



"Customer Service is our #1 Product"

Phone 603-718-1169 Toll-Free 855-546-9238

E-mail: Service@NewEnglandTruckmount.com

Web: www.NewEnglandTruckmount.com

ENCAPSULATION CLEANING FOR THE CARPET CLEANING PROFESSIONAL

AUTHOR: Brian Collopy

The term "encapsulation" (and of course its trendy abbreviation "encap") has been buzzing around in the industry for quite a while now. We hear a lot of cleaners talking about it, and others reporting things like "all I do is encap now." Some claim to remove troublesome stains and capillary wicking problems with encap agents. We hear people talking about different encapsulation products, how well they work, and how they clean up to 3,000 square feet an hour with these. Commonly joined along with encap cleaning is an association of the popular Cimex machines. Some would even have you believe that this method of cleaning can be accomplished only with Cimex machines, or that these machines are the best way to go overall. Are they? Maybe - maybe not.

Does it Replace HWE?

What about our tried-and-true hot water extraction cleaning that most of us do? Is this not the greatest thing since thinly sliced coconuts? Have we been lied to? Has this heavy duty method not been the mainstay of the industry, and to date just not the best thing going for soiled carpeting? After all, we know for sure that hot water extraction is indeed extremely thorough. We see these results every single day on the very worst of carpet and upholstery. So, if this encap thing is so great, what are we possibly missing out on? If a group of us are already using encapsulation products to some degree, are we then using them for all that they really can do? That's yet another burning question.

Part of the huge industry appeal to go ahead and jump on the encap wagon brings a lot of confusion to a great deal of professional technicians out there. Some of this I believe is due to marketing over the last 25 years or so. Not that marketing is a bad thing, of course, but by marketing I mean what has been focused on in the marketplace itself. Let's look at truckmounted equipment. We have many brands out there in different price ranges, but simplistically they are really wet vacs coupled with a minimal pressure washing system. These two main components are wrapped up in a warm blanket of flashy control panels, impressive gauges, and a host of cleaning tools and gadgets to accessorize them in a mostly user-friendly way. We learned a long time ago that to apply a hot cleaning solution to soiled fibers and then subsequently remove that hot solution would leave the fibers a lot cleaner than they were before. That was a no-brainer... we have been doing that with laundry in one way or another for well over 100 years. Now, to package all that up in a system where we can actually drive to someone's home or office and do that rinsing method on site was a real advantage to our profession. Whether with portable extractors or those that are van mounted, we could now offer that same laundering method when and where we pleased.

Because this method proved to be a really great thing, much of the manufacturing research and development in the industry has been focused on making these machines better and more powerful. To follow suit, most chemical and widget manufacturers have also focused on this method as well. Why? Market share. Extraction cleaning was the biggest and best show out there, and if you didn't have it, you could not keep up with your competition. Sales skyrocketed then and continue to do so until today for good reason.

The problem readily observed over time is the lack of experiential understanding of other very valid and effective cleaning methods, and how they can and do fit into the professional service puzzle. Encapsulation cleaning falls into this syndrome too. If you consider that new people have entered the industry during and after the Extraction Boom, all they really do hear is truckmount, truckmount, and truckmount again. When there is discussion about shampooing, there is immediate association with harmful residue. When there is mention of

hand toweling, most will shrug it off as unnecessary, unneeded, and a waste of time. Now over the last several years they are hearing "encap" all the time. What gives?

Let's Look Back in Time

So, to really understand what encapsulation is and what it really can do for your cleaning repertoire, we need to look back a bit and check out what has been happening in the carpet cleaning world other than extraction cleaning. So, close your eyes, and let me take you back in time... way back to before rock and roll was becoming rampant in the music scene.

A very popular method of carpet cleaning then was rotary shampooing and extraction. Not extraction with an extractor as we now know it, but yes... a wet vac. A rotary machine with a brush was used to work a foamy shampooing product into the yarns, and the excess was vacuumed out afterward. It worked fantastic and produced great results, even on very soiled carpets. These rotary machines are still used today. Some people call them rotary machines; others call them buffers, side-to-side machines, on and on. The only challenge was the cleaning chemistry at the time, along with the usual issue of whether or not people mixed the products correctly. Thus was born the resoiling residue problem. It was simply part and parcel of carpet cleaning at the time, which is all the more reason our modern rinsing method became so fashionable and loved.

To further the development of carpet shampoos, manufacturers went two other routes to exploit the grandeur of the rotary machine: soil retardant shampoos and then onto quick-drying bonnet cleaning shampoos. Soil retardant shampoos employed a new chemistry of what was commonly called "clean dirt." That is, they added polymers to the product which then remained on the carpet fibers after cleaning and occupied some physical space where objectionable soiling would otherwise attach. Soil retardant shampoos still exist and still do what they do best: elongate the cleanliness in between. Some even have a fluorochemical protector built right in to help the system perform well. Because encaps have more advanced crystalline polymers, they have superseded these shampoos on a major scale. Now manufacturers like Bridgepoint offer many different high quality encap products, each with their own special characteristics.

Bonnet cleaning was different. Rather than using a brush to incorporate a foamy shampoo, bonnet cleaning got its name from the absorbent cottony bonnets used on a drive block under the machine. The products had water-compatible solvents built in, which allowed the chemical to quickly clean and brighten the soiled yarns and provide very fast drying. No wet vac was needed, and production rates increased because the bonnet absorbed the emulsified soil from the product as the operator moved along. Bonnet cleaning I will not spend more time on, as it is outside the scope of this article. (Do not think for a minute though, that it is outdated or inapplicable for troubleshooting and even to improve results with upholstery cleaning. I'll save that for another time, and I will write more on it if you bug me to do so.)

So, okay, now we are past the glam rock days and into the early days of the long-haired 80's bands. Extraction cleaning was in its infancy, but was coming along just fine. Carpet shampooing was still used, and was regularly deployed as a preconditioning step to a thorough extraction procedure on very soiled carpet. This still holds true today for many old-school cleaners. Soil retardant shampoos and/or bonnet cleaning agents were being used in commercial maintenance environments with good results. Some cleaners may still use these, although their use has been rapidly migrating toward encapsulation products. The products are still out there, and do have benefits in other fiber cleaning operations in our industry.

Now, the BIG Question: *What is Encapsulation?*

So, what exactly is encapsulation cleaning? Encapsulating simply means surrounding, and how these products work is pretty neat. In a way, they are a modern advanced form of soil retardant shampoos. They do the same thing as soil retardants, in that they prolong the clean appearance of the fibers and increase square footage production. They do this in a very different way though. New kinds of polymers are used in the product which literally surround and capture the dirt after loosening it and cleaning the yarns. They hold the soil there, they become crystallized when dry, and then await a happy Hoover afterward. So, after an initial vacuuming, encapsulating carpet shampoos are either sprayed onto carpet, or are dispensed with a machine. With

mechanical action of brushing, soft pads, or Microfiber bonnets, the product loosens and suspends soils just like other cleaning agents. The really nifty part is that they also have those little baseball gloves inside the solution that keep the dirt safely away from reattaching to the fiber. They secretly and skillfully hide the dirt too, so that the carpet immediately looks very clean. Along comes the janitorial staff the next day and thereafter, vacuuming the carpet as usual. Each time the carpet is vacuumed, some more of the baseball gloves figure it's time to split and they get sucked up into the vacuum bag. This is how encapsulation works.



Meet My Dirty Snow

Another example can be illustrated by snow. Since I am writing this article while there is unwanted snow on the ground (and the car, the house, the cat, etc.) I am including this photo for you. Of course when snow first falls and it looks all like a greeting card winter wonderland, it's nicely white and fluffy.

When it starts to get pushed aside by plows and people, it drags along with it the dirt on the ground. Now it looks like my photo. This is encapsulation. The dirt is being held in the snow. After a while, the snow will be gone and the sand will be around for people and vehicles to sweep up. This is the post-vacuuming stage of encapsulation... the "extraction." See *what I mean?*

So, now I have you pondering a few questions, no doubt. Encapsulation cleaning is favored in commercial maintenance today because it's a very quick procedure and produces immediate results and dries rapidly. This is why encapsulation is also referred to as Low Moisture Cleaning. You do not need a lot of product to get decent results. It can be priced very competitively and takes little training to do. The products work great and there are many out there. It can be done very often to maintain cleanliness, but for how long?

Like other carpet maintenance methods, you can do encap routines only for so long before it becomes necessary to rinse out all the excess product from the yarns with conventional hot water extraction. Most techs find this necessary every nine to twelve months, assuming you are encapping on a pretty regular basis (four to six weeks, for example). To answer your next question: no, you do not need a costly machine to get the most out of encapsulation cleaning.

Do I Need a Special Machine?

Encapsulation products can be administered in a variety of ways, all depending on your budget, the size of the job, and how fast you want to do the job. Truthfully, you can apply encaps with a pump sprayer and work it in with a good carpet rake. This method may get old after about 600 square feet though. The Cimex machines can be pricey and a bear to work with, but a lot of cleaners swear by them for their speed and efficacy. Maintenance is required on these because of the way they dispense the products. In my experience, most people using these tend to use too much product. Counter-rotating brush machines come in different price ranges and work exceptionally well. They are also great multi-taskers. Some come with a chemical dispensing system, while most do not. It's helpful to have another person around anyway to address spotting issues, refilling sprayers, and moving electrical cords. Rotary shampooing machines with Microfiber bonnets work very well also, and still will accomplish a lot of square footage per hour. Those machines are the ultimate multi-taskers in the industry. The amount you will actually use encapsulation in your business will determine the right type of equipment for you. With any system you choose, corners and edges can easily be encapped using a rectangular Microfiber flat mop.

How Well Do Encaps Work?

How well do encap products work? Can you perform miracles with them? You need to remember that encapsulation is primarily a commercial maintenance method, and then is only secondarily deployed as a

troubleshooter. *For this reason, you must skip the idea of encapsulation cleaning if:*

1. You are doing heavy stain removal, urine decontamination, and the like.
2. You intend to use a lot. More encap = stiff yarns. Stay away from soft wool or fine denier polys. This is supposed to be Low Moisture Cleaning. If you are using too much product, then this method is not the best chosen for the job.
3. You have a lot of grease to remove from the yarns. Encaps have a harder time with oily soils.
4. The carpet is not in good condition. Preferably, an encap program should be deployed after a thorough initial extraction cleaning visit.
5. There is no vacuuming follow up. Encaps are designed to be vacuumed afterward. Not immediately after drying, but they do need to be vacuumed to release trapped soils. If there is poor daily maintenance overall, an encap program might not be the best.
6. There are a lot of spots and stains. Encap can be used for the overall cleaning, but don't leave your spotting kit at home. Encap products will remove a lot of common spills and the like, but any difficult spot with your other methods will probably be just as difficult with encapsulation.

But I Don't Really Do Commercial Cleaning...

Huh? You don't do much commercial cleaning, or you don't really get into commercial maintenance? You do only a little or you prefer residential work? Hey, no worries... encap can still help you a LOT. I have been very fortunate to work with the top brands in the cleaning product industry and their fine R&D shines in their encap products just as well as their others. So, here is how high quality encap products can help you every day in your fiber cleaning business other than for commercial maintenance:

1. When you clean Berber carpets, you can leave them exceptionally clean and bright and seriously minimize their propensity for wicked-up soils after you leave. How? A couple of these products can be used as the extraction cleaner itself in your machine. Yes, there are Green options also!
2. If you do have wicked-up soils, you can correct them much easier with encap products.
3. You can provide a longer residual cleaning effect in problematic traffic areas.
4. Any commercial work you choose to do can benefit from encap products in some way as your primary cleaning method, or as an adjunct to your current method.
5. You can quickly and easily clean upholstery that does not look to bad to start off with. It's perfect for formal living rooms, waiting room chairs, and more.
6. You can do some skillful spotting work with encap products.
7. And more, more, more.

Hopefully in this article I have helped you along your road to understanding what encapsulation products are and what they can do for you. It's really an old idea in a new set of clothes. Encapsulation cleaning is one of our newest technologies that help you shine as the hard-working professional that you are. It doesn't completely replace what you have been doing all along; it is a valuable add on to your current tools and skill set. Learning more about them and the different varieties they are available in will help you have more armament to conquer the age-old problem of dirt and how to keep it away. With newer advances in cleaning chemistry, you will see encapsulants more and more in truckmount detergents also.

Thanks for spending the time with us today. Call us for more info on these products we support and we will take the time to show you more cool things you can do with encaps!

Truckmount Sales and Service - Professional Cleaning Products – Technical Support

Visit us online at www.NewEnglandTruckmount.com

4 INDUSTRIAL PARK DRIVE • UNIT 34 • PELHAM, NH 03076