



DuBois

Cleaning and Coating Pretreatment Product Guide

Regardless of your application equipment, water conditions, metallurgy, or soil, DuBois has a cleaning product that will meet your process needs. Our cleaners are designed to meet the toughest cleaning requirements with an emphasis on water and energy conservation. DuBois uses innovative technologies to create proprietary chemistries that enable you to operate your process in the most cost effective manner.

Cleaners engineered for:

Cleaning prior to:

- Assembly
- Brazing/soldering
- Overhaul/remanufacturing
- Painting/powder coating
- Plasma cutting
- Welding

Applied by:

- Multi-stage spray
- High pressure cabinet washers
- Belt washers
- Immersion/ultrasonic
- Pressure and steam wand
- Vibratory

Liquid Alkaline and Neutral Products

Product	Description	US/Canada	Recirculating Spray	High Pressure Spray	Immersion	Vibratory	Substrate - Ferrous	Substrate - Nonferrous	Corrosion Inhibition	Degreasing Ability
Liquid MC-726	Best ferrous metal cleaner; removes light rust		•				•			☆☆☆
Liquid Ferro-Terj	Economical heavy-duty product		•				•			☆☆☆
ISW-29	Potassium hydroxide based cleaner		•				•			☆☆☆
Durakleen	No chelants, sequestrants, or phosphates		•			•	•			☆☆☆
Liquid B-R 5512-S	Great on animal fat based soils		•	•			•			☆☆☆
Blockhead	Commonly used in engine rebuild shops				•	•	•			☆☆☆
Multi-TERJ 2111	Mild alkaline; yellow metal protection		•				•	•		☆☆
Multi-TERJ 2112 ES ❄️	Low temperature cleaner; yellow metal protection		•				•	•		☆☆
Multi-TERJ 1012	Surfactant blend		•			•	•	•		☆
Multi-TERJ 2000	Highly phosphated liquid cleaner		•	•			•	•		☆
Multi-TERJ CR-1111	Cleaner/rust inhibitor; virtually residue free		•	•			•	•	•	☆
Multi-TERJ CR-2211 ❄️	Best practice cleaner/rust inhibitor		•			•	•	•	•	☆
ICS-423	Premium cleaner/rust inhibitor		•			•	•	•	•	☆
Liquid 422	Heavy duty multimetal safe; silicated		•				•	•		☆☆☆
Met-ALL TERJ ❄️	Cleaner/rust inhibitor for tougher soils		•	•			•	•	•	☆☆
ISA-16	Neutral, free rinsing cleaner		•				•	•		☆
ISW-24	Noncaustic, nonsilicated cleaner with yellow metal protection		•	•			•	•		☆☆
Duroclean 1256	Primarily designed for engine blocks and transmissions				•		•	•		☆
Multi-TERJ 3110	Liquid cleaner for immersion systems				•		•	•		☆
Saf-D-Rust	Removes light rust at neutral pH		•		•		•	•		
IPR-1000 ❄️	Cleaning additive, also effective as a plastic rinse		•	•			•	•		☆
DK Solvent	Cleaning additive; blend of surfactants and solvents		•	•	•		•	•		☆☆
Vibra-PLUS	Provides lubricity, degreasing, and corrosion protection					•	•	•		☆☆
Vibra-PRO	Provides excellent rust protection to steel media and ferrous parts					•	•	•	•	☆
Vibra-LOOB	Provides excellent lubricity and cleaning					•	•	•		☆
Liquid Cycle	Liquid, heavy-duty burnishing compound unaffected by hard water					•	•	•	•	☆

PRODUCT SELECTION GUIDE

Key:
 • = Applicable
 ☆ = Good
 ☆☆ = Better
 ☆☆☆ = Best
 ❄️ = Low Temperature

US/Canada
 Recirculating Spray
 High Pressure Spray
 Immersion
 Vibratory
 Substrate - Ferrous
 Substrate - Nonferrous
 Corrosion Inhibition
 Degreasing Ability

Powdered Alkaline Products

MC-726	Powdered version of Liquid MC-726		●			●	●			☆☆☆
MC-724	Excellent on grease and rust				●		●			☆☆☆
Alkon	Powdered electrolytic cleaner	 			●		●			☆☆☆
Duroclean 46	Premium, heavy-duty soak cleaner				●		●			☆☆☆
Thermo-Sprex	Powdered general purpose detergent	 			●		●			☆☆
Super-TERJ	Best powdered multimetal safe spray cleaner		●				●	●		☆☆☆
Super-TERJ SF	Solvent free version of Super-TERJ		●				●	●		☆☆☆
DuBois 422	Powdered version of Liquid 422		●	●			●	●	●	☆☆☆
Kool TERJ	* Best practice powdered cleaner/rust inhibitor for cabinet washers		●	●			●	●	●	☆☆☆
Terj K.F. #3	Degreaser in soak or spray applications		●	●	●		●	●		☆☆
Sprex A.C.	Nonphosphated cleaner for immersion; contains no silicates	 			●	●	●	●		☆☆
Sprex A.C. #6	Nonsilicated cleaner for immersion; contains no phosphates				●	●	●	●		☆☆
Diverspray NF	Prevents scale formation in tank; yellow metal protection		●	●			●	●		☆☆
A-612	Heavy-duty, powdered aluminum etchant				●		●	●		
Cycle	Powdered, alkaline burnishing compound						●	●	●	☆☆

Acidic Products

Enviro Clean 110	Liquid, inhibited hydrochloric acid based cleaner and descaler		●		●		●	●		
Orbit NF	Liquid; removes laser scale	 	●	●	●		●	●		☆
Prepare	Liquid used to lightly pickle, clean lights soils, or remove light rust	 			●		●	●		☆
Laser-TERJ	Liquid, nonphosphated, laser scale remover		●				●	●		
DuBois 211	Powdered acidic product	 			●	●	●	●		
FAC-106	Nitric acid based liquid, heavy-duty descaler	 			●		●	●		
Secure SR 5000	Liquid that effectively removes laser scale				●		●	●		
Tart	Liquid cleaner and descaler			●	●		●	●		☆
Alidox	Cleans, brightens, and desmuts aluminum	 			●		●	●		☆
IAD-3	Powdered product removes smut from aluminum	 			●			●		
Vibra-GLEEM	Specifically formulated for brass, copper, and stainless steel; mildly acidic liquid	 					●	●	●	☆
IPW-3001	Liquid acid cleaner used primarily on plastics	 	●				●	●		☆
IPW-4001	Nonphosphoric liquid acid; lightly acidic cleaner primarily used on plastics	 	●				●	●	●	☆

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PRODUCT SELECTION GUIDE

Liquid Alkaline and Neutral Products

Liquid MC-726

Premium product for cleaning the toughest soils on ferrous metals in spray wash systems. An excellent degreaser for ferrous metals, Liquid MC-726 is nonsilicated and nonphosphated.

Liquid Ferro-Terj

Nonphosphated economical product for cleaning tough soils typically encountered in paint pretreatment spray washers. While Liquid Ferro-Terj is most commonly used in processes that run primarily ferrous metals, it can be used under certain conditions in processes which have nonferrous metals.

ISW-29

An excellent spray wash cleaner for steel prior to painting in iron phosphatizing systems. ISW-29 allows for the formation of a good iron phosphate conversion coating by providing an exceptionally clean surface.

Durakleen

Specifically formulated to clean the toughest soils while also being friendly to wastewater treatment systems. Durakleen is a premium spray wash cleaner with a unique polymer system which allows for the formulation to be free of gluconates, EDTA, NTA, silicates, and phosphates.

Liquid BR-5512-S

Heavy-duty liquid cleaner that is effective for cleaning animal fat based soils. Liquid BR-5512-S is very low foaming and free of phosphates and silicates.

Blockhead

Ideal for cleaning ferrous engine components. Heavy-duty, liquid, high alkaline immersion cleaner effective on the most tenacious soils. While also effective for rust removal, Blockhead is used to clean heavy grease, oil, carbonized oil, rust, hard water scale, and many other hard-to-clean soils from ferrous metals. Blockhead is a nonphosphated and nonsilicated product.



Multi-TERJ 2000

Multimetal safe cleaner effective on medium to heavy soils in spray systems. Low foaming in a wide temperature range, it is especially effective in high pressure systems. Multi-Terj 2000 is heavily phosphated, but is free of caustic and surfactants.

Multi-TERJ 2111

A noncaustic, nonsilicated mild alkaline cleaner that cleans and degreases nonferrous metals such as aluminum or galvanized steel. This product minimizes washer scaling and nozzle plugging.

Multi-TERJ 2112 ES

A multimetal safe, low temperature, noncaustic, nonsilicated alkaline cleaner that will clean effectively at temperatures as low as 100 °F without foaming.

Multi-TERJ 1012

A neutral cleaner that contains no silicates, phosphates, or chelants. Multi-TERJ 1012 will remove a wide range of soils from most metals. Effective as both a stand-alone cleaner and as a cleaning additive for alkaline and acidic products. Despite its neutral pH, this product is titratable by using the Non-Ionic Solution Titrant Kit.

Multi-TERJ CR-1111

Liquid cleaner/rust inhibitor for single stage spray washers. Multi-TERJ CR-1111 will typically provide 2-3 days in-process rust protection. This product will leave a virtually residue free surface without rinsing.

Multi-TERJ CR-2211

Our best premium cleaner/rust inhibitor. Formulated without phosphates and silicates, Multi-TERJ CR-2211 is used as a cleaner/rust inhibitor for ferrous and nonferrous metals in spray washers, immersion systems, and vibratory finishing. At proper mix ratios, it will clean light to medium soils and typically provide up to 30 days of indoor corrosion protection, if not rinsed.

ICS-423

A premium cleaner/rust inhibitor that can be used in one-step operations. It is a low foaming synthetic product typically used to provide 30 to 45 days indoor corrosion inhibition on ferrous metals in spray washer applications. ICS-423 is also used in vibratory applications for providing one-step cleaning, deburring, and rust inhibition.

Liquid 422

Our strongest multimetal safe liquid cleaner, Liquid 422 removes heavy soils from ferrous and nonferrous metals. Since it is silicated, it must be followed by a water rinse. Liquid 422 does not contain phosphates.

Met-ALL TERJ

A multimetal safe cleaner designed to be used in low temperature, high pressure spray wash systems. Excellent for use in cabinet type spray units, Met-ALL TERJ has an excellent low foaming detergent package that penetrates tenacious grease and oil, quickly removing them from the surface being cleaned. It is commonly used in the first cleaning steps during reconditioning of remanufactured goods.

ISA-16

A liquid, nonsilicated, aluminum safe spray wash cleaner that is effective when rinsing is minimal. ISA-16 is a neutral product and very low foaming.

ISW-24

A multimetal safe noncaustic, nonsilicated, alkaline cleaner for in-process cleaning that easily rinses and splits out oil. It is most commonly used to clean light to medium soils from yellow metals and aluminum.

Duroclean 1256

A liquid, phosphate free product primarily designed for hot tank soak cleaning of aluminum castings such as engine blocks and transmissions. Effective on ferrous and nonferrous metals, Duroclean 1256 is also useful in pressure washing and as a general purpose cleaner.

Multi-TERJ 3110

A medium-duty multimetal-safe liquid immersion cleaner that contains no silicates, free caustic, or strong solvents. Multi-TERJ 3110 leaves no residual on parts and does not contribute to washer scale buildup typically seen with silicated multimetal safe cleaners.

Saf-D-Rust

A liquid neutral product designed to remove light rust in spray and immersion applications. Saf-D-Rust's proprietary formula minimizes flash rust and sludge generation. It can also be used to effectively remove acid based fluxes used in brazing operations. The neutral operating pH of Saf-D-Rust provides a safer working environment than conventional acids.

IPR-1000

Useful as both a cleaning additive for alkaline and acidic products as well as a rinse additive that minimizes spotting on plastic substrates. As a cleaning additive, IPR-1000 will not only improve cleaning, but will also act as a foam suppressant. As a plastic rinse additive, IPR-1000 reduces the surface tension of water, resulting in the rapid sheeting of water from the surface of a part.

D. K. Solvent

A blend of solvent and surfactant that can be added to alkaline and acidic products as a cleaning booster. It is especially effective on oily and waxy soils.

Vibra-PLUS

A concentrated liquid deburring and burnishing compound that is excellent for use in vibratory and tumbling processes that process primarily steel, but also some nonferrous metals. It provides lubricity, degreasing, and corrosion protection. The specially formulated lubricity package is proven to result in longer media life and shape retention. Vibra-PLUS will also protect your parts from corrosion with its nitrite free inhibition package.

Vibra-PRO

A mild alkaline product used for deburring ferrous metals while also cleaning light soils and providing up to 6 weeks indoor rust protection. Vibra-PRO works well with ceramic, plastic, and steel media in vibratory and rotary barrel units.

Vibra-LOOB

A highly concentrated liquid compound that is formulated to provide lubricity and cleaning in vibratory, tumbling, and high energy mass finishing operations. Its cleaning action will remove and suspend soils while its lubricating action will help media act as designed. Suitable for use in a variety of water conditions. Vibra-LOOB prepares surfaces of parts for paint, anodizing, or plating. It is also ideal for deburring and surface conditioning parts to be automatically assembled.

Liquid Cycle

A red product for cleaning and deburring in vibratory and other mass finishing operations; it also provides in-process corrosion protection. It is a stronger cleaner and rust inhibitor than Vibra-PLUS and Vibra-PRO. Liquid Cycle does contain sodium nitrite. Due to its high alkalinity, this product should not be used on aluminum, galvanized steel, or zinc.



Powdered Alkaline Products

MC-726

Premium powdered cleaner for use in recirculating spray washers on ferrous metals with tough soils.

MC-724

Designed for ferrous metal cleaning and rust removal in immersion systems. MC-724 is formulated to remove heavy grease, oil, carbonized oil, shop soils, and sludge as well as mild cases of rust and hard water scale.

Alkon

A powdered electrolytic cleaner for use in immersion tanks for ferrous and cuprous metals. Alkon maintains cleaning action under the most severe soil load conditions, even in hard water conditions. Its high electrical conductivity promotes good scouring action. Alkon also provides a good foam blanket to prevent gas bubbles from breaking and sparking above the water.

Duroclean 46

A premium heavy-duty soak cleaner designed to give superior soil emulsification and an extended bath life. Duroclean 46 is primarily used in engine block cleaning and degreasing, but is suitable for all types of soak cleaning of ferrous metals.

Thermo-Sprex

An excellent powdered alkaline immersion cleaner for removing tenacious oily/fatty soils from ferrous metals. It is odorless, long lasting and rinses easily. Thermo-Sprex is nonphosphated and nonsilicated.

Super-TERJ

Our best powdered multimetal safe spray wash cleaner. Excellent for cleaning extruded aluminum. Super-TERJ is nonsilicated but does contain phosphates.

Super-TERJ SF

A solvent free version of Super-TERJ used where higher operating temperatures are needed.

DuBois 422

A powdered version of Liquid 422 with the added benefit of an in-process rust protection package.

Kool-TERJ

Designed to provide an excellent potential for energy savings, Kool-TERJ is ideal for removing heavy soils from nonferrous metals in automotive plants where parts are being remanufactured. Kool-TERJ is our best low temperature cleaning product. It works well in cabinet spray washers and is free of phosphates.

Terj KF #3

A multimetal safe, granular, heavy duty detergent for either spray or soak cleaning, Terj KF #3 is formulated to provide excellent soil removal for oil, greases, cutting fluids, and other industrial soils found in metal fabrication operations and automotive rebuild shops.

Sprex A.C.

A versatile multimetal safe powdered product for immersion cleaning. Sprex A.C. removes greases, oils, and fats from all types of metals. It is silicated for soft metal protection but is nonphosphated.

Sprex A.C. #6

A milder, nonsilicated version of Sprex A.C., Sprex A.C. #6 does contain phosphates.

Diverspray NF

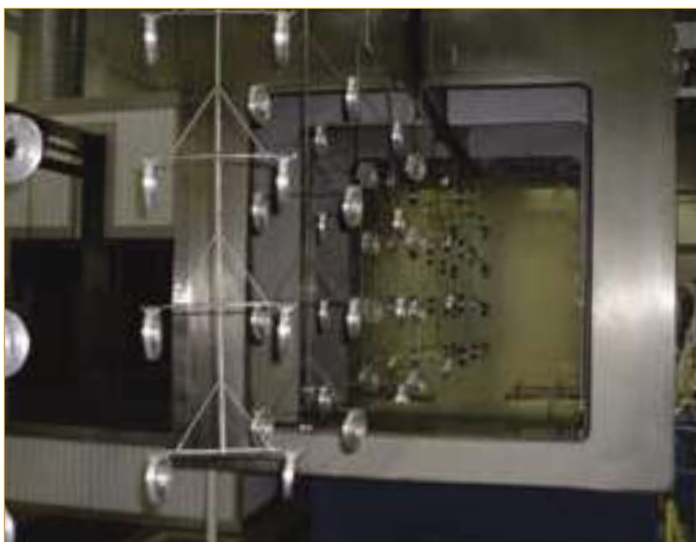
A mildly alkaline cleaner designed for use in both recirculating and high pressure cabinet spray washers. Diverspray NF contains a unique blend of surfactants and builders which provide excellent emulsification and suspension of soils. It is also formulated to inhibit attack on aluminum, copper, copper alloys, and other soft metals.

A-612

A heavy-duty powdered high caustic product for immersion systems primarily used for etching aluminum. A-612 is often used in a two-product system with the aluminum desmutter IAD-3.

Cycle

A dustless powder for use in tumbling and vibratory burnishing operations that will remove oil, grease, light rust and scale. Cycle is intended for use on steel, brass, aluminum, and copper. It will provide a very bright surface luster.



Enviro-Clean 110

An acid product that is used for pickling scale from hot roll or heat treated steel. It is also an excellent product to descale washers of phosphate or water scale buildup.

Orbit NF

A super concentrated phosphoric acid compound used for metal oxide scale removal. It is formulated for use in both spray and immersion systems.

Prepare

A strong phosphoric acid cleaner with a heavy-duty immersion tank cleaning package most commonly used in pickling baths to remove rust, heat treat scale, laser, and welding burn marks. Prepare is also effective at removing lime based and other difficult mineral deposits.

Laser-TERJ

Propriety blend of acids that remove laser, mill, heat treat, weld, brazing, and other oxide scales. This formula is nonfoaming, low sludge, phosphate free, and designed to operate in spray and immersion applications. Laser-TERJ must be used in systems constructed completely of stainless steel or composite materials.

DuBois 211

A dustless, powdered acidic product recommended for removing rust and hard water scale where metal safety is required. Safe on steel, iron, and stainless steel, DuBois 211 will brighten brass and aluminum.

FAC-106

A low foaming blend of phosphoric and nitric acids that provides passivation for stainless steel. It is also used to remove surface imperfections such as weld burns on steel, and scratches and water stains on aluminum.

Secure SR 5000

Effective in both spray and immersion systems for removing laser scale. It can also be used to lower the pH of a phosphatizing bath.

Tart

A low-foaming, colorless, odorless liquid that is effective at penetrating and removing rust and water scale deposits and for brightening steel or aluminum surfaces.

Alidox

A sulfuric and phosphoric acid based product that is effective as an immersion tank cleaner and etchant. Alidox is used to remove oxides and brighten aluminum.

IAD-3

A nonchromated, nonphosphated, acidic material designed for the removal of smut from aluminum. IAD-3 is used in a two-step process with the etchant A-612.

Vibra-GLEEM

Our best product for burnishing yellow metals; it is a mildly acidic liquid compound for vibratory and tumbling operations.

IPW-3001

A liquid acidic cleaner used for cleaning plastic parts in power spray washers. IPW-3001 contains a surfactant system that removes mold release agents and other contaminants from the surface of parts.

IPW-4001

A very mild acidic liquid cleaner primarily used for cleaning plastic parts in power spray washers. The surfactant package in IPW-4001 is designed to emulsify soils, preventing them from redepositing back on the part.



Laser-TERJ

Your chemical solution to high labor costs and bottlenecks associated with grinding laser cut edges.

Laser-Terj effectively removes inorganic soils better, faster, and at a lower concentration with less sludge than conventional descaling compounds.

You will see the following benefits to your operation when using Laser-Terj:

- Minimized sludge and scale
- Better adhesion and corrosion resistance on laser cut edges
- Less chemical usage

Quality, productivity, and cost savings are the most important words in pretreatment today. Companies like yours are constantly looking to improve their competitive advantage and lower their costs. Pretreatment products from DuBois will give you this edge.

Our innovative technology is leading the pretreatment industry by:

- Lowering process costs
- Providing consistent quality
- Providing superior corrosion resistance and coating adhesion



PRODUCT SELECTION GUIDE

Zinc Phosphate

Perma-Gard 3055	❄️	Prepaint		●	●	●	●	●	100-400	2-10
Perma-Gard 3028		Prepaint, rubber to metal bonding		●	●	●	●		150-300	3-15
Perma-Gard 3000LT	❄️	Prepaint		●	●	●	●		150-400	3-20
Perma-Gard 3096		Prepaint, rubber to metal bonding			●	●			300-500	2-10
Perma-Gard CW-2		Cold forming			●	●			1000-3000	<100
Perma-Gard 3030		Cold forming, rust prevent			●	●			1000-3000	<100
Perma-Gard 3048		Prepaint		●		●			100-300	2-10

Key:

- = Applicable
- ❄️ = Low Temperature

Application *US/Canada* *Spray* *Immersion* *Steel* *Galvanized Steel* *Aluminum* *Coating Weight (mg/ft²)* *Crystal Size (µm)*

Iron Phosphate

Secure Tec ES	Energy saving product used at 90–150°F		●			●	☆☆	☆☆☆
Secure Tec 2002	Low sludging straight phosphate		●					☆☆☆
Secure Tec 2100	GM approved premium cleaning product		●				☆☆☆	☆☆☆
Secure Steam	Effective in wand and immersion applications		●	●	●		☆	☆
Secure Steam Plus	Effective with raw water under 150 ppm 'm' alkalinity				●		☆☆☆	☆☆
Secure Steam Ultra	Wand phosphate for all water conditions				●		☆	☆☆
Secure Pro 2001	Provides highest corrosion resistance		●					☆☆☆
Secure Low Foam	GM approved straight phosphate		●					☆☆
Secure Gard	Provides even coatings; very forgiving		●	●			☆☆	☆☆
Secure	GM approved for use on ferrous metal		●					☆☆
Secure 2011	Straight phosphate for multimetals		●			●		☆☆
Secure 2111	Cleaner/phosphate for multimetals		●			●	☆☆	☆☆
Secure 2131	Use when majority of parts are nonferrous		●			●	☆☆	☆☆
Secure 2201	Our best cleaning phosphate		●				☆☆☆	☆☆
Kool Dura-Gard	Extra concentrated formula for low temperatures		●			●		☆
IPI-25A	Easy-to-use cleaner/phosphate for spray		●			●	☆☆	☆
IPI-25C	Easy-to-use immersion and wand cleaner/phosphate			●	●	●	☆☆	☆
IPI-25NF	Easy-to-use straight phosphate		●	●		●		☆
Dura-Gard ALMRT	Best cleaning molybdate accelerated product		●			●	☆☆☆	☆
Dura-Gard Soke	Best cleaning molybdate accelerated product for immersion			●		●	☆☆☆	☆

US/Canada

Spray

Immersion

Wand or Steam

Multimetal Use

Cleaning Ability

Corrosion Resistance

Phosphate Additives

Liquid Trete	Accelerator used in zinc phosphating systems			●
ZT Rinse	Titanium salt used as a crystal nucleating agent; helps control coating weights, crystal size, and packing factor			●
PG-RN	Used for cold working to neutralize the acid carried into the post zinc phosphating stage			●
PGA-OH	Alkalinity additive used to raise pH in both iron and zinc baths		●	●
PGA-Fe	Iron additive especially useful when starting up phosphating baths		●	●
PGA-FN	Neutral fluoride additive used when treating nonferrous metals such as aluminum, galvanized, and galvaneal		●	●
PGA-F	Acidic fluoride additive used when treating nonferrous metals such as aluminum, galvanized, and galvaneal		●	●

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US/Canada

Iron Phosphate

Zinc Phosphate

Zinc Phosphate

Perma-Gard 3055

Our most versatile prepaint zinc phosphate designed for use in immersion and spray systems for the treatment of steel, galvanized steel, and aluminum. Perma-Gard 3055 produces a dense microcrystalline coating that maximizes paint adhesion and salt spray resistance on multiple substrates without changing operating conditions. Low sludging, low temperature technology provides numerous operational and quality enhancements.

Perma-Gard 3028

Zinc phosphate compound formulated to work in spray and immersion systems. Perma-Gard 3028 produces a microcrystalline structure on steel and galvanized metals that is ideal for rubber to metal bonding as well as paint pretreatment operations to increase paint adhesion and salt spray resistance. Satisfies the requirements of Mil TT-C-490E.

Perma-Gard 3000LT

Low temperature zinc phosphate for use in immersion and spray systems. Perma-Gard 3000LT produces dense, uniform zinc phosphate crystals on both steel and galvanized substrates. It provides an excellent base for paint adhesion and outstanding corrosion resistance when painted or powder coated.

Perma-Gard 3096

Zinc phosphate formulation designed specifically for use in immersion systems. Perma-Gard 3096 produces dense, uniform, nodular, microcrystalline zinc phosphate which provides a superior base for paint and rubber to metal bonding. Satisfies the requirements of Mil TT-C-490E.

Perma-Gard CW-2

Heavy zinc phosphate used in immersion systems. Perma-Gard CW-2 provides an ideal base for the absorption of rust preventative oils and for the application of other lubricants for cold working operations.

Perma-Gard 3030

Heavy zinc phosphate designed specifically for use in immersion applications. Perma-Gard 3030 produces an absorbent zinc rich crystal structure as a base for rust preventatives, lubricants, and drawing compounds.

Perma-Gard 3048

Low temperature zinc phosphate compound designed to consistently provide needle shaped coatings on ferrous metals. Perma-Gard 3048 produces dense, uniform, microcrystalline zinc phosphate crystals that provide a superior base for paint adhesion and corrosion resistance.

Iron Phosphate

Secure Tec ES

This energy saving liquid cleaner/iron phosphate is used in spray wash systems to remove soils and impart an iron phosphate conversion coating to ferrous metals at temperatures as low as 90°F. Secure Tec ES is very low foaming, low sludging, has multimetal processing capabilities, and when painted provides very good corrosion resistance.

Secure Tec 2002

Organic accelerated, liquid iron phosphate for spray wash pretreatment processes. It provides very good corrosion resistance to ferrous substrates with the ease of operation of inorganic accelerated products.

Secure Tec 2100

This liquid cleaner/iron phosphate is used in spray wash systems to remove heavy soils from ferrous substrates while creating an iron phosphate rich surface that when painted provides very good salt spray performance. The unique blend of acids and accelerators in Secure Tec 2100 reduces the generation of nuisance sludge. General Motors approved Type IV Iron Phosphate (9984006).

Secure Steam

Versatile liquid cleaner/iron phosphate compound designed for steam, wand, and spray washing systems. Secure Steam will prepare zinc, galvanized, and aluminum parts for painting by cleaning and slightly etching the metal surface. Secure Steam can also be used in immersion tanks or for hand wipe operations to prepare metal for painting.

Secure Steam Plus

Organic accelerated cleaner/phosphate that delivers optimum salt spray results on ferrous metals. Used for spray wand applications. Operating pH range is close to neutral, making it easier to dispose. Used if the "m" alkalinity of the raw water source is <150 ppm.

Secure Steam Ultra

Organic accelerated cleaner/phosphate that delivers optimum salt spray results on hot rolled and other difficult to phosphate steels. Used for spray wand applications. Used if the "m" alkalinity of the source water is between 150–350 ppm. Secure Steam Ultra is our best spray wand cleaner/phosphate.

Secure Pro 2001

Advanced accelerator technology in this liquid iron phosphate spray wash chemistry will provide the highest corrosion protection after painting or powder coating.

Secure Low Foam

Liquid iron phosphate for use in spray wash systems. Organic acceleration provides good salt spray performance and the ability to control phosphate coating weight and work appearance. General Motors approved Type IV Iron Phosphate (9984006).

Secure Gard

Liquid iron phosphate product used in both immersion and spray systems. Secure Gard prolongs the life of paint finishes and provides excellent paint adhesion. Provides greater corrosion resistance than molybdate accelerated products. Secure Gard is extremely effective in treating parts in washers where line stoppages are frequent.

Secure

Liquid cleaner/iron phosphate for use in spray wash systems. Secure's highly effective blend of surfactant cleaners make this the most commonly used product when ferrous metals are processed. Organic acceleration provides good salt spray performance and the ability to control phosphate coating weight. General Motors approved Type IV Iron Phosphate (9984006).

Secure 2011

Liquid iron phosphate for use in multiple stage spray wash systems when a high percentage of multimetals are processed. Secure 2011 is an excellent choice to improve paint adhesion on nonferrous metals such as aluminum and galvanized steel. Similar to Secure 2111 without built-in cleaners.

Secure 2111

Liquid cleaner/iron phosphate for use in spray wash systems when a high percentage of multimetals are processed. Secure 2111 is excellent for improving paint adhesion on nonferrous metals such as aluminum and galvanized steel.

Secure 2131

Liquid cleaner/iron phosphate for use in spray wash systems when primarily processing nonferrous metals. Secure 2131 creates a surface that results in excellent paint adhesion on aluminum and galvanized steel. Secure 2131 is also used when processing harder alloys or work hardened steels.

Secure 2201

Designed for challenging 2 and 3 stage systems (i.e. poor washer mechanics, poor quality steel, or very heavily soiled parts), Secure 2201 is a liquid cleaner/iron phosphate for use in spray wash systems. It is very effective at cleaning parts that have been welded and have weld smut. In addition, Secure 2201 provides very good salt spray performance.

Kool Dura-Gard

Super concentrated liquid cleaner/iron phosphate for use in spray wash systems at lower temperatures. Inorganic acceleration provides excellent adhesion on ferrous and nonferrous metals. Kool Dura-Gard provides consistent blue coatings on steel at very low concentrations and temperatures making it very economical.

IPI-25A

Our best cleaning, inorganic accelerated, liquid iron phosphate for spray wash systems. IPI-25A is more forgiving to operate than organic accelerated products and provides consistent blue coatings.

IPI-25C

Single step cleaner/phosphate containing a unique blend of surfactants that provide good cleaning in both immersion and wand applications. Ideal product to use if flash rusting is a problem.

IPI-25 NF

Inorganic accelerated, liquid iron phosphate for spray and immersion pretreatment systems. IPI-25 NF is more forgiving to operate than organic accelerated products and provides consistent blue coatings that are ideal if painting or powder coating with light color or very thin films. IPI-25 NF can be used to process multiple substrates and is used in multiple stage systems that contain a cleaning stage prior to phosphate.

Dura-Gard ALMRT

Best cleaning, inorganic accelerated, powdered iron phosphate for spray wash systems. Dura-Gard ALMRT works very well on smutty, poor quality steel as well as providing excellent paint adhesion on nonferrous substrates such as aluminum.

Dura-Gard Soke

Powdered cleaner/iron phosphate designed specifically for use in immersion tank systems. Steel, iron, zinc, galvanized, and aluminum parts can be processed when using this product. Dura-Gard Soke is formulated for the effective removal of soils while providing a quality phosphate coating on ferrous metals.

Final Seals

DuFix	Chrome final rinse		3.0 - 5.5	☆☆☆
epoxyLINK	Superior performance on epoxy resin based coatings		4.0 - 6.0	☆☆☆
polyesterLINK	Superior performance on polyester based coatings		3.5 - 5.0	☆☆☆
spectraLINK	Superior results on multiple paint resins		9.5 - 10.5	☆☆☆
ICA-503	Patented inorganic seal		5.5 - 6.0	☆☆☆
Perma-Seal RMB	Great final rinse prior to rubber-to-metal bonding		5.0 - 6.0	☆
Secure SR 5000	Effective as a pH adjuster or as a stand-alone seal		5.0 - 6.0	☆
Secure Seal 8000	Alkaline rinse; great flash rust protection		8.5 - 9.5	☆
Secure Seal FT	Effective as a pH adjuster or as a stand-alone seal		4.0 - 6.0	☆☆
Secure Seal PA	Excellent on aluminum substrates		3.0 - 4.0	☆☆
Secure Seal	Provides excellent flash rust protection		5.0 - 6.0	

Key:
 ● = Applicable
 ☆ = Good
 ☆☆ = Better
 ☆☆☆ = Best

US/Canada

pH Range
Salt Spray
Enhancement

DuFix

Chromic acid rinse additive for the final rinse stage in zinc or iron phosphating operations. It will eliminate flash rusting prior to painting and will maximize paint adhesion and salt spray resistance.

epoxyLINK

Nonchrome, cost effective product that enhances both paint adhesion and salt spray performance. It is designed to optimally perform with coatings formulated with an epoxy resin base.

polyesterLINK

Nonchrome, cost effective, super concentrated product that enhances both paint adhesion and salt spray performance. It is designed to optimally perform with coatings formulated with a polyester resin base. It is typically used in conjunction with either Secure Seal FT or Secure SR 5000 to acidify the use solution.

spectraLINK

Our most versatile nonchrome final seal, spectraLINK is simple to use and has proven effective at greatly improving paint adhesion and salt spray resistance with a wide variety of paint resins, including polyester, epoxy, acrylic, and hybrids.

ICA-503

Enhances both painted adhesion and salt spray performance. Works best when added to DI or RO water. An ICA-503 bath must be dumped at least once per week. Patented and easily automated for effective control.

Perma-Seal RMB

Nonchrome, nonmolybdenum, acidic final rinse that improves paint adhesion. It is often used to enhance rubber to metal bonding adhesion.

Secure SR 5000

Nonchromic acidic final seal rinse that promotes paint adhesion and improves salt spray resistance with a variety of paints. Secure SR 5000 can also be used to lower the pH of a polyesterLINK bath.

How LINK-Science Works



Traditional pretreatment relies primarily on increased surface area for adhesion.



With LINK-Science, molecules anchor to the metal, then bond with the resin in the coating.

Secure Seal 8000

Alkaline final rinse which is excellent at providing flash rust protection during dry off prior to painting. Often used where multiple line stoppages lead to flash rust prior to reaching dry off ovens.

Secure Seal FT

Effective as both a final seal and as a liquid pH adjuster used to acidify other final seal products, most commonly polyesterLINK and Secure Seal PA.










Secure Seal PA

Polymeric final seal especially effective on aluminum when used in conjunction with Secure Seal FT.

Secure Seal

Provides in process protection against flash rusting and improves paint adhesion. It will not enhance salt spray resistance. Secure Seal contains molybdenum.

Paint Strippers

A-R Stripper	Highly concentrated; removes rust and paint			●	●	●			●
pH-100	Highly alkaline product used in conjunction with additives		●	●	●			●	
pH-110	Highly alkaline product used in conjunction with additives		●	●	●			●	
Stripper 4C	Best liquid paint stripper			●	●			●	
Strypp ALL	Multimetal safe product excellent at stripping powder coatings			●	●	●	●	●	
Strypp NF	Outstanding bath life, rinsability, penetration, and foam control		●	●	●				●
Activate	Nonphosphated additive which increases bath life and improves rinsability		●	●	●	●	●	●	
IPH-5A	Powdered additive which is excellent on grease and rust			●	●	●	●	●	
ISO-11	Additive which improves caustic based products' performance		●	●	●	●	●	●	

Key:

●=Applicable

US/Canada
Spray
Immersion
Ferrous
Nonferrous
Liquid
Powder

A-R Stripper

A highly caustic product effective at removing rust and paint from ferrous metal. A-R Stripper also contains sequestrants which dissolve rust and accelerate the stripping process.

pH-100

A nonphenolic, alkaline liquid concentrate designed to be used as a starting point for hot tank stripping systems. PH-100 supplies the necessary alkalinity base and works synergistically with DuBois additives Activate, IPH-5A, and ISO-11.

pH-110

A potassium hydroxide based concentrate used as a base product in a hot tank paint stripping operation. When used with paint stripping additives, it will strip most coatings. PH-110 contains no phenolics.

Stripper 4C

The best built liquid paint stripper on the market, Stripper 4C removes most modern finishes from ferrous metals.

Strypp ALL

Powdered product which strips tough coatings from ALL types of metal substrates. Strypp ALL is your product of choice when stripping coatings from nonferrous metals. Product must be used nondiluted.

Strypp NF

Powdered nonfoaming paint stripper for use in both immersion and spray applications. Strypp NF provides outstanding solution life, penetration, and foam control.

IPH-5A

A highly active, nonphenolic liquid additive for hot alkaline paint strippers. It enhances the stripping ability of alkaline paint strippers such as Stripper 4C, PH-110, and PH-100. IPH-5A must be used in immersion processes.



















Activate

Alkalinity additive used with alkaline paint strippers to improve their stripping action, rinsing, and bath life. Activate is low foaming and contains no phosphates.

ISO-11

A nonfoaming liquid which, through its advanced penetration and wetting agent technology, improves the stripping performance of caustic or caustic based hot tank strippers. The organic ingredients in ISO-11 act synergistically to break the bond between the paint and its substrate.

Rust Preventatives

DuBois 200/200NT	Water soluble synthetic (with and without tint)	 	☆☆☆	☆			●	
Rust Prevent SYN 1-X	Economical water soluble synthetic	 	☆☆☆	☆			●	
Rust Prevent SYN 3-X	Super concentrate	 	☆☆☆	☆☆			●	
DuBois 103SW	Best water soluble synthetic	 	☆☆☆	☆☆			●	
Rust Prevent 100	Emulsifiable rust inhibitor	 		☆☆☆	☆☆☆		●	
Super-Mul 400 LF	Emulsifiable cleaner/rust inhibitor	 		☆☆☆	☆☆☆		●	
Rust Prevent 101	Water displacing solvent cut-back	 			☆☆☆	☆☆☆		88
Rust Prevent 500	High flash point water displacing solvent cut-back				☆☆☆	☆☆☆		200
JAO-6	Light lubricant, penetrant, and rust inhibitor	 			☆☆☆	☆☆☆		125
Barricade	Light wax coating; limited outdoor protection							

Key:
 ☆=Good
 ☆☆=Better
 ☆☆☆=Best
 ●=Applicable

The ability of a corrosion inhibitor to protect is a function of the humidity in which the parts are stored; lower levels of humidity will increase the length of storage.

US/Canada
60 Days
90 Days
6 Months
12 Months
Water Dilutable
Flash Point °F
(Use Solution)

DuBois 200

A water soluble synthetic rust inhibitor that can also be used as a grinding fluid. DuBois 200 contains an inhibitor to protect brass and copper for short term immersion. DuBois 200 is a green liquid.

DuBois 200 NT

DuBois 200 without dye.

Rust Prevent SYN 1-X

Economical synthetic water soluble rust inhibitor that typically provides 30-60 days of indoor rust protection.

Rust Prevent SYN 3-X

A more concentrated version of Rust Prevent SYN 1-X.

DuBois 103 SW

Our best water soluble synthetic rust inhibitor and grinding fluid that can be used on both ferrous and nonferrous metals. It provides excellent rust inhibition for in process parts or for indoor storage. DuBois 103 SW is DEA free and amber in color.

Rust Prevent 100

A water soluble oil rust inhibitor for use on ferrous and galvanized metals. It can also be used to protect aluminum. It provides up to 6 months indoor protection. Rust Prevent 100 can be applied by dip, brush, or spray.

Super-Mul 400 LF

A low foaming, water soluble emulsion cleaner and rust inhibitor for cleaning and protecting metal production parts. It is easy to mix and can be used to clean oily, greasy parts in both immersion or spray

wash systems. Super Mul 400 LF will leave behind a light protective rust inhibiting film after the cleaning process that will provide indoor rust protection.

Rust Prevent 101

A nondilutable water displacing rust inhibitor. It can be applied by dip, brush or low velocity spray. It can not be applied in spray washers. Rust Prevent 101 will provide 6 months or longer indoor protection. It has been used successfully for below deck metal protection on overseas shipments. Meets the corrosion characteristics of Mil-C16173D, Grade III.

Rust Prevent 500

Similar in use and chemistry to Rust Prevent 101 but with a much higher flash point. Rust Prevent 500 has a flash point in excess of 200°F. Rust Prevent 500 takes longer to dry than Rust Prevent 101 but is used in the same manner and provides the same protection. Rust Prevent 500 meets the corrosion characteristics of Mil-C16173D, Grade III.

JAO-6

A nondilutable water displacing rust inhibitor, penetrating fluid, and light lubricant that can be applied by dip, brush, or low velocity spray. It can not be applied in spray washers. JAO-6 will provide 6 months or longer indoor protection. JAO-6 meets the corrosion characteristics of Mil-C16173D, Grade III.

Barricade

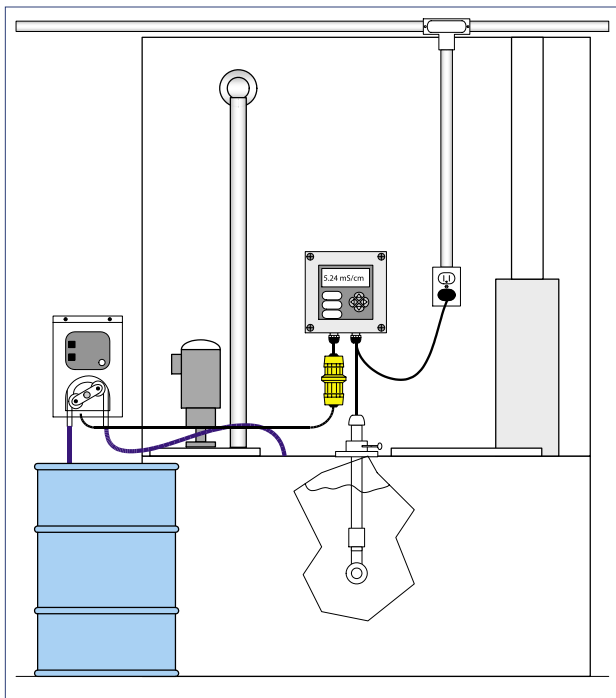
Provides a wax type film which can be applied by a fine mist sprayer, brushing, wiping, and dipping. It is safe to use on all types of metals. Barricade can be used to provide limited outdoor protection.

DuBois designs equipment systems for all cleaning and coating pretreatment applications. Automation will improve productivity and raise the bar on part quality. Improved worker safety and hands-free chemical additions are other benefits. Our proven systems reduce chemical and water consumption by monitoring and controlling key variables such as:

- Concentration
- Conductivity
- Rinse water quality
- Temperature
- pH
- Nozzle pressure
- Chemical inventory
- Water consumption
- Solution level



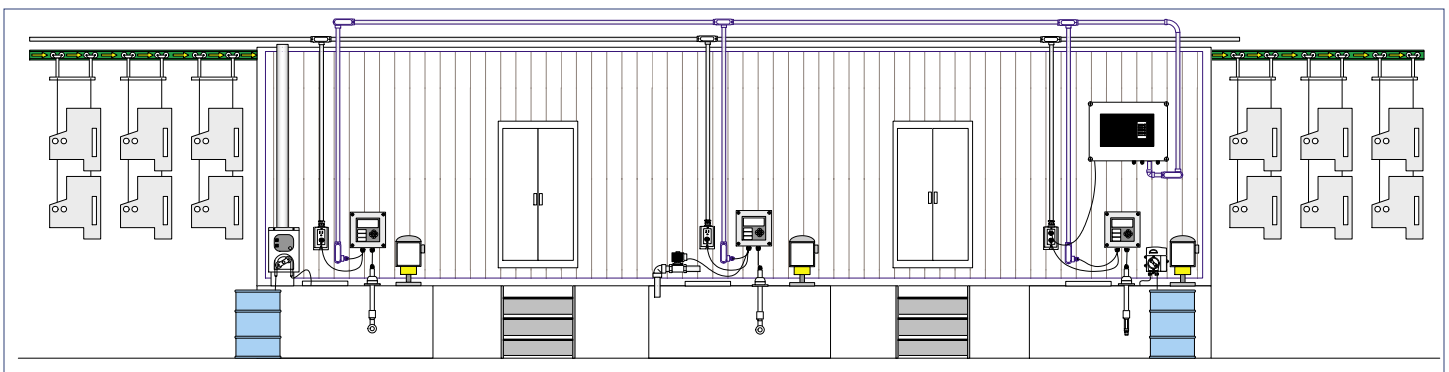
Central control system for 5 stage pretreatment washer controls alkaline cleaner, rinse stages, phosphatizer stage and final seal rinse stage. Chemical feed pumps are included on the panel.



DuBois collaborates with your process quality team to develop a customized chemical and rinse water control system.

Equipment selected by DuBois is designed for heavy-duty industrial environments and provides proven results. Installation of equipment is not complex and, in most cases, can be done while your pretreatment process runs production parts.

Your local DuBois representative will provide hands-on equipment training covering installation, operation, and recommended calibration and maintenance. The equipment system can be a vital part of your continuous improvement quality program.



Example of chemical and rinse water control for three stage pretreatment power washer.



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