

# AR Glass Fiber Dispensing System

## Introduction

Volumetric concrete trucks are widely used in the United States of America and offer the benefit of selling concrete on demand by the cubic yard. Poured concrete is fresh and has not be tumbling in the drum for long periods of time. Volumetric trucks can be used for small and large concrete jobs. "You pay for what you use" is the basic concept.

## The Fiber Feeding System

The Spray-Tech Volumetric Fiber Feeder is simple and easy to install onto the volumetric trucks. The complete system consists of:

- A stainless steel box (aluminum also available).
- A purpose-built chopper.
- 4 bolts to mount the box onto the truck.
- A 3/8 inch air-line (10 to 80 psi).
- A plastic tube which guides the chopped fibers onto the belt.
- An on/off switch or a valve depending on the truck set-up.

Spray-Tech Inc. boxes and delivers the turn-key system. The system adapts to any volumetric truck design or application and is easily mounted with the 4 bolts and an air-line (box size is 12"x12"x18.5").

The AR glass fiber roving fits perfectly in the box and the fiber strand is easily inserted through the purpose-built chopper. The system is then calibrated to run at the right speed in order to chop the fiber in 1/2 inch, 3/4 inch or 1 inch length. Some calibrating testing is required in order to insure adequate chopping time that will satisfy the fiber dosage at one pound per cubic yard of concrete.

The Spray-Tech Fiber Feeder is very accurate and maintenance-free. To insure the quality of the chopping, the end-user will have to verify the chopper blades and the backing roller for small defects and change them on a regular basis. Spray-Tech Inc. carries and sells spare parts.

Patent for this fiber feeder is pending.

## Key Advantages

- Wide range of fiber length and output adjustments.
- Continuous fiber roving which holds approximately 40 pounds.
- Better quality control with automatic fiber chopping and dispensing.
- Ability to change the concrete grade and reinforcement levels on site according to job specifications.
- No need for manual feeding of the bags during mixing thus greater productivity during the mixing of all raw materials.
- No fiber bags inventory to be kept in the truck.
- System is maintenance-free and easy to install.

## References

The Spray-Tech Volumetric Fiber Feeder is gaining quick acceptance in the United State of America. The advantages of the system are well recognized and the following companies have already installed and used the system:

Volumetric by Strong, Texas  
Reimer International, Canada  
Short Loads, Florida and Louisiana  
Advantage Concrete, Florida

**SPRAY-TECH inc.**

## Application Data Sheet



## The Cem-FIL® Reinforcement Solution

Cem-FIL® Reinforcements have developed two products which can be successfully used in the Volumetric Fiber Feeder System. These products are called the Cem-FIL® 61/1 Premix Roving and the Anti-Crak™ High Dispersion (HD) Roving. These two products are currently commercially available and are sold by Spray-Tech Inc. as part of the complete fiber dispensing system.

### Cem-FIL® 61/1 Roving

Linear weight of roving (tex)	Loss on ignition (%)	Moisture (%)
ISO 1889 : 1987	ISO 1887 : 1980	ISO 3344 : 1977
3000	1.8	< 0.35



Cem-FIL® 61/1 rovings are designed to be unwound internally. They are protected by a shrink-wrap polythene film which should not be removed when used. Each roving is identified by an individual label and packed in a box. Cem-FIL® 61/1 rovings are white colored but a pink color is used on labels and shrink-wrap to aid identification.

Product	Individual packaging		Characteristics of roving		
			Height (inch)	External diameter (inch)	Net weight (lbs)
	Packaging code	Packaging style			
61/1	pink	carton	10.24	11.02	42

### Anti-Crak™ HD Roving

Linear weight of roving (tex)	Loss on ignition (%)	Moisture (%)
ISO 1889 : 1987	ISO 1887 : 1980	ISO 3344 : 1977
640	1.0	< 0.30



Anti-Crak™ HD rovings are designed to be unwound internally. They are protected by a shrink-wrap polythene film which should not be removed when used. Each roving is identified by an individual label and packed in a box. Anti-Crak™ HD rovings are white colored and the shrink-wrap packaging is clear with Cem-FIL® logos to aid identification.

Product	Individual packaging		Characteristics of roving		
			Height (inch)	External diameter (inch)	Net weight (lbs)
	Packaging code	Packaging style			
HD	clear	carton	10.24	11.02	42

### **Quality**

Cem-FIL® products are manufactured under a Quality Management System approved under ISO 9001.



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