

ENDRCHEM SOLUTIONS CATALOG



AUTOMATED SYSTEMS

(800) 442-4360

NorchemCorp.com

Made in the USA 📕

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Sustainable Water Systems
UltraPure [®]
Hot & Tempered
UniSoft [™]
ROpure [™]
UltraSep [™]
Engineered Process System
NorFlow-WIN [®]
NorCart [™]
NorVision [™]
NorQuest [™]
System Parts

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GET TO KNOW MORCHEM









NATIONWIDE COMMITMENT

Built on the motto of "zero-downtime," you can count on us to deliver on our committment, no matter where you are.





FAMILY-OWNED & OPERATED

Norchem puts the needs of its customers at the forefront of all product development and customer care initiatives while maintaining its core values of trust, sustainability, and the willingness to

pursue solutions for challenging environments. The Norchem family tree grew as Kevin Minissian was joined by his wife Houri Minissian, and children, Vaughn, Karineh, and Lorina in the day to day operations

and holistic management of Norchem. The Minissian family and the Norchem team continue to carry his legacy and bring success, honor, innovation and growth to Norchem, just as Kevin built it up to be.

REMEMBERING OUR FOUNDER

Originally founded in 1978 by Kevin Minissian, the company has evolved into a multi-disciplinary clean technology firm founded under the principle that innovation can only be driven by customer necessity.







National Sales Manager

LEADERSHIP

Karinch Minissian

Vice President & Managing Director



Chad Tolkerts /ice President of Engineering, Automated Systems

Jaime Gastelum

Senior Director of Customer Care



Jeonardo Gastelum

Director of National Accounts, Customer Care

Martin Mora

Project & Systems Design Manager, Automated Systems



David Whiteside

THE NORCHEM PROCES

LTRASEP Retrofitted production Separate suspended Screen fine particles Liquid laundry chemicals are A customized

held in Norchem bulk storage tanks.

Automated Dosing System records the volumes and generates production reports.

NUpHASE PRO[®] NorFlow-WIN[®] NorQuest[™] NorVision[™]

machines with the latest in NEMA-rated controller technology.

software platform to analyze plant labor productivity and utility usage in real time

solids from the water like lint from the stream

UltraSep[™]

waste stream

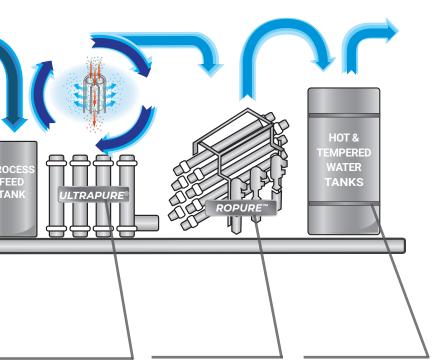
Shaker Screen





UltraPure[®]

ROpure[™]



Crossflow membrane filtration removes oil, grease, BOD's, and other microscopic contaminants

Used for incoming water filtration and process water tertiary filtration to remove TDS & PFAS Recycled water tanks with pump stations supply production with reclaimed water



















DETERGENT WASH PROGRAMS

NUpHase Pro® is the result of extensive research to produce a program that combines alkalinity, powerful detergency, and excellent wetting properties to not only lower wash chemical cost but also improve overall washroom efficiency. This detergent program minimizes fabric degradation and lowers alkali usage.

NorGEN[™] is a new generation NPE-APE free biodegradable laundry detergent program specially formulated for cleaning and stain treating all 100% cotton, synthetic and blended textiles used in hospitality, cleanroom, healthcare, linen, and industrial product mixes.

ALKAPON[™] is a cost-efficient detergent wash program, backed by a proprietary blend of cleaning solutions. Experience longer-lasting fabrics, a reduction in lint & utility costs, a lower rewash percentage, and an improved bottom line.

ColdClean[®] is offered as an alternative to hot wash formulas for light to medium soil hotel room linen. The greatest satisfaction has been achieved with bath towels, bed sheets, pillow slips, and pool towel formulas.







COLDCLEAN

rapps delivered with

All detergent wash programs delivered with

NORFLOW-WIN® Automated Chemical Dosing Systems

CLEANER AND BRIGHTER TEXTILES WITH BALANCED WASH FORMULAS

Superb soil removal

Minimizes fabric degradation

Provides excellent wetting and soil suspension, effective FOG emulsification, and faster rinsing

Boosts stain removal with carefully dosed chlorine bleach and liquid alkali

Concentrated caustic-built detergent with strong soil suspension, anti-redeposition, and chelating properties

THE 100% BIODEGRADABLE SUSTAINABLY-FOCUSED DETERGENT PROGRAM

100% biodegradable detergent that delivers clean, static-free textiles

Highly effective at removing petroleum & food-based oils

Excellent wetting properties

Designed to increase productivity and fabric lifespan

Advanced non-caustic liquid detergent for all fabric types utilizing the highest-grade blend of biodegradable surfactants

GREATER SOIL REMOVAL AT A LESSER COST

Eliminate added liquid alkali on select light and medium soil formulas

Reduces lint and residual chemicals that can cause static

Lift FOG (Fats, Oils, and Grease), medicine stains, and protein stains with more efficiency

Deeply penetrates natural and synthetic fabrics

Highly concentrated caustic-built detergent formulated to effectively clean most soils with no separate liquid alkali

OUR INNOVATIVE 3-STEP SYSTEM THAT THOROUGHLY CLEANS WITHOUT THE NEED FOR HOT WATER

100% WATER HEATING SAVINGS (on select formulas)

ColdClean® simplifies wash formulas into 3 easy steps: suds, rinse twice, and extract

Thoroughly cleans fabrics, deodorizes, and brightens linens without the need for hot water on most light soil formulas

Specifically formulated surfactant blend paired with a stain removal & whitening agent effective at cleaning light to medium soil in 80°-90° temps



LAUNDRY CHEMISTRY PRODUCTS





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Most chemical products available in bulk packages and sizing. Gal Jug, 5 Gal Jug, 15 Gal Drum, 55 Gal Drum, 250 Gal Tote; 300 Gal Tote







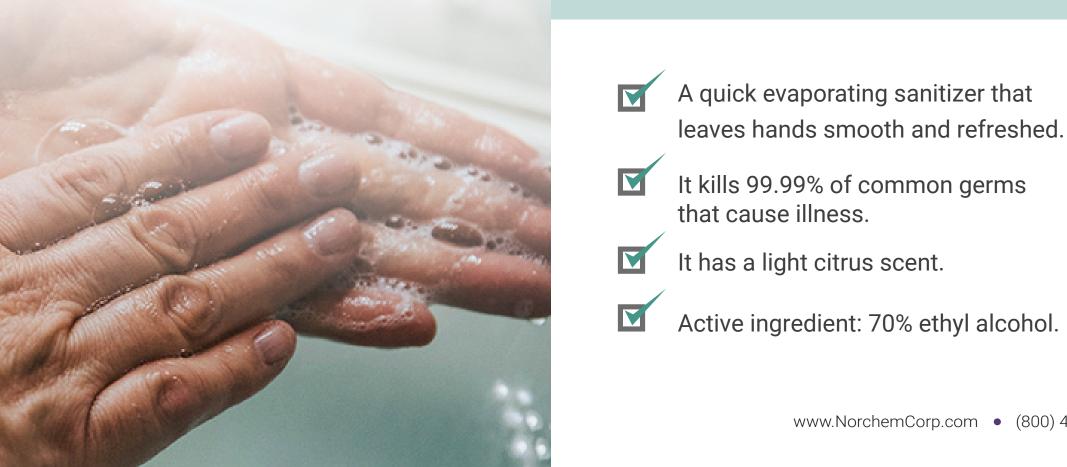
FDA APPROVED HAND SANITIZERS

Infection prevention starts with clean hands. Hand hygiene is one of the most important practices available to reduce the rapid spread of infectious diseases at home or at work. With FDA approval, Norchem hand sanitizers are formulated with 75% and 80% alcohol to kill microorganisms, bacteria, and viruses.



HAND HYGIENE AT & AWAY FROM THE SINK."







Choose from one of our available sanitizers





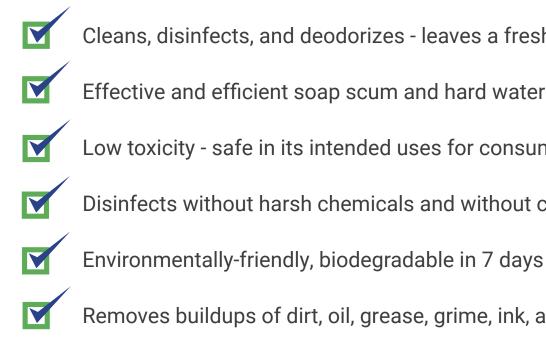
Surface Cleaners

KoreKlean[™] Hard Surface Disinfectant is a non-flammable. non-quaternary, antimicrobial cleaner designed for use on various hard surface cleaning applications. KoreKlean[™] has low corrosivity, making it effective for household and institutional cleaning applications, including removing soap scum, grease, and hard water deposits.

MicroKlean[™] All-Purpose Cleaner offers exceptional cleaning strength on multiple non-porous surfaces and various soils. It was formulated with a well-balances blend of surfactants and solvent to remove, penetrate, soften, and emulsify soils like grease, oil, dirt, grime, soap, scum, and body oils from hard non-porous, washable surfaces.



SIZE	PACKAGE
16 oz	Bottle w/ trig spray
32 oz	Bottle w/ trig spray
32 oz	Bottle w/ pump
1 Gal	Jug 4x1 Case
5 Gal	Carboy
15 Gal	Drum
30 Gal	Drum
55 Gal	Drum



- Cleans, disinfects, and deodorizes leaves a fresh clean scent
- Effective and efficient soap scum and hard water salt removal
- Low toxicity safe in its intended uses for consumer
- Disinfects without harsh chemicals and without chlorine odors
- Removes buildups of dirt, oil, grease, grime, ink, and food soils
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Pair **KoreKlean**[™] or **MicroKlean**[™] with the **Electrostatic Portable FOGGER**



Norchem's Portable Electrostatic Fogger utilizes electrostatic technology to charge each droplet to provide effective application of formulations. The droplets stay separated due to the charged nature allowing uniform coverage on entire targeted surface. Pair your new electrostatic Fogger with Norchem's KoreKlean[™] and MicroKlean[™] for the most efficient clean sweep.

This fogger is ideal for use in spraying commercial and residential areas, such as: hotels, schools, greenhouses, warehouses, medical facilities, sanitation, germicidal treatments and disease control programs.



NOCK

OSE STAIN REMOVER





Dropper caps for easy use no-drip safety







ver	Removes Rust From Fabric
е	Keeps fabric safe, targets rust
and	Dropper caps for easy use and no-drip safety
	21



ULTRAPURE[®] WASTEWATER FILTRATION SYSTEM

Advanced Ceramic Membrane Technology The UltraPure® produces high quality recycled water for applications in commer-cial laundry, food processing, and many others with no added treatment chemicals. The ultra-filtration process uses an innovative ceramic crossflow membrane design that can reclaim up to 80% of wastewater and 90% of wastewater heat.

Proven to recycle up to 90% of Effluent Wastewater

- Reduce energy cost for heating water by up to 85%
 - Aids in the removal of PFAs in conjunction with the ROpure[™]

Automated Clean in Place (CIP) technology



- Reduce FOG, TSS, TDS, BOD & COD's
- Designed to fit in any plant, big or small, with added capacity for future growth at less cost



OPERATING CAPABILITIES

Processes Wastewater Temp	up to 2
Wastewater	between 0-1
Ceramic membranes process FOG	above 1000
Low pressures reduce power dema	and 40-9

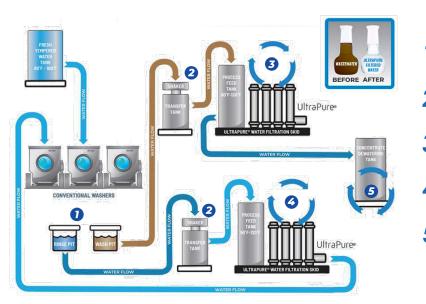
211°F 14 pH mg/L

90 psi

CONTAMINANT REDUCTIONS

COD up to	97 %
BOD up to	93%
TSS up to	100%
(FOG) Oil and Grease up to	99%
Precipitated Heavy Metals up to	99 %

THE PROCESS



- Heavy soil wash water and rinse water can be separated into 2 pits to maximize savings
- Large solids & lint removed through MicroPure System
- The hot recycled water is used on all wash steps
- Rinse water can be treated separately and pumped to the tempered water tank
- Contaminates removed during the 5 filtration process are concentrated daily and disposed of periodically
 - *when combined with tertiary Reverse Osmosis filtration, the wastewater does not need to be separated between rinse and wash*

PROPRIETAR MEMBRANE

The UltraPure® can significantly reduce the retentate without bypassing to sewer or FILTRATION using a filter press.

- Anti-fouling membrane material coating
- Membranes are chemically inert
- No annual filter replacement cost
- Average membrane lifespan is 7-10 years
- Low sensitivity to temperature, pH, chemical & mechanical abrasion
- Channels tolerate more suspended solids unlike hollow fiber and other tubular technologies

SMART & DEPENDABLE

- ✓ Chemical-free filtration
- ✓ 100% stainless steel construction
- Compact footprint & modular for expandability
- Remote access for easy monitoring and serviceability
- ✓ Membrane health monitoring
- ✓ Data Management & Reporting

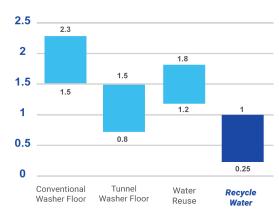
THE CHOICE IS

Parameter	Fresh Water	Reuse	Multi Media	DAF	ULTRAPURE®
Filtration Size	0.0001 µm	150 - 250 μm	2 µm	150 - 250 µm	.02 µm
TDS	<800 mg/L	1,000 - 1,200 mg/L	450 - 1,000 mg/L	1,300 - 1,800 mg/L	450 - 1,000 mg,
TSS	<1 mg/L	181 mg/L	1 - 25 mg/L	25 - 50 mg/L	0 mg/L
рН	6.5 - 9.0 su	7.0 - 11.0 su	7.0 - 9.0 su		8.5 - 10 su
Alkalinity	<10 ppm	5 - 15 ppm	5 - 15 ppm	150 - 300 ppm	5 - 200 ppm
Iron	<0.1 ppm	<1.5 mg/L	<0.5 mg/L	<1.5 mg/L	<0.1 mg/L
Hardness	<17 ppm	<30 mg/L	<30 mg/L	15 - 50 mg/L	<17 mg/L
FOG	0 mg/L	5 - 50 mg/L	0 - 50 mg/L	10 - 200 mg/L	0 - 5 mg/L
		POTENTIAL	COST SAVINGS		
Recycle/Reuse Savings		10% - 20%	50% - 75%	10% - 30%	50% - 90%
Energy Savings (water heating)		0%	25% - 30%	0%	50% - 85%
Wash Chemical Savings		0%	0%	0%	10% - 30%

WATER **USAGE** COMPARISON

UltraPure® allows for optimal wetting of your textile, while still lowering your gallon/lb usage.

TOTAL PLANT WATER





✓ QC sensors for conductivity, turbidity, pressure, and temperature Early adoption driven by superior flux performance and membrane longevity



WATER QUALITY & CONSERVATION PARAMETERS

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HOT & TEMPERED

STORE, SUPPLY, AND HEAT YOUR WATER

Reliability, Consistency, & Efficiency

Since hot and tempered water is the life blood of most plant operations, we build our hot and tempered water systems to last. The most robust and reliable systems for any production environment. Our team of automation engineers design and build these systems based on customer specifications.

D WATER

WATER STORAGE SYSTEMS



WATER SUPPLY SYSTEMS



WASTEWATER HEAT RECLAMATION SYSTEMS



- Transducers to monitor tank fluid levels
- Flat or cone bottom | 200 gallons to 10,000 gallons capacity
- Vertical or horizontal tanks with double-sided welds for durability

- Stainless steel pre-piped pump skids and impellers
- Single, dual, or triplex pump systems with 1 hp – 60 hp pumps
- Temperature, pressure, TDS, and pH monitoring with UL-approved system controls and Industrial PC HMI Touchscreen

- Our systems are designed to fit any application
- The cooling of wastewater is especially ideal for plants that chemically treat effluent water
- Capture and reuse heat from the wastewater to then heat incoming city water that efficiently produces tempered water for production



HEAT EXCHANGERS



PLATE AND FRAME

- Stainless steel base and frame
- Pre-piped with stainless steel and valves
- Automated valves for backflush to prevent solids build up
- **CIP** cleaning system to clean plates and maintain high performance
- **UL**-approved panel pre-wired and mounted to the skid
- Industrial PC HMI Touchscreen Dashboard



SHELL AND TUBE

- Stainless steel base and frame
- Stainless steel shell and tubes
- Pre-piped with stainless steel and valves
- Automated valves for backflushing to prevent solids build up
- CIP cleaning system to clean plates and maintain high performance
- UL-approved panel pre-wired and mounted to the skid
- Industrial PC HMI Touchscreen Dashboard



WATER TREATMENT CHEMICALS



FLOCCULANTS

Anionic, nonionic, and cationic flocculants in dry powder, liquid emulsion, and liquid solution forms.

SCALE INHIBITORS

Norchem offers innovative scale inhibitors from inorganic substances, which are a frequent problem with water used in a variety of applications such as boilers and cooling towers.

NORCHEM

MOLUNCE

COAGULANTS

Norchem supplies cationic, organic coagulants in liquid form.

HEAVY METAL CHELANTS

Chelating agents designed and formulated to enhance the removal of heavy metals from waste streams via precipitation.

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INODCHEM



NORCHEM CORP

1-800-442-4360

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SOFT WATER

UNISOFT[™]

A ROBUST WATER SOFTENING SYSTEM

Norchem's Water Softening System, UniSoft[™], is a reliabale water softener that keeps your water at zero grain hardness. A water softener that is reliable and does not breakdown is crucial to an operation that runs 24/7.

The construction of UniSoft[™] is equipped with the latest UL-approved controller technology. All systems are sized to fit each application and each system takes all ion exchange resins types.

NORCHEM

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SOFT WATER

ORCHEM CORP

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SOFT WATER





- Single, duplex, or triplex tank syster
- Skid piping is welded with flange connections to make for easy asser
- Reduces volume of rinse water nece during regeneration
- **Equipment with PLC based controls** interactive touch screen controller



TECHNICAL FEATURES

ems	UL & NEMA rated smart controls
mbly	Level sensors for brine tank ensure proper salt concentration
essary	Tanks meet ASME code and will outlast carbon steel and fiberglass tanks
s and	Smart flow sensors monitor precise water volume through the resin to maximize efficiencies and minimize resin regeneration



ROPURE[™]

REVERSE OSMOSIS SYSTEM

If your plant uses water in its production process and requires low TDS process water, then Norchem's Reverse Osmosis System is a worthwhile solution to explore.

Used for incoming water filtration and process water tertiary filtration to remove TDS, ROpure[™] utilizes membranes to increase the flux rate by as much as 70%. High temperature up to 160 degrees of continous operation.

PFAS OUT, PURITY IN:

Norchem's specialized ROpure[™] paired with the UltraPure[®] Wastewater Filtration & Recycling System ensures compliance and eliminates the threat of PFAS in your operation.



SUPERIOR TDS REDUCTION

Fully automated with UL-approved & **NEMA-rated smart controls**

Reduces the overall TDS discharge to sewer after the filtration process

Stainless Steel Skid Mount

TYPICAL APPLICATIONS

INCOMING LAUNDRY WATER

In addition to hard water, high TDS is known to cause problems with linen discoloration. The application of the ROpure[™] to the wash process mitigates the risks of hard water that result in spending more money on excess wash chemicals and elongated wash times.

- chemical usage
- boiler cycle
- Supplies your boiler with near zero TDS water

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SPECIFICATIONS

Fully scalable from 5 GPM to 1000 **GPM**

Pre-piped with all stainless-steel components



TERTIARY FILTRATION

ROpure[™] will greatly increase the performance of the UltraPure® Wastewater Filtration System by acting as a tertiary control mechanism for the TDS levels coming off the membranes.

BOILER FEED WATER

☑ ROpure[™] for boiler feedwater filtration increases the cycle time of boilers by reducing the number of blow downs Longer cycles and less blow downs means less treatment

Saves water and heating energy by getting more out of each



PROCESS SOLIDS SEPARATORS

MECHANICAL SEPARATION MADE EASY

Norchem offers various suspended solids removal technologies to remove diverse solids from the waste stream. We offer vibrating screens, selfcleaning trench screens, rigid basket filters and vertical bowl centrifuges.

The UltraSep[™] Solids Removal System is the superior solution for removing sand, silica, gravel, and other particles from wastewater streams. Excellent option for operations with tight TSS discharge requirements.

Shaker Screening Systems remove lint and large particles to lower TSS prior to discharge to the city, and prior to ultra-filtration or wastewater heat exchangers.

The Trenchmaster is a stainless-steel conveyor screening system to remove large solids in the wastewater prior to the clarifier or wastewater pit.



ULTRASEP® Solids Removal System

NORCHEM

WASTEWATERT

High rpm rotation reaches 1,500-2,00 Minimizes need to pump solids from water pits **UL and NEMA rated pre-wired panel** mounted to the skid Automated self-scraping technology cleans the bowl in between spin cycles



TECHNICAL FEATURES

000G	98% removal of the settling solids from process water
n waste-	Industrial PC HMI Touchscreen Dashboard
and	The vertical bowl centrifuge is designed for high volume TSS with specific gravity above 1.2
cleans	

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SHAKER SCREENS Lint and Large Particle Removal System

TECHNICAL FEATURES

- All stainless-steel construction
- Stainless steel screen form 60 mesh to 400 mesh
- **UL** and NEMA rated panel pre-wired and mounted to the skid
- Industrial PC HMI Touchscreen Dashboard

200-to-1,000-gallon transfer tank sizes

MOF

- \Box Coarse filtration from 75 to 175 μ M (microns)
- Two-stageT304 stainless steel shaker screen and basket strainers for solids collection

- All stainless-steel construction
- Protects the wastewater pit pumps from clogging

TRENCHMASTER Conveyor Screening System

TECHNICAL FEATURES



Self-cleaning conveyor screen

Solids are easily disposed of in a waste receptacle



NORFLOW-WIN®

Automated Chemical Dosing Systems

NorFlow-WIN® is a fully automated chemical dispensing system, engineered to be the most reliable and held to the highest quality standard with the smallest margin of error. Norchem engineers have optimized the production process by designing injection configurations to reduce water, energy, and chemical usage for laundry operators. The system can be used to inject product on timed injection or flow meter-controlled injection.

NorFlow-WIN[®] systems are available in two versions: G3 for Conventional washers and G4 for CBW's.

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NORCHEM

RFLOW-WIN" C3

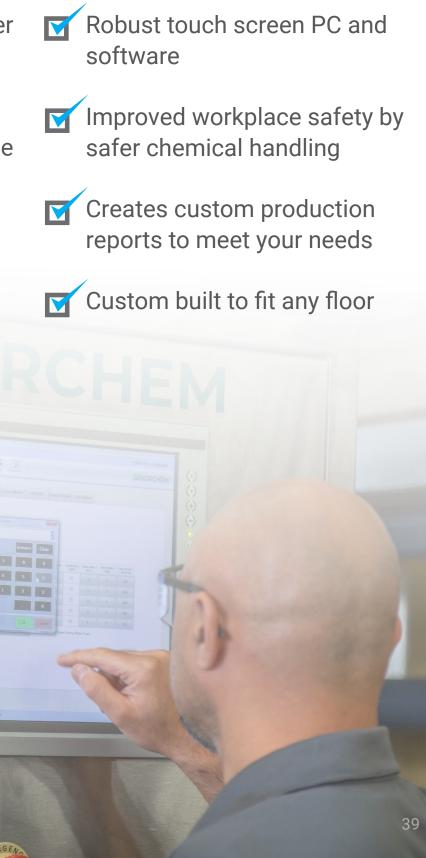
TECHNICAL FEATURES & BENEFITS

Faster pumping for shorter formula times

Smaller footprint to maximize washfloor space

Eliminates day tanks

Injects by volume or time





NORCARTTM **Cart Washer Systems**

The Norchem Cart Washer was built to handle different size carts with adjustable wash cycle times per the customer's specifications. Specialized high pressure drip proof nozzles prevent over-spraying and lower utility consumption. The UL-listed control panel allows for easy access to system settings and metrics.

Norchem pairs its own hard surface cleaning product, **KoreKlean**[™], with its cart washers for optimum cart cleaning and disinfection.

This can be offered in 30 Gallon drums, 55 Gallon drums, and 250 Gallon totes.

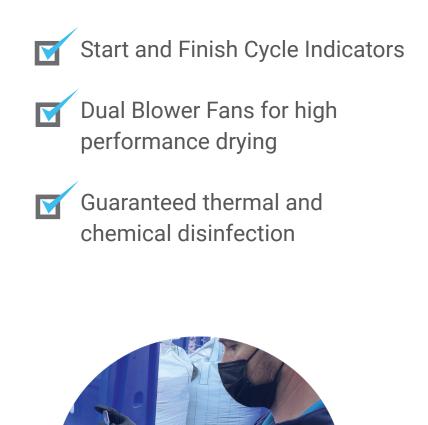




TECHNICAL FEATURES & BENEFITS

- Fast cycle times ranging 2-3 minutes
- Single Cart and Dual Cart configurations
- Unique drain design to improve runoff
- User Friendly Automation
- Low Water Usage

Pair Norchem's Cart Washer with...





KORE*KLEAN*



Standard 459 units per l

4

• Stop

NORVISIONTM **PLANT DATA SYSTEMS**

Managing complex laundry operations without data is an intimidating task. Transform your uncertainty into opportunity by improving laundry efficiency in three steps:

Measure, Analyze, and Optimize.

Developed to provide a full-featured production and utility information management system to capture data, analyze it, and report it through an interactive dashboard. **NorVision**[™] answers the tough questions in detail about production levels down to the individual plant worker on the plant room floor. Utilities like water, pressure, and energy usage are tracked and reported via the dashboard in a way your management team can understand.



NorVision[™] UMVS

Utility Management **Vision System**

- A custom software platform to analyze utility usage in real time
- Drive down utility costs and increase profitability
- Water, Temperature, & Gas monitoring for entire wash floor

MEASURE. ANALYZE. OPTIMIZE.

NorVision[™] PMVS

Productivity Management Vision System



Overhead displays show employee productivity percentages



Optimize workflow & increase productivity



Collects and reports data in real time



NORQUESTTM **MACHINE CONTROLLERS**

Norchem offers two types of machine controllers: the *NorQuest*[™] 3000 for smaller machines and the NorQuest[™] 6000 for larger machines. Both types are programmed for washers and dryers. The NorQuest[™] features the latest microprocessor technology based on a robust Programmable Logic Controller (PLC) for easy programming and operation. All instructions, formulas, and settings are set via the touchscreen.

Retrofit a mechanically sound washing or drying machine with modern controller intelligence to optimize equipment performance and networkability without the need to purchase a costly new piece of equipment.



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Fabricated In-House **Proudly Manufactured** in the USA

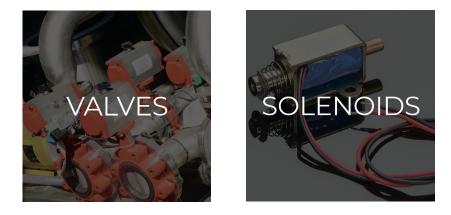
Norchem's in-house fabrication team and parts department can supply a diverse range of prefab piping, valves, pump assemblies and more. These are applicable to a wide range of industries, including but not limited to commercial laundry, dye houses, food processing, pharmaceutical, and Oil & Gas.

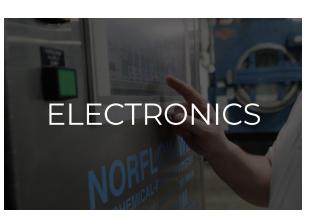


Contact Us For New Parts Or Replacements

We carry all of the supported components to our system assemblies, from Pump Kits to Electrical Components.

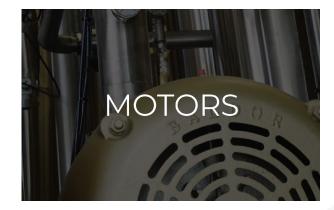














SCAN HERE to visit our online System Parts shop





SCAN TO VISIT NorchemCorp.com

Norchem Corporation (800) 442-4360 5649 Alhambra Ave, Los Angeles, CA 90032