CUSTOMER SUPPORT LAB
Our Research & Development lab is very well equipped and staffed with highly qualified chemists and engineers to carry out research and product development, equipment design and to perform customer required testing as needed. Our lab is ISO 9001:2000 certified for design requirements and is an integral part of our customer support activities. Below is a partial list of the equipment and testing available for our customer’s benefits!

QUALITY ASSURANCE LAB
As part of our company being ISO 9001:2000 certified, all raw materials and finished products must meet our stringent quality specifications. Every batch of product we make is traceable to its raw materials. All reagents used are certified to the applicable NIST standards and each test we perform complies with the applicable ASTM methods or the generally accepted analytical chemistry methods.

DOCUMENTATION SUPPORT
For further information, recommendations and other regulatory information please refer to the individual Product Data and Material Safety Data Sheets and/or contact Lincoln Chemical.

 Pretreatment Cleaners

Our LincClean and LincWash product lines were developed to clean the most tenacious soils. We have a wide variety of alkaline and neutral pH cleaners for practically any application.

Lincoln Chemical has a cleaning product that can meet your toughest cleaning requirements - such as stubborn oils, grease, carbon-based soils, fatty acid soils, waxy corrosion inhibitors, and light corrosion.

We have a full line of multi-metal safe cleaners as well as products developed exclusively for ferrous alloys. Our products are designed for use in multi-stage spray systems, agitated immersions, soak tanks, and belt washers. The industry has proven our products to be highly effective in all of these types of operations.

Alkaline cleaners have long been the prevailing choice in the pretreatment industry. These cleaners are designed to remove the toughest, most tenacious soils with a lower concentration of product. Alkaline cleaners are the best type of cleaners in operations where soil loads fluctuate from day to day. These cleaners remove a variety of soils in a very cost effective manner. Conventional alkaline cleaners in the market today operate at temperatures of between 140 and 160 °F.

New technology low temperature cleaners have been developed that can be used in most applications to reduce energy costs without sacrificing cleaning results. These cleaners are very effective in multi-stage spray washers at significantly lower temperatures than those typically found in most paint pretreatment washers. They are an excellent choice when two rinse stages are available prior to applying our inorganic conversion coating products. This line of cleaners operates efficiently at temperatures of between 90 and 120°F, depending on soil levels and type.

Neutral pH cleaners are an ideal choice when cleaning light soils. These cleaners are based on surfactants that are designed to “lift” the soils off the parts without using aggressive caustic cleaners. That makes them more environmentally friendly, while at the same time making them safer for the operators than conventional cleaners.

Innovations such as low conductivity cleaners, neutral pH cleaners and rust removers will increase your plant safety without adversely effecting productivity. We have both powder and liquid products for your convenience.

Complimentary Products

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<td>pH adjuster up</td>
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<td>Cleaner booster additive</td>
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<td>Wetting agent additive</td>
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Conversion Coatings

Lincoln Chemical is widely recognized as an industry leader in pretreatment technology through products such as our LincPhos and LincKote lines. These product lines are currently being used on all types of metal. We have products designed for ferrous and non-ferrous metals that provide outstanding corrosion resistance and enhanced paint adhesion.

Depending on your needs, we have the ability to provide the right product for the right application. These product lines are designed for multi-stage washers ranging from 2 stage and up. Some of our conversion coatings are preceded by a cleaner followed by rinse, while some of our other products are used as a cleaner/coater in the same stage.

Inorganic Conversion Coatings
Formulated to replace traditional iron phosphate, these products require no or very little heat to deposit an inorganic conversion coating. These types of coatings provide a microcrystalline surface in the nanometer (10-9m) range and require a short contact time of 15 to 30 seconds. The “nanocrystals” formed increase the surface area of the substrate thus enhancing paint adhesion, corrosion protection and consequently salt-spray results. These inorganic conversion coatings do not require a non-chrome post treatment seal to achieve high performance adhesion, under film corrosion and salt-spray resistance.

These new technology coatings contain no regulated heavy metals and they significantly reduce phosphate from the process bath. Sludge is also reduced to a minimum while waste treatment costs and other effluent issues are greatly diminished. Rinse water consumption is also minimized because of the lower amount of total dissolved solids present in these new coating baths.

Iron Phosphate
The LincPhos product line of iron phosphates is very diverse and well proven. We have products that contain a single accelerator and products that utilize the synergy generated when using one of our proprietary multi-accelerated packages. In many cases our LincPhos products, when used in conjunction with our LincSeal rinses and a top quality paint, have been proven to provide over 1000 hours of salt spray resistance.

Zinc Phosphate
The LincZinc product line is designed to provide a uniform microcrystalline zinc phosphate structure. This product line is capable of meeting the most stringent corrosion resistance requirements. The LincZinc product line provides a fine grain coating on ferrous and nonferrous metals, when used in conjunction with our specialized grain refiner.

Final Seals & Rinses
We have a full line of final seals and rinses to accommodate and complement any conversion coating process. Whether you are using an iron phosphate or an inorganic conversion coating, we have a sealer to enhance paint adhesion and increase corrosion resistance (salt spray results). Our sealers are used to eliminate flash rust. Lincoln Chemical's LincSeal brand consists of a variety of sealers and rinses including alkaline blends, amine blends, solubilized metal blends, and polymer blends.