



Global Barrier Services, Inc.

Trial Overview Project Report

Concrete Mixer Truck Drums

Global Barrier Services, Inc.

[REDACTED]

Presented to: Mr. [REDACTED]

CC.
[REDACTED]
[REDACTED]

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1.0 Project Overview

Global Barrier Services, Inc. (GBS) and [REDACTED]'s ([REDACTED]) entered into a formal Demonstration Project to prove the **Slipcoat IRC™** product's effectiveness in reducing cleaning times, minimizing or eliminating the need for rock washing and minimizing or eliminating the need for mixer drum chipping. The demonstration also focused on reducing cleaning times for the truck chutes and hoppers.

This is the second of two Demonstration Projects performed by **GBS** and [REDACTED]. The first Project, which was completed in July of 2018, proved the effectiveness of the **Slipcoat IRC™** product's use with reducing cleaning times and the frequency of required chipping in the Central Mixer.

This Demonstration took place at the [REDACTED] plant located in Los Angeles, CA. The Demonstration began on Saturday, July 28th, 2018 and completed on Saturday, August 11th, representing **12 operating days**. The Demonstration was performed using two trucks, one of which was operated by an exceptionally 'clean' driver and the other operated by a driver who does not maintain the truck to the same standards. Each truck was treated with **Slipcoat IRC™** at the end of each day after the final washout. Both trucks were thoroughly cleaned out prior to the start of the Project.

The trucks designated were **#488**, which was the 'clean' truck, and the other was truck **#327**.

Both drivers were instructed not to change their cleaning procedures in any way.

GBS personnel applied **Slipcoat IRC™** to both trucks each evening after the final washout. **GBS** personnel photographed and took video of the condition of the mixer drum, chute and hopper of both trucks at the end of each day and spoke with the drivers about the **Slipcoat IRC™** product's performance.

Truck **#488** was sprayed a total of 10 times. **#488** missed a total of 3 sprays during the demonstration. The first missed spray was Thursday, August 2nd and the others were the last 2 days of the Demonstration (August 10 and 11) due to the truck being involved in a traffic accident.

Truck **#327** was sprayed a total of 13 times (did not miss any sprays).

During the Demonstration, the trucks handled a variety of mixes and were operating in very high (**+95°F**) temperatures, which often causes concrete to dry quickly on parts of the mixer drum and chute, making cleaning difficult and contributing to the need for frequent chipping. With the **Slipcoat IRC™** product in use, all concrete washed out easily at the end of each day, even during high temperatures.

Neither truck performed any rock washes during the Demonstration and at the end of the Demonstration, both trucks were as clean, if not cleaner, than they were at the start of the project.

Both drivers confirmed verbally that cleaning times were drastically reduced, which we estimate by at least 50% and that cleaning is made much easier with the product in use.

2.0 Project Specifics

- The Demonstration included two mixer trucks at the Los Angeles, CA [REDACTED] location - #488 and #327
- For comparison purposes, the driver of #488 was selected due to his history of maintaining an exceptionally clean truck and the driver of #327 was selected due to his history of not maintaining his truck to as high a standard.
- The mixer truck drums were equally clean prior to beginning the project.
- The application volume of **Slipcoat IRC™** to the mixer drum, chute and hopper each day averaged 1.12 pints at a cost of approximately \$2.10 per day per truck.
- The application time for the mixer drums was 3 minutes using a single barrel Thumb Gun type fogger and an additional 30 seconds for the chute and hopper.
- The trucks were treated once with **Slipcoat IRC™** each evening after end of day washout before beginning an estimated 9-hour shift the next day. Both trucks averaged 5 delivery cycles per day.
- **GBS** personnel were at the site each afternoon for the return of the trucks to photograph the interior of the drums and the chute and record the results/events of the day from the driver.

Weather Data (accuweather.com – Los Angeles, CA):

SUN 8/5	MON 8/6	TUE 8/7	WED 8/8	THU 8/9	FRI 8/10	SAT 8/11
Actual Temp 89°/68°	Actual Temp 93°/69°	Actual Temp 96°/71°	Actual Temp 98°/72°	Actual Temp 97°/71°	Actual Temp 93°/73°	Actual Temp 90°/73°
Hist. Avg. 84°/64°						

3.0 Project Results & Business Case

Summary:

As reported by the drivers, the cleaning process was considerably reduced, which allows for less time at the wash.



Truck drums Day 1 of the Demonstration



Truck drums last day of the Demonstration.

Video of **Slipcoat IRC™** being applied can be downloaded here:

<https://drive.google.com/file/d/1-zLcvDILxrPfRmZhkWtgq2vJNq7vRfDm/view?usp=sharing>

https://drive.google.com/file/d/1kWYYacnIF2UEbLZzH2_v7_hucS0jdLk5/view?usp=sharing

Photographs and video of the entire project series can be viewed here:

https://drive.google.com/open?id=1kWYYacnIF2UEbLZzH2_v7_hucS0jdLk5

The Project proved that by not allowing build-up to gain a foothold in the mixer drum to begin with, **Slipcoat IRC™** not only reduced cleaning times but also eliminated the need for rock washes or drum chipping.

Based upon the amount of product used per application during the Project (1.12 pints), the cost per day for **Slipcoat IRC™** per truck is approximately **\$2.10**.

The cost for a basic **Thumb Gun Fogger** spray application system, which operates off of either the truck's compressed air supply or compressed air at the facility, is **\$200**. A 3-foot wand extension was also used, which allowed for easy application to be performed from the ground through the exit port (**\$25**).



Thumb Gun Fogger

ADDITIONAL SAVINGS & BENEFITS:

In addition to wash-time savings, other savings/benefits resulting from the use of **Slipcoat IRC™** include:

- *Reduced costs for cleaning and chipping*
- *Reduced truck dwell time at the wash area due to ease of concrete removal*
- *Extended equipment lifespan due to the minimization or elimination of rock washes & drum chipping*
- *Reduced maintenance costs due to elimination of off-balanced drum caused by buildup*
- *Minimized or eliminated safety risk to personnel associated with chipping*
- **Slipcoat IRC™** acts as a rust inhibitor, helping to reduce corrosion and increase lubricity
- **Slipcoat IRC™** has a wide variety of additional uses around the plant, including forms, molds and other equipment that experiences problems with sticking.

4.0 Conclusion & Recommendations

The results of this report prove the capability of the **Slipcoat IRC™** product to reduce wash times for the mixer trucks by a minimum of 50%, minimize or eliminate the need for rock washing and minimize or eliminate the need for drum chipping in the [REDACTED] fleet.

Based upon the results of the demonstration project, we recommend continuing the use of **Slipcoat IRC™** on a full-time basis. We very much look forward to working with you to determine the most efficient application points for various locations.

We also look forward to working with [REDACTED] on calculating the amount of fuel savings that result from using **Slipcoat IRC™**. Third party data provided by another customer indicates a 15-18% reduction in diesel consumption may be possible.

We are currently working with your team to set up application stations at the Los Angeles location and will be visiting with Sun Valley shortly.

Sincerely,
Global Barrier Services, Inc.



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