

BOYD TECH, INC. USA

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Services



ENCAPSULATED IDENTIFIABLE TRACEABLE

Making Asbestos Pipe Rehabilitation Safe and Affordable

For Use with Conventional Trenchless Rehabilitation Processes

CLOSE TOLERANCE HDD (CTPS)

PIPE BURSTING OR SPLITTING

OPEN CUT

EncapsulAC encapsulates AC pipe fragments creating a safe & workable coagulated mass that doesn't harden like cement.

Vibrant Blue colour is easily identifiable and stops fibre release during future excavations.

ENCAPSULAC®

The only ACM Coagula-Tracer Fluid

For The Identification and Containment, of Asbestos Cement Pipe (ACP) particulates caused by trenchless rehabilitation procedures, (Asbestos Containing Materials) ACMs.

DESCRIPTION

EncapsulAC® is a proprietary dry-bagged powder which, when blended with water, produces a vibrant blue fluid.

This environmentally friendly pumpable fluid coagulates and covers ACP fragments and fibres with a dyed gel holding them in a coagulated mass. Its unique blend seals the terraform and can withstand ground water wash.

The EncapsulAC® Coagula-Tracer Fluid can be utilized with all conventional Trenchless Technologies as well as Open-cut rehabilitations to identify possible ACMs.

APPLICATION

EncapsulAC® is specially designed for AC Rehabilitation. Formulated for both water main and wastewater systems.

ACP systems have exceeded their useful life putting them at high risk for leaks due to degradation.





DRIED MATERIAL, SHOVEL READY



PIPE BURSTING



CTPS

EncapsulAC® enables pipe owners to continue utilizing low cost Trenchless Infrastructure Rehabilitation Methods such as Pipe-Fracturing (aka; Pipe-Bursting), Pipe-Splitting, and Close Tolerance Pipe Slurrification (aka,CTPS).

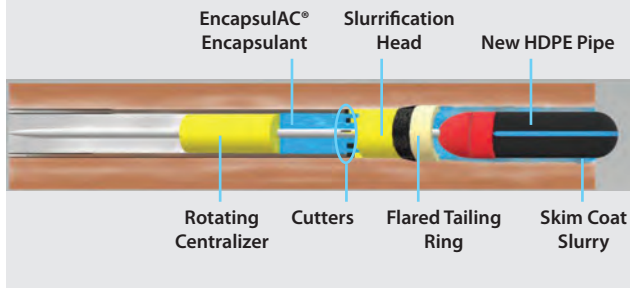
The vibrant blue Coagula-Fluid creates an easily identifiable indicator of ACMs. EncapsulAC® Coagula-Tracer Fluid creates a safer environment for Utility Contractors & the General Public.

CTPS has been approved by the US-EPA / NESHAP Federal Register / Vol. 84, No. 111 / Monday, June 10, 2019. Environmental Protection Agency [EPA-HQ-OAR-2017-0427; FRL-9994-29-OAR] RIN 2060-AT73

ENCAPSULAC®

Hybrid CTPS with EncapsulAC® Coagula-Tracer-Fluid & Tracer Wire

Renders Asbestos Cement Pipe (ACP) 100% Encapsulated, Identifiable and Traceable for size-on-size or up-size, all in one shot.



Additional HDD & specialised equipment required:

- Specialised back reaming heads with flared tailing ring
- Special training and certification is required

The HDD rig is being rotated at 200 to 250 RPM with light pull back pressure. The rotating centralizer has cutters that clean interior of pipe and holds tooling on centreline in front of the slurrification head. The slurrification head also rotates as its cutters are being pulled into the profile face of the asbestos cement pipe.

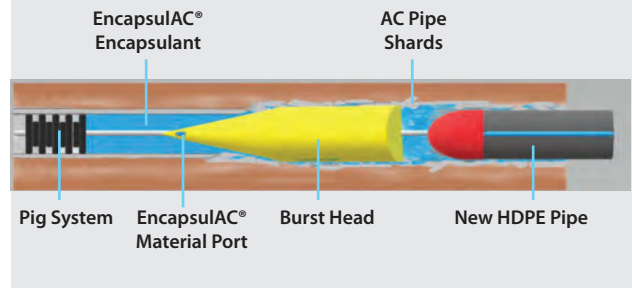
The ACP is reduced to a slurry as it is blended with the EncapsulAC® encapsulant. The slurrified mixture flows back along the circumference of the new pipe. This mixture of asbestos, cement and EncapsulAC® coagula-tracer-fluid acts as a skim coat. This skim coat produces a coagulated mass surrounding the new pipe. It's proprietary properties will not allow wash-out of colour or fibers, yet remains digable. The slurry will not harden while buried.

For up-sizing use a centralizer for pipe size and an upsized slurrification head. The excess material can flow into forward pits. A bull-tail cable connected to front of new pipe may be needed to allow additional capacity for excessive cuttings.

To eliminate rotation of new pipe a rotation suppressor may be installed at tail end of new pipe, when tracer wire is required.

Pipe bursting with EncapsulAC® Coagula-Tracer-Fluid & Tracer Wire

Renders Asbestos Cement Pipe (ACP) 60-90% Encapsulated, Identifiable and Traceable for size-on-size or up-size, all in one shot.



Additional static pipe bursting & specialised equipment required:

- Flow-thru bursting heads
- High volume/high pressure mix & pump system
- Delivery system
- Pig system

A pig is placed in front of a burst head to produce a reservoir of EncapsulAC® encapsulant to treat ACP fibers as cracks are formed. These cracks are filled and shards of pipe are pressed into the surrounding soil by the bursting head. Most of the shards will be broken several more times while traveling along side and past the burst head.

These shards may not be fully encapsulated because, as the shards are pressed into the surrounding soil by the burst head, the outer face of the AC pipe pressed into the soil may not be covered with EncapsulAC®.

The delivery system either runs up through or alongside of the new pipe. Insertion through pipe may require additional equipment not listed above. If alongside is preferred, a bracket will be required to prevent the slurry delivery line being damaged during the pull.

This delivery line also typically would remain in place after the pull.