AV-202. Single component resin that uses water as its activator. Designed to permeate tight cracks or joints. Cures resilient, flexible, tough and closed-cell with superb adhesive qualities. Withstands high water flows, can absorb up to 8x its weight in water.

- EGP Technique - sealing various cracks or joints in concrete with Oakum or Resin Rod
- V-PAT for crack injection
- Used in manhole sealing and pipe penetrations

- Low viscosity version of AV-202
- Free rise expansion: 400-600%
- Absorbs up to 8x its volume
- Can be used in underwater applications
- Great for moving cracks and joints

### AV-315 Microfoam™

Viscosity:  
50-100 cP @ 72°F (22°C)

Water to Resin Ratio: 1:1

Single component, moisture activated resin designed for sealing active water leaks in very fine cracks or joints in below-grade structures. Has an extremely low viscosity and cures flexible, dense, impermeable and closed-cell.

- EGP Technique - sealing various cracks or joints in concrete with Oakum or Resin Rod
- V-PAT for crack injection
- Used in manhole sealing and pipe penetrations

- Free rise expansion: 300-600%
- Low viscosity for excellent permeation
- Solvent free, non-corrosive
- **NSF/ANSI/CAN 61: Drinking Water System Components**

### AV-330 Safeguard™ AV-330-NTP Safeguard NTP™

Viscosity:  
350-750 cP @ 72°F (22°C)

Water to Resin Ratio: 1:1

Single component, MDI-based, moisture activated resin designed for sealing active leaks in below grade structures. Mid-range viscosity that permeates well in various cracks and joints. Added safety in confined spaces or areas with poor ventilation. Cures tough, flexible and closed-cell. Non-acetone equivalent to AV-333.

- EGP Technique - sealing various cracks or joints in concrete with Oakum or Resin Rod
- V-PAT for crack injection
- Can be used in underwater applications

- Free rise expansion: 400-600%
- 100% MDI-based
- Non-potable version (NTP)
- **NSF/ANSI/CAN 61: Drinking Water System Components**

# HYDROPHOBIC POLYURETHANE GROUTS

### AV-248 Flexseal™ with AV-249 Flexseal AC™

3 Versions - Viscosity:  
(LV) 150-250 cP @ 77°F (25°C)  
550-830 cP @ 72°F (22°C)  
(HV) 1200 cP ± 200 @ 72°F (22°C)

Moisture activated resin whose chemical reaction is catalyzed with AV-249 Flexseal AC. Injected as a single component and designed for sealing active and potential water leaks in cracks or small annular spaces when flexibility is needed. Cures flexible and impermeable. Withstands wet/dry cycles. AV-249 is used exclusively with AV-248. Low (LV), high (HV) viscosity available.

- VPAT for crack injection in above or below-grade structures
- Fill voids and pipe penetrations
- Structures that may shift like tunnels, dams, and reservoirs
- EGP Technique - sealing various cracks or joints in concrete with Oakum or Resin Rod

- Free rise expansion: 400-600%
- Cures flexible and closed cell under confined conditions
- Controllable reaction times by adjusting AV-249 volume
- **LV Version: NSF/ANSI/CAN 61: Drinking Water System Components**

### AV-260 Fusion Grout™ with AV-261 Fusion AC™

Viscosity:  
300-500 @ 72°F (22°C)

Moisture activated resin whose chemical reaction is catalyzed with AV-261 Fusion AC. Injected as a single component and designed to seal active and potential water leaks in cracks and small annular spaces where flexibility is needed but is susceptible to wet/dry cycles. Cures flexible and impermeable. AV-261 is used exclusively with AV-260.

- VPAT for crack injection in above or below-grade structures
- Fill cracks and pipe penetrations
- Structures that may shift like tunnels, dams, and reservoirs

- Free rise expansion: 1,500-2,000%
- Cures flexible and closed cell under confined conditions
- Can be used in humid or arid environments
- Controllable reaction times by adjusting AV-261 volume

### AV-275 Soilgrout™ with AV-276 Soilcat™

Viscosity:  
30-55 cP @ 77°F (25°C)

Low viscosity, moisture activated, MDI-based resin whose chemical reaction is catalyzed with AV-276 Soilcat. Injected as a single component and designed to react quickly with moisture to bind together and waterproof loose granular soils. Cures rigid, dense, impermeable, and closed-cell. Withstands wet/dry cycles and permeates well. AV-276 is used exclusively with AV-275.

- Curtain or probe grouting manholes or other concrete and brick structures
- Soil stabilization applications to fill voids, prevent soil washout, and sinkholes

- Free rise expansion: 3,000%
- Injected as a single component
- Can achieve high compressive strengths
- Controllable reaction times by adjusting AV-276 volume
- **NSF/ANSI/CAN 61: Drinking Water System Components**

### AV-278 Low Vis Hydro™ with AV-279 Low Vis Accel™

Viscosity:  
25-100 cP @ 72°F (22°C)

Low viscosity, moisture activated resin whose chemical reaction is catalyzed with AV-279 Low Vis Accel. Injected as a single component and designed for soil penetration with high expansion to fill voids, stop active or potential water leaks and stabilize soils. Withstands wet/dry cycles. Cures semi-rigid, dense, impermeable, and closed-cell. AV-279 is used exclusively with AV-278.

- Probe grouting, curtain grouting and pressure injection
- Fills voids on the exterior of below-grade structures
- Stops active leaks in below-grade structures

- Free rise expansion: 4,000-6,000%
- Excellent permeation abilities
- Injected as a single component
- Controllable reaction times by adjusting AV-279 volume

### AV-290 Fast-Set™

Viscosity:  
Part A: 200 cP @ 72°F (22°C) ±10%  
Part B: 600 cP @ 72°F (22°C) ±10%

Product Ratio: 1:1

Dual component resin designed to fill large voids on the exterior of below-grade structures where high-water flow is present. Free rise expands up to 2,600%. Quickly cures rigid, impermeable, and closed-cell. Withstand wet/dry cycles.

- Probe grouting, curtain grouting and pressure injection
- Fills large voids below-grade
- Stops high volume leaks

- Free rise expansion: 1,500-2,600%
- No water needed for reaction
- Reacts within seconds
- Available in single and dual-component cartridges with static mixer tip

## URETHANE GEL

### Product

#### AV-254 Gelseal™

Viscosity:  
175-450 cP @ 72°F (22°C)  
10 cP (in solution)

Water to Resin Ratio: 1:1,  
up to 8:1

### Description

Prepolymer resin with excellent permeation properties when injected in water. It quickly permeates the soil and cures to create an effective water barrier while providing superb soil stabilization. Injecting an 8:1 ratio (water to AV-254) into the soil or external substrate will produce a strong gel/soil matrix.

### Applications

- Probe Grouting
- Curtain Grouting
- Remote Packer

### Advantages

- Five gallons of material will make up to 45 gallons of active solution
- Produces a strong gel/soil matrix
- Solvent free, Non-toxic
- AV-257 available as additive

## SOIL STRENGTHENERS

#### AV-550 Soil Strengthener™ with AV-551 Soil Strengthener Cat™

Viscosity:  
20-30 cP @ 68°F (20°C)

Hydrophobic urethane resin designed to permeate and stabilize various types of soil, increasing the load bearing capacity of permeable soil by filling voids to create a cohesive soil-polyurethane matrix. Reacts with water, creating a slight expansion of the resin. AV-551 Soil Strengthener Cat is used exclusively with AV-550 and required to control the cure time.

- Stabilizing soil under concrete slabs, roadways, and other structures via probe grouting or tube-a-manchette (TAM) grouting

- Withstands wet/dry cycles
- Solvent free
- Extremely low viscosity
- Controllable reaction times by adjusting AV-551 volume

#### AV-560 Geo-Lok™

Viscosity:  
200 cP ±5 @ 68°F (20°C)

Product Ratio: 1:1

Two-component, hydrophobic urethane resin designed to consolidate rock, and permeate and stabilize various soils. Mixed resin will cure into an early, high strength polyurethane that is unaffected by mild corrosive environments and microorganisms.

- Probe grouting or tube-a-manchette (TAM) grouting for rock consolidation, soil nails, rock anchoring, rock fractures and permeating various soils/rock

- Early high strength
- Withstands wet/dry cycles
- Solvent-free
- Low viscosity

## PUMP FLUSH & CLEANERS

#### AV-208 Technical Grade Acetone™

Removes all moisture in grouting equipment. It is important to pump AV-208 through grouting equipment - pumps and hoses - prior to grouting as it removes moisture. Many of Avanti's grouts are water sensitive; therefore, moisture removal is vital to successful grouting operations.

#### AV-222 Cleaner™

Dissolves cured polyurethane resin from grouting equipment. If grouting equipment is clogged with cured resin:

- Disassemble clogged pieces and soak in AV-222 overnight.
- After soaking overnight, rinse the parts with water to remove remaining AV-222 solution.
- Remove dissolved cured resin from the parts using air pressure.
- Once cured resin is removed, assemble pieces.
- Flush all grouting equipment with AV-284 Pump Wash to completely flush any residual chemical grout.

#### AV-284 Pump Wash™

Non-flammable, non-drying compound used to remove uncured polyurethane resin from grouting equipment. Once grouting operations are completed and all residual grout is removed from the pumping system using either AV-208 Technical Grade Acetone or AV-222 Cleaner, AV-284 can be introduced to maintain pump. As a side note, the material may be stored in grouting equipment for extended periods when pump is not in use.

## EPOXIES

### Product

#### AV-502 Injectable Bonding Epoxy™ Series

3 Versions - Mixed Viscosity:  
(LV/low) 550 cP  
(MV/mid) 3,000 cP  
(HV/high) 7,800 cP

### Description

Developed for structural concrete repair by crack injection, gravity feed or patching. It can be used as a liquid binder for sand, aggregate or any other mineral filler to patch or resurface damaged concrete slabs. This material may be used to repair masonry, wood, and other rigid construction materials. 100% solids, VOC free and Butyl Glycidyl Ether (BGE)\* free.

### Applications

- Binder for aggregates to patch or resurface damaged concrete slabs
- Repair of masonry, wood and concrete structures
- Crack injection

### Advantages

- User friendly mix ratio of 1:1 by volume
- Butyl Glycidyl Ether (BGE)\* free
- Long working time
- Excellent adhesion
- High hardness
- ASTM C 881 compliant:  
(LV) Types I and IV, Grade 1, Class C  
(MV) Types I and IV, Grade 2, Class C  
(HV) Type I, Grade 2, Class C

#### AV-522 Crack Sealing Paste™

Mixed Viscosity:  
Paste

Two component, non-sag structural epoxy designed to offer exceptional mechanical strength in anchoring/bonding applications. Due to its high bond strength to concrete, it is ideal to use for anchoring threaded rod or rebar dowels. The consistency is good for capping (sealing) for crack injection or general surface repairs. 100% solids, VOC free and Butyl Glycidyl Ether (BGE)\* free.

- Anchoring threaded rods or rebar dowels
- Capping/ sealing for crack injection
- Pick proof/tamper proof

- User friendly mix ratio of 1:1 by volume
- Solvent free
- Butyl Glycidyl Ether (BGE)\* free
- High strength/modulus/hardness
- Easy to apply paste
- Non-sag
- Excellent adhesion
- ASTM C 881 compliant: Types I, II, IV, & V Grade 3, Class B & C

**Product**

**AV-580 Joint Filler Epoxy™**

Mixed Viscosity:  
3,200 cP @ 68°F (20°C)

**Description**

Two component, non-sag structural epoxy specifically designed for filling sawcut control joints and contraction joints in concrete. 100% solids, VOC free, thermosetting epoxy system that cures to a semi-rigid resiliency which supports joint edges to prevent edge deterioration and concrete spalling. Bonds tightly to the sides of concrete joints, prevents contaminant and water penetration and delivers high wear resistance and durability.

**Applications**

- Control joints and contraction joints in concrete
- Use only on Type 1, non-moving joints
- Use only on fully cured concrete (minimum 30 day old; ideally 60-90 day old concrete)

**Advantages**

- Non-shrink
- User friendly mix ratio 1:1 by volume
- Fast flush shave time in as little as 3.5-4.0 hours
- Excellent substrate adhesion

**AV-590 Joint Filler Polyurea™**

Mixed Viscosity:  
2,000 cP @ 68°F (20°C)

Two component, 100% solids, VOC free, rapid setting, polyurea system specifically designed for filling sawcut control joints and contraction joints in concrete. 100% solids, VOC free, rapid setting, polyurea system that cures to a semi-rigid resiliency which supports joint edges to prevent edge deterioration and concrete spalling. Bonds tightly to the sides of concrete joints, prevents contaminant and water penetration and delivers high wear resistance and durability.

- Control joints and contraction joints in concrete
- Use only on Type 1 joints
- Use only on fully cured concrete (minimum 30 day old; ideally 60-90 day old concrete)

- Non-shrink
- User friendly mix ratio 1:1 by volume
- Fast flush shave time in as little as 15 minutes
- Colorfast, resisting fading and discoloration
- Moisture tolerant
- Excellent substrate adhesion

**CEMENTS**



**Avanti is the exclusive distributor for US Grout, LLC Cement products. US Grout (Idaho) produces the only American-made Ultrafine cementitious grout available in the world and has a stable North American supply.**

**Product**

**Ultrafine SD**

Particle size: Avg. 3 microns

Water to Dry Cement Ratio:  
0.8:1 by weight

**Description**

Composed of a finely ground mixture of Portland cement, pumice, and dispersant. Average particle size of 3-4 microns (60 to 70 microns in conventional cements). Standard grade of cement grout formulated with superplasticizer for a fool-proof system with zero bleed and very high compressive strengths. Never blend USG Super with Ultrafine SD.

**Applications**

- Stabilizing weak soil and rock
- Sealing seepage in mines, dams, tunnels
- Low permeability curtain grouting
- Hazardous waste containment
- Oil well squeeze cementing

**Advantages**

- Stable North American supply
- Small particle size penetrates smaller fractures and finer soils
- USG Super is pre-blended
- Non-hazardous
- Lower permeability compared to ordinary Portland cement
- **NSF/ANSI 61: Drinking Water System Components**

**Ultrafine VX**

Particle size: Avg. 3 microns

Water to Dry Cement Ratio:  
0.8:1 by weight

Composed of a finely ground mixture of Portland cement, pumice, and dispersant. Average particle size of three microns. Formulated with a polycarboxylate based superplasticizer for minimal bleed and high compressive strengths in soil permeation applications. Can be used with optional additive USG Super. No additives required.

- Stabilizing weak soil and rock
- Sealing seepage in mines, dams, tunnels
- Low permeability curtain grout
- Hazardous waste containment
- Oil well squeeze cementing

- Stable North American supply
- Small particle size penetrates smaller fractures and finer soils
- USG Super - optional additive
- Non-hazardous
- Lower permeability compared to ordinary Portland cement

**USG Super**

*Water/Grout Ratio:	Liquid USG by %	Dry USG by %
0.6/1.0	1.0	0.5
0.8/1.0	0.75	0.4
1.0/1.0	0.5	0.3

\*Lab tests were performed on neat cement only. No aggregates added.

Liquid or dry powder polycarboxylate based superplasticizer that improves flow characteristics of Ultrafine VX, allowing for the successful injection of low water/cement ratio mixes with high compressive strengths. USG Super should be premixed with the measured amount of water prior to adding powdered grout.

- Used as additive for Ultrafine VX
- **Never use USG Super with Ultrafine SD**

- USG Super should be premixed with the measured amount of water prior to adding powdered grout.

**Polynaphthalene**

Polynaphthalene is Sodium Naphthalene Sulfonate - a major ingredient in the formulation of various superplasticizer admixtures. It helps disperse cement particles and break agglomerates, thereby improving the fluidity of concrete. It can be used to improve the rheological and mechanical properties of concrete (ie: workability, compressive strength and bending modulus of elasticity).

**Polynaphthalene is premixed in Ultrafine SD**, however additional Polynaphthalene can be used in the Ultrafine SD mixture allowing for the successful injection of low water/cement ratio mixes with high compressive strengths.

- Used as additive for Ultrafine SD
- Ultrafine SD must be mixed in a high shear colloidal mixer
- **Never use Polynaphthalene with Ultrafine VX**

- Self-leveling
- High resistance to initial compression
- Low carbon footprint

## EZ-1

The EZ-1 injector is the most cost-effective production port available due to its disposable composite plastic design for ease and efficiency. The zerk fitting is 0.12" diameter port and 5/8" outside diameter for lower flow at high pressures. This port is the best seller and most often specified for crack injection work.

## EZ-3P

The EZ-3P injector has 0.28" diameter port and 5/8" outside diameter which allows for greater flow at high pressures. The metal button head mechanically seated fitting adds safety. An excellent choice for tight cracks where pressures may be greater than 1,000 psi.

## EZ-4

The EZ-4 injector has a steel ball one-way valve, 0.28" diameter port and 5/8" outside diameter. The disposal composite plastic material is designed with button head coupler connection.

## Mechanical Injectors/Packers

The 3" mechanical injectors/packers are available in 1/2" and 5/8" outside diameters and are reusable. These injectors/packers are designed for 45 degree and straight-on injection of cracks and expansion joints. Both 1/2" and 5/8" packers have 0.375" diameter port for injection of large volumes of material. These injectors are tolerant of pressure fluctuations. 3" injectors may be used with an extension. Available as a 4" extended mechanical injector/packer.

## 3/8" Bang-In

The 3/8" Bang In injector has 0.12" diameter port and 3/8" outside diameter which allows for quick, low-pressure applications of urethane and epoxy resins. The 3/8" has a separate zerk fitting and is easily disposable. The lowest cost injector available.



# INJECTION ACCESSORIES

These are our standard injection accessories. If you need customized items such as hoses, manifolds, static mixers, strainers, call us at 800.877.2570.

## Resin Injection Gun

The Resin Injection Gun is used with single-component pumping systems. The stainless-steel gauge attached to the gun reads pressures while injecting into the crack. The tip is fitted with a grease fitting coupler.

## "F" Assembly

The "F" assembly is to be used with a two-component pumping system for injecting acrylic grouts. The "F" assembly contains a stainless-steel assembly with quick connects and two way shut-off valves.

## Wall Spear Assembly

The Wall Spear Assembly is a reusable stainless-steel accessory used in conjunction with the "F" Assembly as a resin injector for acrylics.

## Needles

Needles are good for penetrating leaking pipe-to-manhole connections and for manhole chimney grouting and are suitable for injecting grout behind cured Expanded Gasket Placement Technique (EGP) application. The stainless-steel 1/4" needles are available in lengths of 10", 12", 15", 18", 24", and 36".

## Button Head Coupler

The Button Head Coupler attaches to EZ-3P or EZ-4 injectors to allow grout to flow through. Injectors not included.

## Coupler

The Coupler connects to the grease fitting which allows grout to flow through. Attaches to EZ-1, Mechanical (1/2" & 5/8") or 3/8" Bang-In injectors. \*Injector not included.

## Injector Extension

The Injector Extension is a 4" long extension that can be used with Mechanical (1/2" & 5/8") injectors.

## Moisture-Resistant Hose

The Moisture-Resistant Hose is recommended to prevent resin from "setting up" inside lines. Available in 25' and 50' lengths.

## Injection Hose Kit

The Injection Hose Kit is an injectable waterstop for the permanent sealing of cold and construction joints in concrete, pipe penetrations, and voids between slurry walls and slabs. The tubing is designed to keep the concrete out of the grout delivery system during the pour of a new wall but allows chemical grout to be injected at any time after the pour cures and settles. AV-248-LV is the recommended urethane injection grout to use with the Injection Hose Kit.

## AV-215 Resin Rod

AV-215 Resin Rod is an open cell foam rod designed for use with Avanti's polyurethane foam grouts via the Expanded Gasket Placement Technique (EGP). Available in multiple diameters ranging from 5/8" to 2" and, up to 500-ft. sections.

## AV-219 Fibrotite (Oakum)

Oakum is a fibrous jute material free of oils/tars used in cracks or joints in areas a carrier is needed to keep grout in place. Designed for use with the Expanded Gasket Placement Technique (EGP). Available (25) 2-ft. sections or (7) 100-ft. twisted fiber sections.



Avanti is a distributor of pumps and accessories from Graco and WIWA. Below are standard options we offer, however additional pump models and customization options are available from both manufacturers. Visit our website or call us for information on additional pump options - 800.877.2570.

### Graco President® 1:1 Fixed Ratio Stainless Steel



The Graco President® 1:1 Fixed Ratio Stainless Steel Pump is ideal for pumping Avanti's acrylic gel systems. The President pumps high volumes of material and has maximum pressures of 600 psi - more than enough pressure for your grouting needs.

- Graco President® Air Motor
- Portable Cart
- SQ-398-495 Stainless steel mix manifold
- Air monitoring
- Hose Set - Suction and Discharge assembly
- Customizable mix block/"F" Assembly options

### Specs

Pump cycle rate is dependent on material pressure and discharge orifice size:  
 20 cycles/min – 2 gpm  
 30 cycles/min – 3 gpm  
 40 cycles/min – 4 gpm  
 Pressure Ratio: 5:1  
 Mix Ratio By Volume: 1:1

### Graco Ultra® Max II 495 PC Pro



The best choice for professionals looking for superior performance and control in daily use. The new Ultra® Max II 495 PC Pro brings the leading technology and performance of Graco's larger Ultra Max II models into these compact and light weight systems. Ideal for pumping Avanti's polyurethane products.

- ProConnect™
- MaxPower Motor
- Endurance™ Pump
- FastFlush™
- Smart Control 2.5
- East Out™ Pump Filter

Max GPM (LPM): 0.60 (2.3)  
 Max PSI (Bar): 3,300 (227)  
 Motor HP: 1.2 Brushless DC  
 Unit includes: 1/4"x50' BlueMax™ II Airless Hose

### Graco Reactor E-10 Heated Electric Foam and Polyurea Proportioner



Graco's Reactor E-10 is a small, ready-to-use system that helps you get in and get smaller jobs done fast without sacrificing performance. The Reactor E-10 sprayers are ideal for plural-component, joint-fill jobs and touch-ups. With smart controls that are easy to setup and simple to operate, the E-10 is a natural complement to any proportioning equipment line-up.

- Electric power and motor
- Intuitive start, stop, digital temp. display
- Pressure balance valve
- Balanced proportioning
- Self-contained translucent material tanks
- Unheated or heated hoses

Maximum Mix Ratio: 1:1  
 Applies up to 12 lb. (5.4 kg) per minute  
 Max operating pressure: 2,030 psi (140 bar)  
 Max Temperature: 159.8°F (71.0°C)  
 Max Output: 40 cycles/min  
 Electric source

### WIWA 2K-Inject 14025 1:1 Fixed Ratio Stainless Steel



Highly advanced technology for injection and pressure grouting applications with Avanti's acrylic gel systems. The newly developed pneumatic WIWA 2K-Inject 14025 not only demonstrates its capability in injection and pressure grouting technology, but with the highly developed equipment technology also professional competence and environmental consciousness.

- High-pressure pump
- Discharge and Inlet Hoses
- Cart frame
- Air driven plural component injection unit
- Optional accessories: adapters, couplings, JIC connections, mounting kits

Fixed 1:1 Mix Ratio  
 Output per cycle: 80 cm3  
 Pressure ratio: 25:1  
 Max. operating pressure: 2,900 psi (200 bar)  
 Max. input air: 116 psi (8 bar)  
 Max. fluid delivery: 1.36 gpm @ 60 cpm

### WIWA 2K-Inject 25015 1:1 Fixed Ratio Stainless Steel



Highly advanced technology for injection and pressure grouting applications with Avanti's acrylic gel systems. The newly developed pneumatic WIWA 2K-Inject 25015 not only demonstrates its capability in injection and pressure grouting technology, but with the highly developed equipment technology also professional competence and environmental consciousness.

- High-pressure pump
- Discharge and Inlet Hoses
- Cart frame
- Air driven plural component injection unit
- Optional accessories: adapters, couplings, JIC connections, mounting kits

Fixed 1:1 Mix Ratio  
 Output per cycle: 144 cm3  
 Pressure ratio: 15:1  
 Max operating pressure: 1,740 psi (120 bar)  
 Max. input air: 116 psi (8 bar)  
 Max. fluid delivery: 1.50 gpm @ 60 cpm

# THE AVANTI PHILOSOPHY

Avanti has been an experienced producer of high-quality injection grouts in North America which include acrylic, polyurethane, epoxies, and Ultrafine cements since 1978. Avanti began with only one product - AV-100® Chemical Grout - used primarily to seal leaking collection systems. Avanti now offers over 25+ injection grouts used world-wide for municipal, industrial, commercial, and geotechnical applications to stop water infiltration, stabilize soil and rock, and control groundwater - permanently.

We have specific core values that we abide by each day: to provide sustainable solutions for safer work environments, stronger infrastructure, and healthier communities everywhere. Restoring public safety and confidence in our aging infrastructure drives us to educate and train public and private property owners, lead the charge of proactive vs. reactive repair and maintenance, and grow the use of injection grouts around the world.

## ENGAGE with AVANTI

