

FC-35 Testimonial

Late in 2003 my company was looking for a more economical cleaner for the floors. We are a manufacturing facility of diesel engines and we machine over 1,500 blocks, heads and rod sets each day. Our floors are unsealed raw concrete with constant exposure to cutting and lubrication oils, iron dust, and lots of rubber build up from the over 100 forklifts in constant operation.

As with many organizations we had experienced poor business for a number of years prior to this. We were limited to one riding battery powered scrubber, with only two batteries, to clean over 1.2 million square feet of factory flooring. The best we could possibly do was 8 hours a day on the scrubber. It took an entire week to make a single pass of the plant.

The product we were previously using cost about half of FC-35. We were using at a 12/1 water / soap concentration and still having to double scrub. Our criteria for a new soap seemed like just a dream. We wanted a soap we could use at 25/1 and clean with a single pass. We have very strict environmental rules. It seemed that of every 20 products we looked at 19 did not meet our criteria. We could not use a product with a high or low Ph, it could not have any ingredients which were SARA recordable and absolutely no VOCs.

When we first tried FC-35 we knew we had a winner. At a 30/1 concentration the results were simply amazing. It cleaned a completely filthy floor in a single pass, as shown below:



Life immediately improved for us. The driver no longer had to double scrub. The floor cleaning schedule immediately improved. We were able to cover all of manufacturing two times and assembly once each week. Everything improved, the odor of the plant was so much improved that within 6 weeks all the complaints of indoor air quality went away.

In November of 2004 our scrubber fleet saw the addition of a new scrubber which had a real engine. We were no longer limited to 8 hours of scrubbing per day. That's when we really got a handle on the floors. We were able to cover the entire manufacturing side of the plant every day. The floors turned white, everything was running better. We actually had light reflecting back off the floors instead of being absorbed in a dark and dingy floor.

If I were a regular cleaning professional I would have left well enough alone. But I am not even in the Housekeeping department. Instead, I am the Maintenance Analyst and it is my job to make things better. Now the biggest problem we had was cleaning out the recovery tanks of the scrubbers. So much oil and grease was being picked up the recovery tank solution became so thick it drained out like cold gear oil.

I had a revelation. My mother never cleaned the floors with cold water, why was I? We ran a few test filling the scrubber from one of our domestic hot water heaters and adding the correct amount of soap to run at a 30/1 concentration. It was amazing, the grease was coming out and the tank was easy to clean.

That's when we noticed the floor was actually slick before it dried. The slick floor caused us to start reducing our soap concentration. We worked up sequentially until we went to over 150/1. At 1 part soap and 150 parts water we were still cleaning, however we lost our single pass ability and our ability to remove rubber was significantly reduced. We finally settled on about 75/1 as the magic concentration. It cleans in a single pass, has excellent rubber removal capabilities, and leaves the floor with no residue.

I then designed and had a hot water fill station installed. It utilizes two instantaneous tankless gas hot water heaters; each of them capable of delivering 10.3 gallons of water per minute at 140 degrees. I am able to fill my scrubber tanks in less than five minutes. They are 90 gallon tanks and hold enough heat to be effective until all the cleaning solution is used.

Before we started using FC-35 our annual soap bill to maintain the plant was almost \$80,000 a year. Cold FC-35 cleaned the plant (and got it really clean) for around \$55,000 a year. With hot water our cost are further reduced to approximately \$27,500 annually. Our plant has never been cleaner. The money spent on the hot water system has already more that paid for itself.

Our environmental condition has significantly improved. We no longer have so much soap going to our waste treatment facility. The lower concentration of soap allows for the waste oil to come out of solution much easier and our level of oil sludge generation has significantly reduced. Fewer chemicals are required to separate the waste and this also generates significant savings. We are also able to reclaim more waste oil and this also generates revenue.

In short, if you want to have clean floors use FC-35. If you want to have clean floors with a minimum soap bill use FC-35 in hot water. We ran soap trials with products from 12 different companies. FC-35 was the hands down favorite. INDUSCO, LTD. has been very supportive and has worked with us as we have resolved other cleaning issues. We also use PW-1 to clean our test cells. It is an excellent degreaser and is perfect for use with a mop or as a spray and wipe product.



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