The Specialty Tools of Our Trade

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Photos Courtesy of ***Seymour Midwest***

Work in contracting long enough and you will no doubt have encountered jobs that failed to go as planned. If time is money, then planning is an insurance policy. And the single limiting factor to a job's success is starting the project with the correct tools.

Absent the right tools, you can count on delays—sometimes significant, always costly, and certainly frustrating to the customer. Not to mention having the right tools in your job box is critical to completing the project per the manufacturer's recommendations and within the job specifications.

Equipping your crew with the proper tools is always the best way to complete the project from a labor productivity standpoint. I've had the opportunity to be at jobsites of all types and complexities, including protective coatings and lining projects, flooring projects, and traditional painting projects. One consistent theme that has emerged from my time at these jobs is that there is a direct correlation between having the proper tools and the efficiency with which that project is completed. It is no accident that the most profitable and successful contractors I've worked with also happen to plan the best, account for the unexpected, and always have the proper tools and equipment on the jobsite.

Using the wrong tools and equipment exposes your company, the job, and potentially the relationship with the customer to unnecessary risk. For example, using an incorrectly sized notched squeegee and failing to gauge your film thickness on a regular basis is an excellent way to install the project outside of the manufacturer's specifications. If you're lucky, the consequences are only that you run short of material, have to wait an extra day for additional material to arrive, and explain to the customer why the project is not going to be completed on time. On the other hand, if you finish the project and have material left over, the consequences are to second guess your quote/measurements and move on to the next project. But no sooner are you on to the next job before you get a call from an unsatisfied customer, indicating that his or her floor is failing.

These consequences are avoidable, and the insurance policy is using the right tools for the job. We can all agree that unhappy customers and pricey rework are worth avoiding at all costs. Let's review the most common tools that provide the insurance policy for a successful, high-performance coatings project.

Application Squeegee

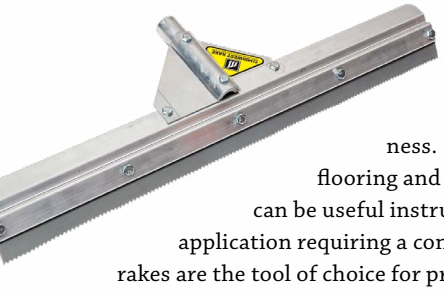
The application squeegee is the staple in the job toolbox of contractors applying high-performance resinous flooring

systems, protective and marine coatings, roof coatings, and decorative concrete products. Application squeegees are typically used to spread and disperse coatings at thinner film builds — less than 60 mils (1,524.0 microns).

It's worth distinguishing between an application squeegee and a basic janitorial squeegee. An application squeegee is engineered and designed to apply high-performance resinous flooring systems, while a janitorial squeegee is used for cleaning and removing water and other cleaning products. Additionally, an application squeegee will contain a high-quality, chemical-resistant, and non-marking blade material and come with either flat or notched blades options. It's critical to note that there is not an industry standard with regard to the shape and size of the notching, so be sure to verify that you are using the correct blade to deliver your specified wet film thickness required for the job. The required notching very well may be different from job to job.

In general, there are two types of application squeegees: replaceable blade and fixed blade. A good replaceable blade application squeegee is easy to clean, allows for a quick and easy blade change, and provides a range of high-quality replaceable blade options. For most contractors and jobs, the replaceable blade squeegee is the go-to application squeegee. The fixed blade application squeegee (also referred to as a non-replaceable application squeegee) is not designed to be able to change/replace the blade quickly, so they often are disposed of after they become inoperable or the depth of the notching wears down.

Gauge Rakes



Gauge rakes are tools designed to apply materials at a precise and uniform depth or thickness. Primarily used for resinous flooring and decorative concrete, they can be useful instruments for any coating application requiring a consistent film build. Gauge rakes are the tool of choice for products and coating systems needing to be installed at a film thickness between 1/16 and 1½ inches (1.6–38.1 mm). Urethane concrete, epoxy slurries, and cementitious- and gypsum-based resurfacers and mortars are all excellent candidates to be installed with a gauge rake.

Gauge rakes come in three types:

1. CAM Style, which features an extruded aluminum frame that contains a set of steel CAM Guage sets attached to the end of the tool to control the depth of material delivered. This offers great consistency and precision.
2. Sled style.
3. Wire style.

Both sled and wire styles use radial designed wires and sleds that affix to the frame and can be adjusted to the depth desired. It is important to monitor your tools and film thickness when using the sled and wire styles as the sleds and wires are prone to loosen with use.

Spiked and Stubbed Rollers

Coat concrete long enough and you eventually experience "outgassing." Outgassing is a common phenomenon where air that is trapped in a concrete substrate attempts to escape through freshly applied coatings, often revealing bubbles and blisters in the coating. A spiked roller is one of the best tools to release the trapped air. In addition to this role, spiked rollers are also used extensively to apply and expedite the self-leveling characteristics of overlayment resurfacing products.

Spiked rollers come in metal-tined and polypropylene configurations.

Stubbed rollers are specific versions of these same tools with shorter and/or stubbed versions of the same spikes. Stubbed rollers are often used to apply roof coating and/or other materials with the stubs often serving as a gauge for material depth as well as to promote the leveling aspect and force and compress aggregate material in a variety of specialty coatings.

Hand Trowels

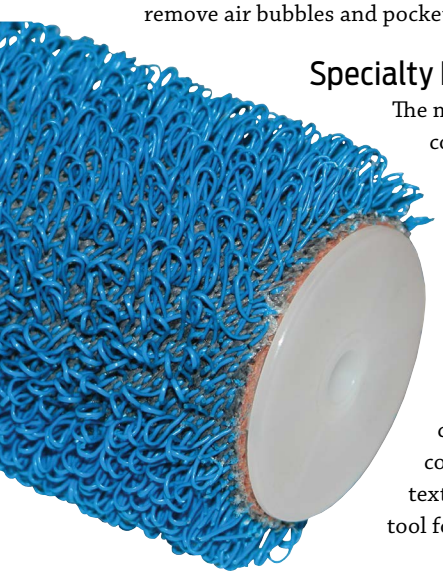
Hand trowels are the primary method of application for concrete and the plaster industry. The coatings industry does rely on them quite frequently to patch, apply, spread, and smooth various resinous and cementitious materials, too. Hand trowels commonly used in the coatings industry include epoxy mortar trowels, rounded end (pool) trowels, and various finishing trowels.

Spreader/Smoother

The spreader/smoother may be viewed as a stand-up version of the hand trowel. Used primarily to spread and smooth resurfacing materials and overlayment materials, they also are used as surface preparation and application tools for resinous flooring materials. They can be made from a wide range of blade materials. The thickness and shape of the blade and how and where it is attached to the frame all play significant roles in determining how it is best used.

Ribbed Rollers

A ribbed roller is a specialty tool used primarily by those in the protective and marine coatings industry. Typical projects include tank linings, secondary containment, roof coatings, and marine applications where fiberglass may be used to reinforce and strengthen multi-coat high-performance systems. The use of these aluminum rollers enhances the fiberglass/fabric saturation and containment while helping to remove air bubbles and pockets.



Specialty Roller Covers

The most common specialty roller covers used in the coatings industry today include looped polymer covers, phenolic covers, and foam covers. The looped polymer cover uses a series of polymer loops attached to the core. This cover is used to backroll aggregated coatings, such as urethane concrete. The looped polymer cover is also used regularly as a texturing roller and a faux finishing tool for metallic epoxies. The phenolic cover is used to spread and apply aggregated coatings, such as anti-slip coatings. Foam rollers are great where virtual lint-free applications are necessary, such as on decorative counter tops coated with urethanes and/or epoxies.

Using the Right Tool

There are a variety of specialty tools that can be used in the high-performance coatings industry, whether you're on a roof, floor, or secondary containment project, for example. Knowing which tool is the right one for the particular project is important to completing the job successfully the first time. *CP*

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