



TRI-CHEM

We've got your back.



Maintenance Free Floors



First and foremost, we would like to thank you for considering us as a trusted vendor for your future plans. For 45 years, Tri-Chem has partnered with fortune 100 to fortune 500 companies and thousands of national and international manufacturing organizations to help maintain, repair, safeguard and beautify their facilities. Our long tenured success is a result of our commitment to two organizational standards. First, the development of application specific products that exceed customer expectations. Second, to service every product we sell so as to build customers for life. We have spent over 4 decades refining our products and service culture to deliver on these promises.

On larger projects, we offer the opportunity to test our products and services against those you are currently using. By giving you the ability to test our products prior to purchase, we ensure that expectations are met and performance levels are reached. Whether we are testing a concrete patch for durability, applying a test patch of non-skid epoxy or polishing concrete, we offer you an opportunity to take all of our products and services for a test drive. We also offer free technical support for all of our products.

Our products and services are only as good as the people that develop and install them. That is why our chemist, polymer engineer, facility construction manager, floor coatings installer and tooling and safety engineers each have over 20 years of experience in their respective disciplines. Our real success over last 4 decades can be attributed to our passionate and experienced staff.



This section of the booklet will highlight the product characteristics, application advantages and overall efficacy of Tri-Chem Corporation's Tri-Epoxy 100% Solids Epoxy Floor Coating. Tri-Epoxy was developed as a super-strength abrasion and chemical resistant coating for application in areas such as industrial, warehouse, light and heavy manufacturing, and machining. It is manufactured exclusively by Tri-Chem Corporation and not available through distributors.

Product Characteristics

Tri-Epoxy is a 100% solids epoxy coating that will not shrink from water or solvent evaporation. Unlike other solvent based epoxies it is odorless and VOC free. It does not contain any Volatile Organic Compounds that can be dispersed throughout a facilities air handling system at the time of application.

Tri-Epoxy utilizes Tri-Chem's unique cycloaliphatic catalyst to maximize physical performance. Cycloaliphatic catalysts react with epoxide groups in a chemical reaction commonly referred to as "Cross Linking" or "Polymerization". The robust blend of Tri-Epoxy's package allows for the polymerization to build to an impenetrable "Cross Link" density that provides unparalleled chemical resistance to fluids and chemicals.

Application Advantages

Tri-Epoxy's packaging is the easiest to use and most efficient packaging on the market to date. Tri-Epoxy's proprietary "Drop-In" technology affords the applicator a simple 2 step process for complete application. Additionally, Tri-Epoxy has been designed to be self-leveling which means that the applicator DOES NOT have to overwork the product in order to achieve optimum results every time. Finally, clean-up is kept to a minimum. There are no messy aluminum cans to discard, but rather the entire epoxy mixture, including Parts A and Parts B are collectively contained in one 5 gallon mixing container.

Overall Efficacy

Tri-Epoxy is a super strength, abrasion and chemical coating that has been designed to withstand the wear and tear of forklift traffic, machining operations, and resists acids, alkalies, and solvents.



TECHNICAL DATA SHEET

TRI-EPOXY 100% Epoxy Floor Sealer

DESCRIPTION

Tri-Epoxy is a super strength coating and sealer for high traffic floors. Excellent for containment areas, especially when an acid and chemical resistant coating is required. Use Tri-Epoxy to give old worn-out floors a new abrasion resistant surface that will stand up to acids, alkalies, solvents, heat and cold and to protect new floors from wear, spills and damage.

FEATURES

- Resists chemicals, impact, corrosion and abrasion
- No odor – unlike solvent based epoxies
- 100% epoxy resins – no loss from evaporation
- Will not break down at temperatures below 550°F
- Can be applied as non-slip finish
- Available in a variety of colors as well as clear
- Single kit covers approximately 480 sq. ft. at 10 mils DFT (2 gallon Part A, 1 gallon Part B)
- Master kit covers approximately 1200 sq. ft. at 10 mils DFT (5 gallons Part A, 2 1/2 gallons Part B)

HOW TO USE

Thoroughly clean and acid etch floor. Pre-mix Part A well. Pre-mix Part B well. Add A and B and mix thoroughly until a uniform color is obtained (approximately 2-3 minutes). Pour out on floor. Squeegee out with a flat squeegee and back roll-with a short napped paint roller.

SPECIFICATIONS

	Part A	Part B
Physical Form	viscous liquid	Liquid
Color	clear to light amber	colored
Odor	acrylate	amine
Specific Gravity	1.13	1.13
Flash Point (TCC)	200+°F	200+°F

AVAILABLE COLORS





TRI-CHEM

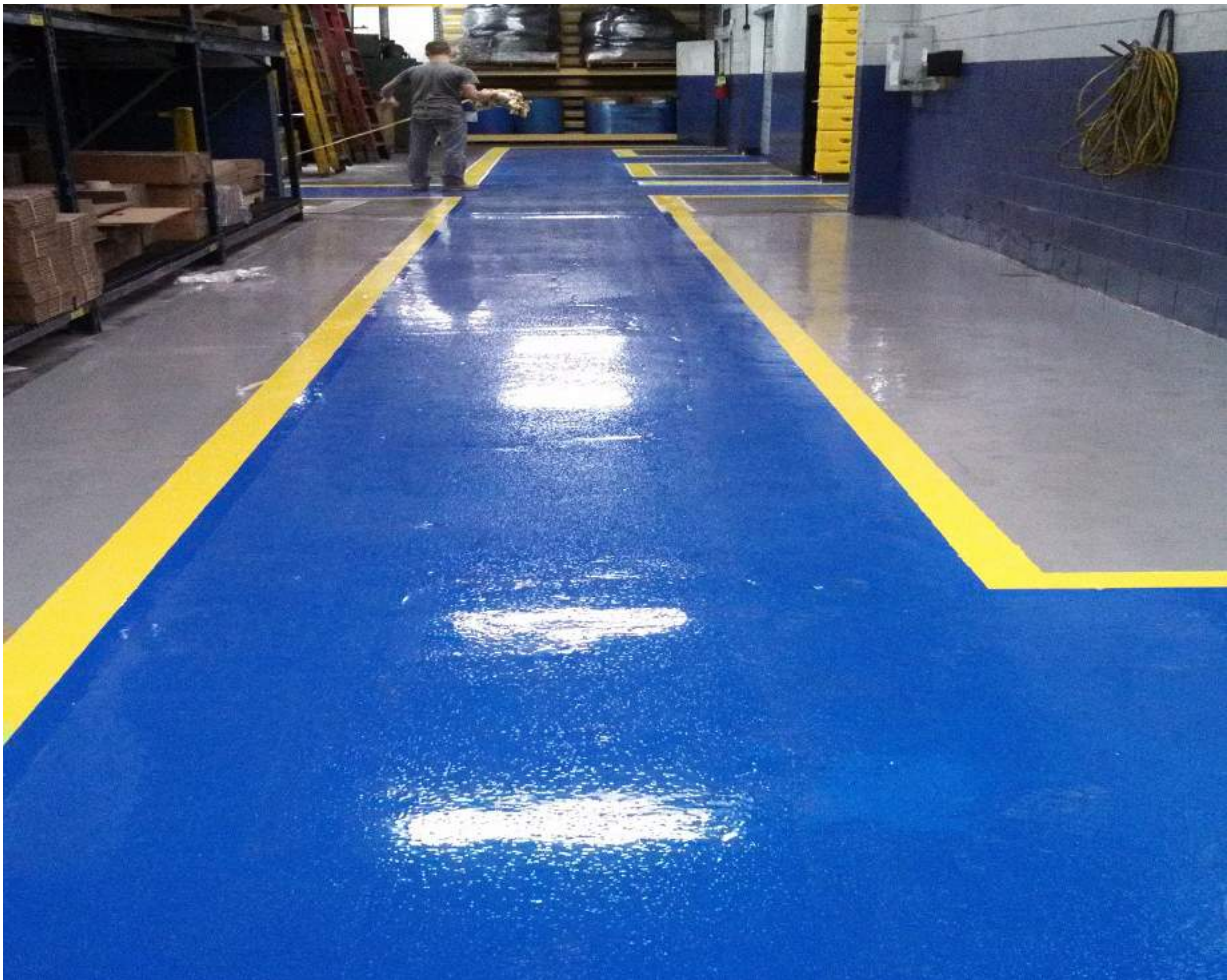
**Tri-Epoxy
100% epoxy sealer
for
Concrete – Steel – Wood**

Physical Properties	Tri-Epoxy	Concrete (Typical Value)	Chemical Resistance
PSI (ASTM C579)	18,000 psi	3 – 5,000 psi	Acetic Acid 10% Acetone Ammonia Brine Butanol Butyl Acetate Carbon Tetrachloride Cellosolve Citric Acid 40% Distilled Water Ethyl Acetate Ethyl Alcohol Gasoline Heptane Hexane M.E.K. M.I.B.K. Mineral Spirits Nitric Acid Oxalic Acid 10% Potassium Hydroxide Sodium Hydroxide Sulphuric Acid 40% Toluene Triethanolamine 10% Urea 10% Xylene
Flexural Strength (ASTM C580)	4,500 psi	300 – 700 psi	
Tensile Strength (ASTM C307)	2,250 psi	200 – 700 psi	
Coef. Of Thermal Expansion – Water absorption (ASTM C413)	0.000025 in/in. F	4.7 x 10.6 6 – 8%	
Impact Resistance 9BRE tester 8.8 lbs weight 3.3 ft)	4 mils indentation	Concrete fractures	
Slip Resistance (ASTM D2047) (static coefficient)	0.60	PVC tile (unwaxed)	
With Anti-slip Texture	0.80	0.40 N. American Minimum .4 - .5	
Shear Bond Strength (ASTM D905)	300 – 400 psi		
Heat Resistance (ASTM C484) (5 cycles 104 F	No change		
Shore D Hardness (ASTM 2240)	80 - 85		

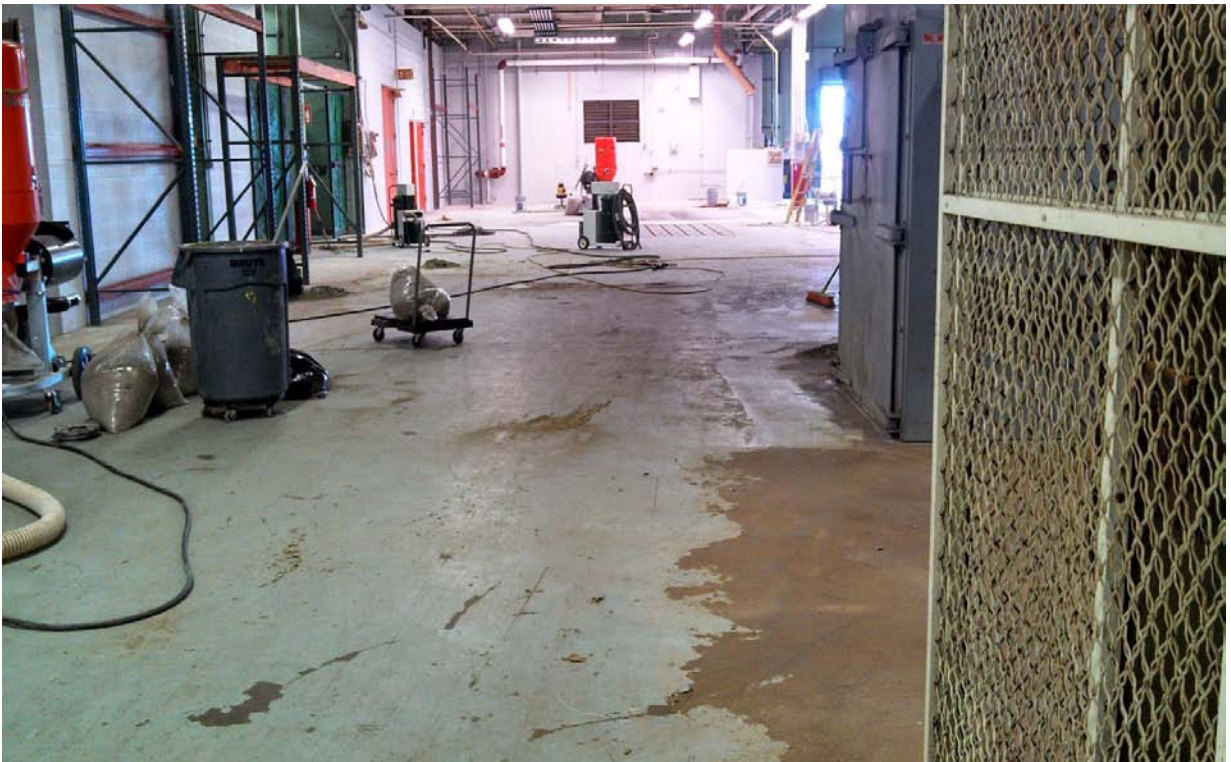
BEFORE



AFTER



BEFORE



AFTER



THE RESULTS



THE RESULTS





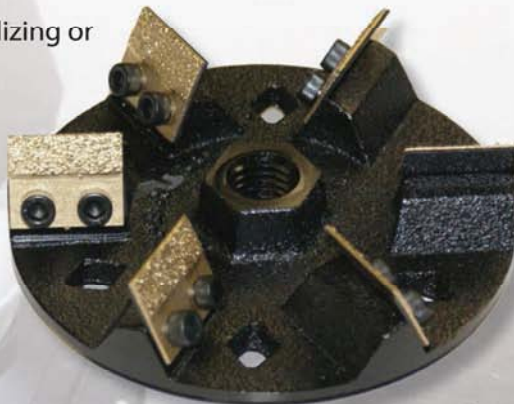
TRI-CHEM

We've got your back.

4.5" Removal Tool

**Removes Mastics, Adhesives, Epoxies & Urethanes,
Thin-sets, paints, and many other Gummy Coatings**

- Diamond abrasive technology prevents caramelizing or clogging of tool.
- Preps concrete floors, block walls, brick, metal and more!
- Removes gummy mastics up to 10x faster than the competition.
- No harsh chemicals needed.
- Works on standard electric hand grinders.



**Replacement Blade Kits
Available**



800.456.6255 | tri-chem.com



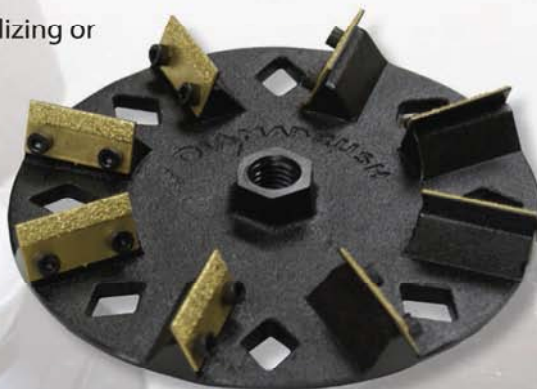
TRI-CHEM

We've got your back.

7" Removal Tool

Removes Mastics, Adhesives, Epoxies & Urethanes,
Thin-sets, paints, and many other Gummy Coatings

- Diamond abrasive technology prevents caramelizing or clogging of tool.
- Preps concrete floors, block walls, brick, metal and more!
- Removes gummy mastics up to 10x faster than the competition.
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Replacement Blade Kits
Available



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In this section we will cover The Tri-Chem polishing system. This is a five step do-it-yourself wet process that uses ordinary tap water in your existing floor scrubbers. Water is required to cool the system to optimize performance and minimize dust. Mild detergents and/or surfactants are often used to help hold dirt and debris, but are not necessary. We consider this process a “green” way to maintain your concrete floors in your main warehouses, wet rooms, and cooler rooms, since it doesn’t require the use of chemicals, waxes, urethanes and/or epoxies to achieve a glossy durable finish. The system makes your floors super shiny without making the concrete slippery.

ADVANTAGES

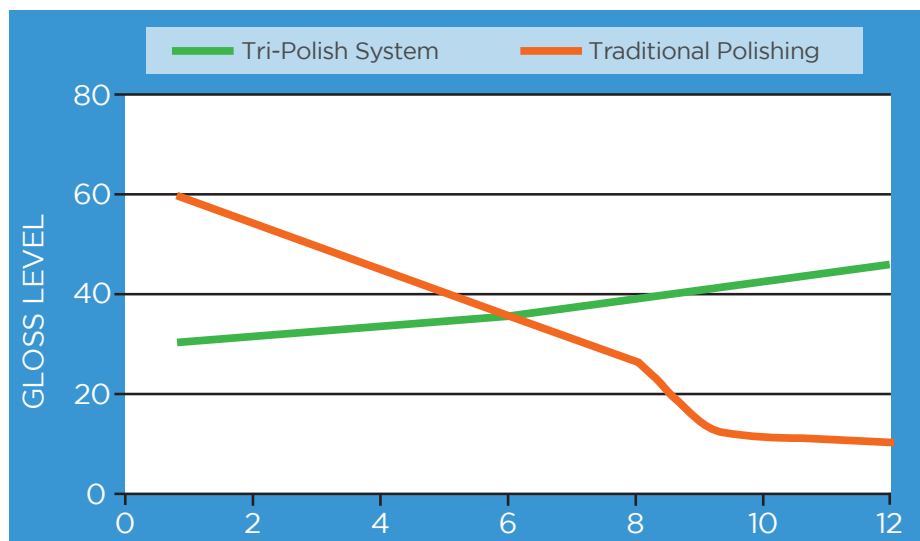
- **Eliminates concrete dust from Efflorescence.** In ordinary unpolished concrete, tiny particles of dust push through the surface leaving a fine dust on the surface of the concrete. Polishing will eliminate this concrete dusting saving time and cost in maintenance.
- **Increased strength, for old, deteriorating, weak concrete finishes, with more abrasion resistance (ASTM C779) and an increase in impact resistance (ASTM C805-97).** There are dozens of ways for concrete floors to break as they age: surface stress, delamination, improper curing, joint shoulder failure and many more. The Tri-Polish System actually removes the top part of the surface of the old concrete floor (including any patchy, partial, or whole coatings), and hardens the exposed surface beneath.
- **Less maintenance and longer service life.** Polished floors are easy to clean, requiring only occasional damp mopping. They also eliminate the need for messy waxes or coatings as well as the associated labor, time, and expense to apply them. The glossy surface of polished concrete resists the marks of forklift truck tires and staining from oil and chemical spills.

ADVANTAGES

- **Cost-Effective.** Polished concrete is one of the most economical, cost effective flooring alternatives. The reduced costs associated with saved energy, reduced tire wear, maintenance reduction, and especially the long-lasting durability shows that polished concrete is budget sensible, as well as beautiful, flooring system.
- **A truly “Green” System.** Polished concrete is intrinsically **green** because it de-materializes a project, reducing the need to bring in additional coverings or coatings that end up in land-fills upon their eventual replacement.
- **Increased ambient lighting which will naturally enhance the beauty of your floor and reduce the cost of lighting.** Polished floors align with the LEED rating system.
- **Higher levels of co-efficient of friction than any coating on the market.** Wet or dry, a polished concrete floor surface meets, and most often exceeds, OSHA and ADA standards for slip resistance. Kept clean and clear of debris, polished concrete floors tend to be less slippery than waxed surfaces.

SEALER VS. NON-SEALER

Professional polishing contractors will use a sealer or lithium guard product that is applied at the conclusion of the polishing process. The process is simple: The topical sealer is burnished into the concrete with a high speed burnisher that provides an increased gloss level. However, this sealer or guard product has been applied for short term gloss results. With any topical polish, sealer or guard put over a newly ground and polished concrete floor, empirical data shows that gloss levels fade exponentially over the course of 12 months. Moreover, in areas that experience particularly high levels of forklift, foot and cart traffic, the reduction in gloss levels are increased over a 12 month period.



SEALER VS. NON-SEALER

The Tri-Polish process grinds the surface of any concrete by using progressively finer grits of resin bonded diamonds to ultimately smooth and close the pores of the surface. By keeping the pores of the concrete surface “closed” you reinforce and prevent break-down of the surface and achieve higher gloss levels compared to more open pored surfaces. Instead of having a pitted surface that refracts light, the light reflects off of the floor creating a shine. It is not a product or sealer that makes the floor shine, instead it's the concrete itself. This patented process does not call for the application of any topical sealers or guards since the gloss level of the floor is maintained through the consistent use of the final grit brush. The result is a clean, polished floor that will dramatically reduce the dust in the facility as well as improve overall brightness.

Application of a topical sealer or guard is superfluous in light of the fact that the consistent polishing of the floor with the final grit brush, heavy forklift and foot traffic delaminate and break-down the coating. As such, by maintaining the floor with our 1,000 grit blade you are continuously tightening the pores which helps prevent stains.

REDUCE COSTS

Tri-Chem Polishing System is a **long term solution** for the maintenance of your concrete floors - **NOT** a short term fix, and is designed to achieve these additional cost saving benefits:

- 1 No expensive machinery needed!** The system utilizes existing floor scrubbing equipment and doesn't require any additional machinery.
- 2 A one-time investment** in the system achieves results for the life of the concrete.
- 3 Replacement blades can be purchased separately** based on grit without having to purchase the entire system.

HOW IT WORKS

- 1 Discs with polishing blades are attached to the bottom of your floor scrubber replacing the scrubbing brushes.
- 2 In all, there are 5 different grit polishing discs with blades that systematically polish your floor to a super shine. This creates increased durability without creating a slippery surface.
 - Each of the 5 polishing blades require six passes over the surface of your concrete floor.
 - Once you reach level 5 you have achieved a beautifully polished concrete floor. Now, daily or weekly passes with the 1000 grit blades will maintain a shiny durable finish for the life of your floors.
- 3 **Ultra-Shiny** floors can be achieved by adding a densifier to the concrete during polishing with the level 5 blades (this process is not necessary, however, an option if desired.)

Important Note: This system cleans and polishes at the same time so you will no longer need your scrubbing brushes.

THE RESULTS



BEFORE



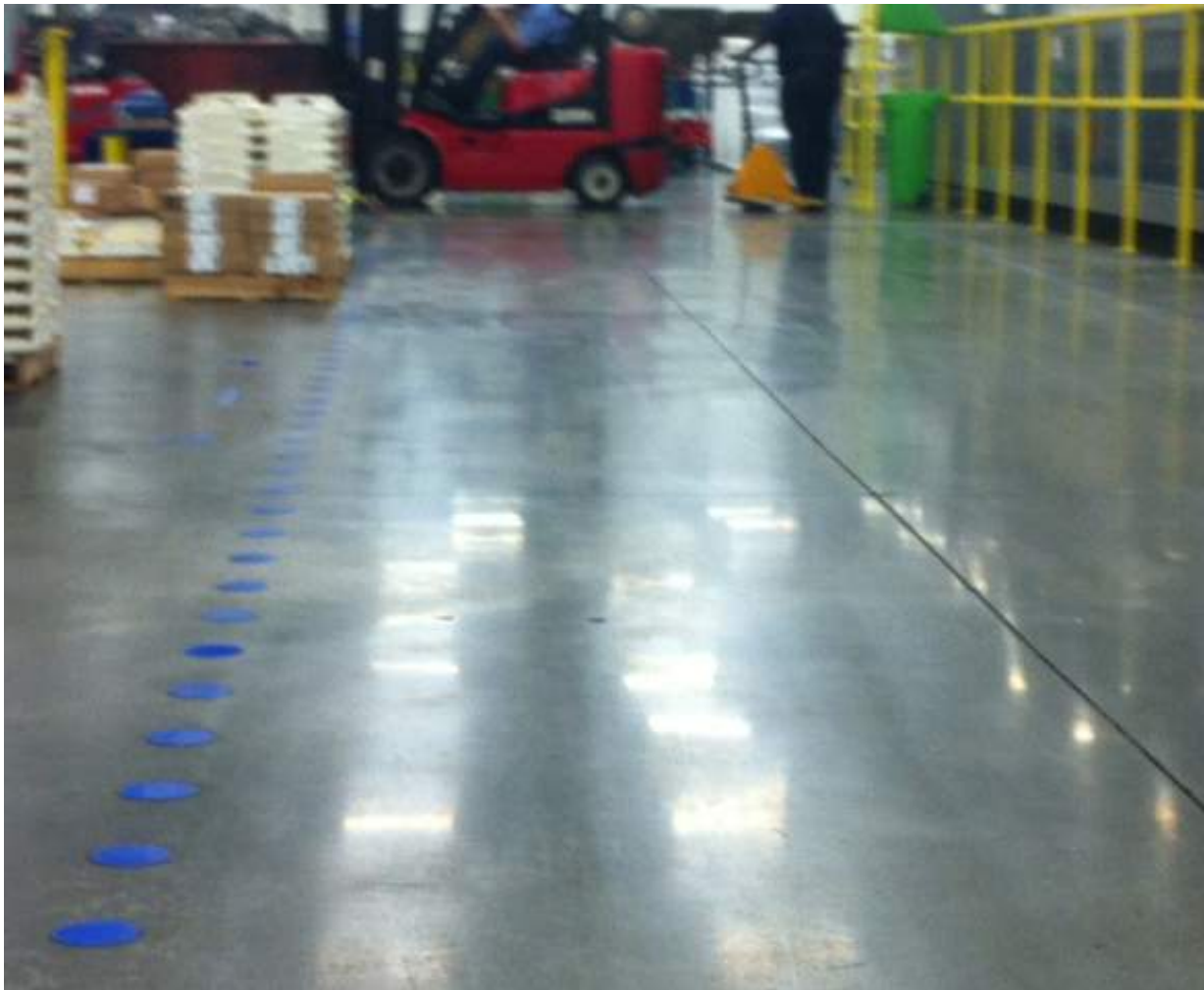
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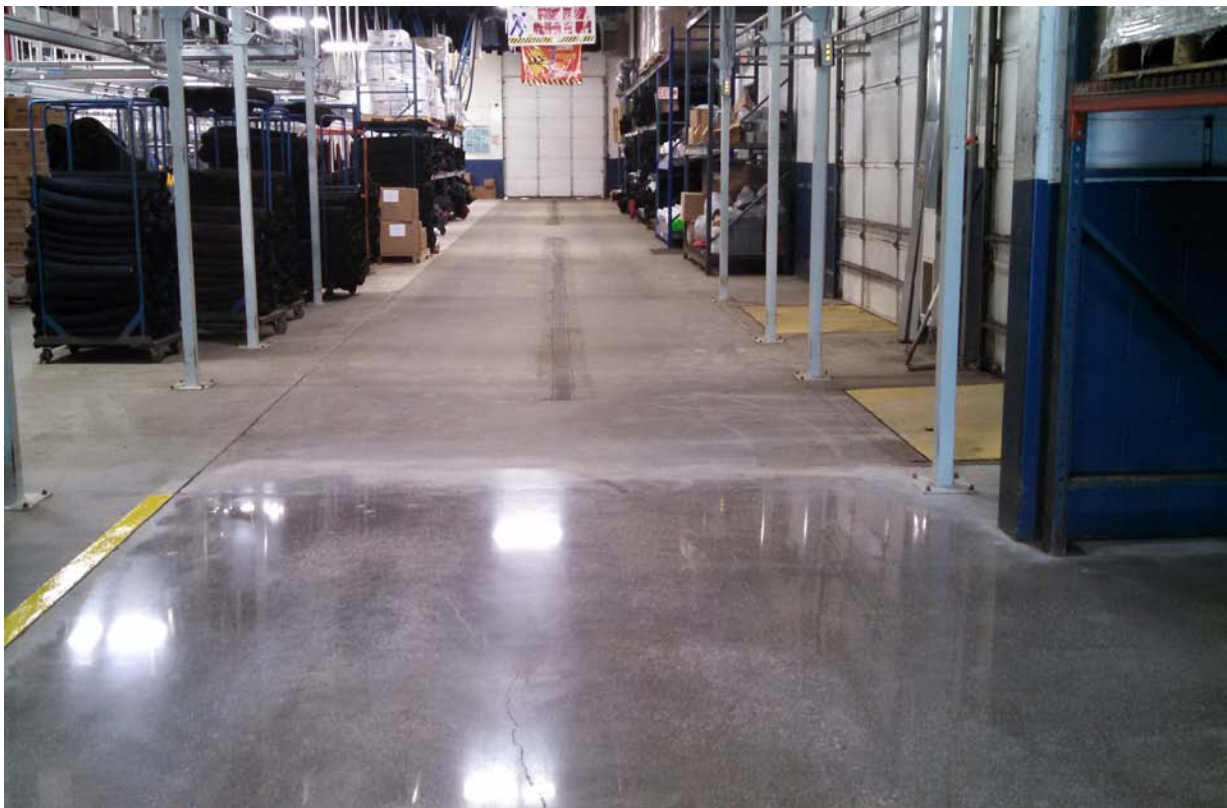
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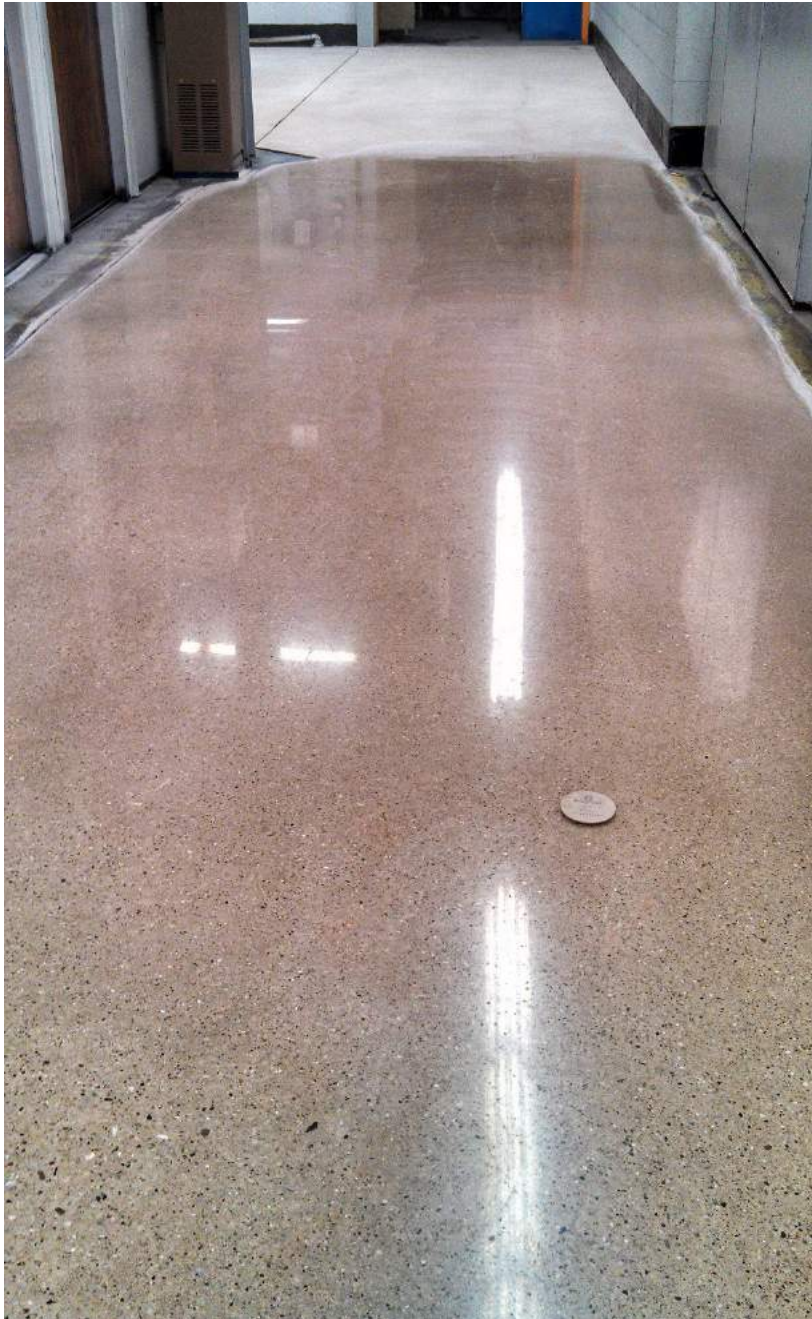
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THE RESULTS



THE RESULTS



JAAVIS offers turnkey commercial flooring installation. From epoxy manufacturing and customization through flooring installation, Tri-Chem and JAAVIS have got your back. We offer an array of floor coating, epoxy and primer products and systems.

JAAVIS Group is a full-service design, construction and management firm based in Troy, Michigan. From design/build to general contracting we approach every project with an “ownership” mindset. Simply, we manage all projects, regardless of size, as if the construction venture was being done to our own facility.



Clients that have used our turnkey system:

Ford

Wal-Mart

Chrysler

Magna

Mars

John Crane

Quality Tubing

Cintas



Tri-Chem

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