

VENDOR LIST

ALTERNATIVES FOR CFC

113  
AND METHYL CHLOROFORM  
IN PRECISION CLEANING



November 1998

SIGNIFICANT NEW ALTERNATIVES POLICY  
PROGRAM STRATOSPHERIC PROTECTION DIVISION  
U.S. EPA

This document is not an exhaustive list of vendors and is intended for informational purposes only. Product offerings and descriptions have been supplied by the vendors included on the list and have not been evaluated by EPA. EPA does not endorse these products, certify their cleaning performance, or certify the accuracy of health and safety data provided by these companies for any of the alternatives to CFC-113 and methyl chloroform (MCF) presented in this document.

Section 612 of the Clean Air Act Amendments of 1990 requires EPA to publish lists of acceptable and unacceptable alternatives for ozone depleting substances (ODSs). To complete these lists, the Significant New Alternatives Policy (SNAP) program is evaluating both new and existing alternatives to ODSs within a comparative risk framework. To obtain a copy of the SNAP acceptability determinations, please contact:

SNAP Coordinator  
U.S. EPA 6205J  
401 M St. SW  
Washington, DC 20460  
(202) 564-9870

The majority of cleaning products sold by companies listed in this document are acceptable under the SNAP program for use as CFC-113 or MCF replacements. However, it is the user's responsibility to ensure that products selected to replace CFCs and methyl chloroform are acceptable substitutes under the SNAP Program.

If you would like to add a company name to the vendor list, please fill out the form at the end of this document and send it along with product literature to the SNAP coordinator. If you have a new substitute and would like to make a formal submission to the SNAP program prior to having your company added to our lists, please also contact the SNAP Coordinator. Product formulations describing specific ingredients and composition must be included in order to have a product evaluated.

AQUEOUS  
CLEANERS

ADF Systems, Ltd.  
1302 19th Street. N.  
Humboldt, IA 50548  
Tel: (515) 332-5400  
Fax: (515) 332-4495

Aerocote Corporation  
P.O. Box 15849  
Houston, TX 77220  
Tel: (713) 224-6185  
Fax: (713) 223-5229

Altos Engineering, Inc.  
6009 N. 61 Ave  
Glendale, AZ 85301  
Tel: (602) 931-8434  
Fax: (602) 937-6396

Ambassador Marketing  
Route 1-Box 207  
St. David, AZ 85630  
Tel: (602) 720-4310  
Fax: (602) 720-4068

Amtrex Technologies Inc.  
3361 boulevard Griffith  
Saint-Laurent QC  
Canada H4T 1W5  
Tel: (514) 739-0233  
Fax: (514) 739-1581

Ardrox  
16961 Knott Avenue  
La Mirada, CA 90638  
Tel: (714) 739-2821  
Fax: (714) 670-6480

AT-CHEM  
1225 W. Main St.  
Wilmington, OH 45177  
Tel: (513) 362-7511  
(800) 443-2436  
Fax: (513) 362-8038

Offers detergents both liquid and powder designed for use in all type of aqueous washing equipment. Offers non-foaming formulations with and without glycol ethers and with and without rust inhibitors for all applications. Has parts washing equipment designed for the type of uses experienced in maintenance operations.

Aqueous, semi-aqueous cleaners and hydrocarbon solvents. Applications using agitation including spray wash cabinets. Also, spray in steam cleaning, pressure washing, soak immersion, ultrasonic, and hand wiping applications.

Batch and inline cleaning equipment with non-chemical, thermal vacuum drying of rinse waters. Detergent formulations available with and without glycol ethers.

Aqueous and alcohol based cleaners for low residue degreasing and dewaxing applications. Formulations are nonflammable and nonfuming.

Aqueous ultrasonic cleaning/degreasing systems for the metalworking, aerospace, automotive, military, and plating industries.

Full range of aqueous-based formulations as well as aliphatic hydrocarbon-based blends, terpene-based formulations, hydrocarbon-based solvent blends and other cleaning alternatives and equipment.

AtoChem North America  
3 Parkway  
Philadelphia, PA 19102  
Tel: (215)419-7000

A.W. Chesterton  
225 Fallon Road Middlesex  
Industrial Park Stoneham,  
MA 02180-2999  
Tel: (617) 438-7000  
Fax: (617) 438-8971

Better Engineering Mfg., Inc.  
8361 Town Center Court  
Baltimore, MD 21236-4964  
Tel: (410) 931-0000  
(800) 229-3380  
Fax: (410) 931-0053

Betz Metchem  
508 Prudential Rd.  
Horsham, PA 19044  
Tel: (800) 775-7175

Bio-Chem of Illinois, Inc.  
3335 No. Lewis Avenue  
Waukegan, IL 60087  
Tel: (708) 249-5770  
Fax: (708) 623-6919

CAE Blackstone Ultrasonics, Inc.  
9 North Main St.  
Jamestown, NY 14701  
Tel: (716) 665-2340  
(800) 766-6606  
Fax: (716) 665-2480

Blue Wave Ultrasonics  
Div. of Alpheus Cleaning Technologies Corp.  
960 S. Rolff St.  
Davenport, IA 52802  
Tel: (319) 322-0144  
(800) 373-0144  
Fax: (319) 322-7180

A complete line of aqueous cleaners containing detergents, with and without glycol ethers. Hydrocarbon solvents and solvent blends. Non-ozone depleting chlorinated solvents. Provide free assistance to customers wishing to replace ozone-depleting chemicals. Synthetic machining fluids, lubricants and maintenance specialties.

Manufacturers of industrial cleaning equipment, including automatic jet washers compatible with biodegradable detergents and water solutions. Also cleaning systems with wash, rinse, and dry cycles, custom systems, extended wash cabinets, large capacity systems, and tumbling systems.

Complete range of ultrasonic cleaning products from stand-alone and bench-top heated tanks to wash/multiple rinse/dry console systems with optional material handling and automation. Also, fluxless ultrasonic solder pots for tinning leads and electronics.

Ultrasonic cleaning equipment built for various applications specific to the customer's needs. Effective in cleaning different products and materials throughout the scope of fabricated metals, plastics, and ceramics. Also offer aqueous-based detergents that are environmentally safe.

Branson Ultrasonics Corp.  
P.O. Box 1961  
41 Eagle Rd.  
Danbury, CT 06813-1961  
Tel: (203) 796-0392  
Fax: (203) 796-0320

Break-Free, Inc.  
1035 S. Linwood Avenue  
Santa Ana, CA 92705-4396  
Tel: (714) 953-1900  
Fax: (714) 953-0402

The Brulin Corporation  
PO Box 270  
2920 Dr. Andrew J. Brown Ave.  
Indianapolis, IN 46206  
Tel: (317) 923-3211  
Fax: (317) 925-4596

Buckeye International, Inc.  
2700 Wagner Place  
Maryland Heights, MO 63043  
Tel: (800) 321-2583  
Fax: (314) 298-2850

BY\*PAS International Corporation  
P.O. Box 14  
Hudsonville, MI 49426  
Tel: (616) 875-7234  
Fax: (616) 875-7743

Chemical Solvents, Inc.  
3751 Jennings Road  
Cleveland, OH 44109  
Tel: (216) 741-9310  
Fax: (216) 741-4080

Ultrasonic cleaning equipment and integrated cleaning systems for metal, electronic, and precision cleaning requirements. Manual and fully automated material handling/transport systems. Equipment for aqueous, semi-aqueous and solvent chemistry.

Unique blend of orange oils and highly refined synthetic hydrocarbons formulated as a safe replacement for most chlorinated or halogenated, ozone-depleting solvents. Applications include degreasing, removal of oils, wax, tar, adhesives, fresh paint and oil-based inks. Also water-based, alkaline cleaners for the removal of heavy soil contaminants.

Advanced technology aqueous detergent systems for spray, immersion, ultrasonic, and passive process cleaning of fabricated metal or plastic parts.

Aqueous cleaners made with new patented chemistry have successfully replaced MEK, 1,1,1-trichloroethane, acetone, and other hydrocarbon solvents in many different applications.

Aliphatic hydrocarbon blends, terpenes, surfactants, biodegradable emulsifiers, non-ozone depleting halogenated solvents, HCFCs. Specialty formulations for metal, urethane fiberglass (resin) clean-up processes via spray, wipe and immersion systems. Turn-key parts cleaning services. Recycling, disposal of generated waste solvents and waters.

Chem-Tech International  
1800 Diagonal Rd., Suite 600  
Alexandria, VA 22314  
Tel: (703) 549-1001  
Fax: (703) 549-1003

Chemtronics, Inc.  
8125 Cobb Center Dr.  
Kennesaw, GA 30144  
Tel: (404) 424-4888  
Fax: (404) 424-4267

Church & Dwight Co, Inc.  
469 N. Harrison Street  
Princeton, NJ 08543-5297  
Tel: (609) 683-5900  
Fax: (609) 497-7176

Circle-Prosc0, Inc.  
2017 Yost Ave.  
Bloomington, IN 47403  
Tel: (812) 339-3653  
Fax: (812) 331-2566

Container Products Corp.  
PO Box 3767  
Wilmington, NC 28406  
Tel: (919) 392-6100  
Fax: (919) 392-6778

Crest Ultrasonics  
Scotch Rd.- Mercer County Airport  
PO Box 7266  
Trenton, NJ 08628  
Tel: (609) 883-4000  
(800) 441-9675  
Fax: (609) 883-6452

Aqueous-based formulations containing detergents with and without glycol ethers as well as blends of hydrocarbons and emulsifiers which, when used in combination, provide residue-free cleaning. Can be used on all metals, teflon, plastic, and painted coatings. Also specially designed cleaning equipment.

Ultra-pure cleaners for electronics and metals.

Aqueous-based alkaline cleaner for removing flux from electronic assembly, or light oils from precision parts. The formula is non-hazardous, non-toxic, has no VOCs, non-flammable, no glycol ethers, does not attack aluminum and is used in in-line or batch equipment.

Aqueous, alkaline, etchant cleaners for ferrous and non-ferrous applications. Aqueous, acidic, neutral, and alkaline oil rejecting cleaners with or without glycol ethers for ferrous and non-ferrous applications. Water miscible, semi-aqueous cleaners (electronics cleaning). Water emulsifiable cleaners containing aliphatic and terpene solvents. Evaporative oils for no clean applications.

Systems incorporating a variety of aqueous cleaning techniques which include filtered negative pressure chambers, high pressure chambers, and mobile cleaning systems.

Precision cleaning equipment (primarily ultrasonic systems) from standard wash-rinse-dry cleaning consoles to large custom automated batch cleaning equipment. Ultrasonic generator is sweep frequency generator capable of cavitating both aqueous and semi-aqueous chemistries. Full line of aqueous-based cleaning chemistries for ultrasonic applications as well.

Dell-Chem of Arizona  
P.O. Box 6633  
Scottsdale, AZ 85261  
Tel: (602) 788-8684  
Fax: (602) 948-4172

Delta-Omega Technologies,  
Ltd. PO Box 81518  
Lafayette, LA 70598-1518  
Tel: (318) 237-5091  
Fax: (318) 237-5131

Detrex Corp.  
24901 Northwestern Highway  
Southfield, MI 48075  
Tel: (313) 358-5800  
Fax: (313) 358-5803

Dow U.S.A.  
Midland, MI 48674  
Tel: (800) 447-4369  
Fax: (517) 832-1465

Ecolink  
1481 Rock Mountain Blvd.  
Stone Mountain, GA 30083  
Tel: (404) 621-8240  
(800) 886-8240  
Fax: (404) 621-8245

Electrolube Corporation USA  
10 Skyline Dr.  
Hawthorne, NY 10532  
Tel: (914) 347-7300

Corpex  
P.O. Box 13486  
Research Triangle Park, NC 27709-3486  
Tel: (919) 941-0847  
Fax: (919) 941-0652

Aqueous and alcohol-based cleaners for low residue degreasing and dewaxing applications. Formulations are nonflammable and nonfuming.

Fully aqueous, biodegradable, non-toxic cleaning solutions. Products leave no residue following proper cleaning and rinsing, no fumes or odors, are non-flammable, and contain no hazardous or reportable components.

Aqueous micro-emulsion solution for gross metal cleaning and equipment for use with the cleaning solution. Alternative/vapor degreasing process, specialty equipment and solvents for metals and electronics cleaning, chlorinated and HCFC solvents, and aqueous and semi-aqueous solvents.

Multiple formulations composed of blends of anionic and nonionic surfactants with corrosion inhibitors and builders.

Wide range of aqueous, semi-aqueous and non-aqueous chemistries. Formulations include a variety of hydrocarbon, NMP, DBE and terpene products as well as non-ozone depleting halogenated solvents. Manufacture a complete line of batch cleaning units for use with these solvents.

Non-toxic, non-flammable, biodegradable aqueous solvents suitable for in-line and batch equipment without modification. Also ideal for screen and pallet cleaning and precision metal degreasing (ferrous and non-ferrous).

A wide variety of corrosion inhibitors, hydrocarbon emulsifiers and carbon product removers that are non-hazardous and non-toxic.

ETUS, Inc.  
1511 Kastner Place  
Sanford, FL 32771  
Tel: (407) 321-7910  
Fax: (407) 321-3098

Fine Organics Corp.  
205 Main St.  
PO Box 687  
Lodi, NJ 07644-0687  
Tel: (201) 472-6800  
(800) 526-7480  
Fax: (201) 472-6810

Fremont Industries, Inc.  
4400 Valley Industrial Park  
Shakopee, MN 55379  
Tel: (612) 445-4121  
Fax: (612) 496-3027

Hubbard-Hall, Inc.  
PO Box 790  
Waterbury, CT 06725  
Tel: (203) 754-2171  
(800) 648-3412  
Fax: (203) 596-9544  
(203) 756-9017

Hurricane Systems, Inc.  
2080 Brooklyn Rd.  
PO Box 867  
Jackson, MI 49204  
Tel: (517) 787-3481  
Fax: (517) 787-2349

Hurri-Kleen Corp.  
6000 Southern Industrial Dr.  
Birmingham, AL 35235  
Tel: (205) 655-8808  
Fax: (205) 655-5392

Formulations made of hydrocarbons and blends of hydrocarbons and emulsifiers. Also offer aqueous-based formulations containing detergents with and without glycol ethers.

Non-hazardous and biodegradable solvent and solvent-emulsion based alternatives. Products are applicable to the transportation, aviation, electronics, and coatings industries. Also offer water-based alternative products.

Aqueous-based metal cleaning and non-metallic substrate cleaning formulations and application equipment. Includes spray, soak, and ultrasonic cleaners in rinse and no-rinse formulations.

Wide range of “off-the-shelf”, semi-custom, and custom parts cleaning systems using water-based cleaning compounds. Systems include: belt, rotary and overhead conveyors for continuous and batch processing; carousel, cabinet, and agitation tank washers; multi-stage wash, rinse, oxidation inhibit, and dry; oil removal and oil skimming devices; electric, gas, and steam heat packages.

Aqueous-based biodegradable cleaners with and without glycol ethers.

Inland Technology, Inc.  
401 East 27<sup>th</sup> St.  
Tacoma, WA 98421  
Tel: (253) 922-8932  
(800) 552-3100  
Fax: (206) 926-0577

Range of aqueous cleaners used in hand-wipe cleaning. Also other non ozone-depleting biodegradable solvents for various cleaning applications, including vapor degreasing, precision cleaning, paint stripping, and resin removal.

Insitu Environmental Chemical Co.  
8402 East Redwing Rd.  
Scottsdale, AZ 85250-5740  
Tel: (602) 948-9209  
Fax: (602) 951-0715

Aqueous and alcohol-based cleaners for low residue degreasing and dewaxing applications. Formulations are nonflammable and nonfuming.

International Products Corp.  
P.O. Box 70  
Burlington, NJ 08016-0070  
Tel: (609) 386-8770  
Fax: (609) 386-8438

Biodegradable formulations with low toxicity, no phosphates or CFCs used in precision and critical cleaning operations.

JM Associates, Inc.  
225 Railroad Avenue  
Bedford Hills, NY 10507  
Tel: (914) 241-3795  
Fax: (914) 241-3731

New bioremediation technology: safe, non-toxic, non-caustic, neutral pH, non-flammable aqueous cleaning solution with hydrocarbons. Has successfully replaced hazardous solvents in vehicle maintenance, metals cleaning and precision manufacturing operations. Also solvents for auto, marine, contaminated soil and grease cleaning. Application of cleaners by immersion, spray or within closed-loop industrial systems.

JnJ Industries  
195 E. Main St.  
Suite 303  
Milford, MA 01757  
Tel: (800) 554-9994  
Fax: (508) 478-2221

Manufacturer of eight non-CFC formulations including a supersaturated wipe solvent.

Kester Solder Division Litton Industries  
515 E. Touhy Avenue  
Des Plaines, IL 60018-2675  
Tel: (847) 297-1600  
Fax: (847) 390-9338

Alcohol-based cleaners, solvent blends, and aqueous saponifiers. Also manufacture no-clean, water-clean, and VOC-free; fluxes, solders, and solder pastes.

Kyzen Corporation  
430 Harding Industrial Drive  
Nashville, TN 37211  
Tel: (615) 831-0888  
Fax: (615) 831-0889

A broad line of non-hazardous, zero ODP, biodegradable, and low VOC cleaning products. Kyzen products are used for cold cleaning, immersion solvent cleaning, and aqueous spray cleaning. These materials are compatible with a wide range of cleaning machines: spray in air, spray in immersion, soak, and ultrasonic. Kyzen products can be used in closed looped systems for low/zero discharge by a variety of commonly available water reuse systems.

Lewis Corp.  
102 Willenbrock Rd.  
Oxford, CT 06478-1033  
Tel: (203) 264-3100  
Fax: (203) 264-3102

Manufacturer of industrial cleaning systems, specializing in aqueous-based chemistries. Both ultrasonic and non-ultrasonic washers available.

MacDermid, Inc.  
245 Freight St.  
Waterbury, CT 06702  
Tel: (203) 575-5700  
Fax: (203) 575-5630

Full range of aqueous-based formulations and terpene-based formulations for the metalworking, aerospace, automotive, electronic, military, and printing industries. Designed to meet military specifications. Products leave no residue following proper cleaning and rinsing. Formulations available with and without glycol ethers.

Modern Chemical Inc.  
P.O. Box 368  
Jacksonville, AR 72078  
Tel: (501) 988-1311  
Fax: (501) 988-2229

Non-toxic, non-corrosive, and non-flammable alkaline aqueous based cleaner. Can be used in hand sprayers, dip tanks, ultrasonic, and spray wash cabinets. Safe for ferrous and non-ferrous metals. Also effective in removing flux from printed circuit boards.

Navy Brand Mfg Co.  
Division of Chemstar, Inc.  
3670 Scarlet Oak Blvd.  
St. Louis, MO 63122  
Tel: (800) 325-3312  
(314) 861-5500  
Fax: (314) 861-5509

Industrial degreasers for metal cleaning and parts cleaning. Formulations are based on non-ozone depleting solvents. Also solvent-based, aqueous-based and also semi-aqueous-based products for a variety of cleaning applications on a host of substrates, both metallic and non-metallic.

Neozyme International, Inc.  
3333 W. Pacific Coast Hwy. 4th Floor  
Newport Beach, CA 92663  
Tel: (714) 650-9131  
Fax: (714) 360-1193

North American BioIndustries Corp.  
400 N. Executive Drive, Ste 467  
Brookfield, WI 53005  
Tel: (414) 789-2724  
(800) 395-8070  
Fax: (414) 789-2725

Oakite Products, Inc.  
50 Valley Road  
Berkeley Heights, NJ 07922  
Tel: (908) 508-2107  
Fax: (908) 464-9250

O.C.S. Systems  
134 East Chestnut Ave.  
Monrovia, CA 91016  
Tel: (626) 305-7479  
Fax: (626) 305-7485

Parker-Amchem  
32100 Stephenson Highway  
Madison Heights, MI 48071  
Tel: (810) 583-9300

PPG Chemfil  
1330 Piedmont  
Troy, MI 48083  
Tel: (313) 689-0720

Degreasing formulations made of plant derived enzymes and fully biodegradable emulsifiers in an aqueous solution. Unique applications in water treatment systems. Can be used in conjunction with ultrasound microwave, and other types of mechanical cleaning devices.

Aqueous surfactants and microbes for hard surface degreasing and to initiate bioremediation of oily waste water. Also offer and service bioreactors for treatment of oily waste water.

High-tech, state-of-the-art, recyclable cleaning products for use in immersion, ultrasonic, hand wipe, and other cleaning applications. Many aqueous and semi-aqueous formulations adhere to the Clean Air Act, OSHA regulations, and do not contain SARA 313 ingredients. Comprehensive lines of products that exhibit biodegradability, oil splitting or emulsifying features. Terpene-based cleaners have no flash point, and alkaline, aqueous formulations include non-phosphated, non-chelated, mildly alkaline cleaners.

Offer aqueous-based formulation containing detergents with and without EGBE. Biodegradable, sewerable. Ultrasonics, spray wash systems, dishwashers, cabinet washers for cleaning, defluxing any and all parts. Complete closed loop systems, including D.I. water systems.

PPG Industries, Inc.  
Chemicals Group  
1 PPG Place  
Pittsburgh, PA 15272  
Tel: (800) 243-6774  
Fax: (412) 434-2401

Quaker Chemical Corp. Elm &  
Lee Streets Conshohocken, PA  
19428-0809  
Tel: (610) 832-4000  
Fax: (610) 832-8682

Qual-Tech Enterprises, Inc.  
1485 Bayshore Blvd.  
San Francisco, CA 94124  
Tel: (415) 467-7887  
Fax: (415) 467-7092

R.G. Hanson Co., Inc.  
703 E. Lincoln  
Bloomington, IL 61701  
Tel: (309) 828-5070  
(800) 392-0903  
Fax: (309) 829-3294

Rochester Midland Corp.  
333 Hollenbeck St.  
Rochester, NY 14621  
Tel: (716) 336-2200  
Fax: (716) 467-4406

SafeWorld Products Corp.  
P. O. Box 4680  
Homosassa Springs, FL 34447  
Tel: (904) 382-1483  
(800) 461-8714

SAMSCO, Inc.  
18 Cote Avenue  
Goffstown, NH 03045  
Tel: (603) 668-7111  
Fax: (603) 647-0537

Micro-emulsion cleaning system suitable for many metal cleaning applications. System is neutral, non-ionic, low VOC, non-combustible and biodegradable. Also contains a rust inhibitor package and features long bath life and low waste generation.

Aqueous cleaning chemicals and equipment. New equipment using only steam to clean also available.

Formulations comprised of hydrocarbon and/or terpene solvents. Some also contain surfactants. Many contain alkaline builders and chelants as well as glycol ethers. Some aqueous-based or water-compatible formulations exhibit good biodegradability. Many products allow for good oil/grease separation upon standing.

Formulations of biodegradable, ionic and non-ionic surfactants. Also low odor, micro emulsions that are non-solvent blends, and other biodegradable cleaners, degreasers, and dispersants.

The SAMSCO water evaporator evaporates efficiently and economically. Typical applications include machining/grinding coolants, alkaline cleaners, floor scrubber waters, vibratory solutions, stamping/drawing compounds, wire drawing compounds and die casting solutions.

S.A.S., Inc.  
2435 North Indian Hill Blvd  
Claremont, CA 91711-1730  
Tel: (909) 624-0396  
Fax: (909) 624-6336

Selig Chemical Industries  
PO Box 43106  
840 Selig Dr. SW  
Atlanta, GA 30378  
Tel: (404) 691-9220  
Fax: (404) 699-7024

Smart Sonic Precision Cleaning Systems  
2373 Teller Rd., #107  
Newbury Park, CA 91320  
Tel: (805) 499-7440  
Fax: (805) 375-5781

SONICOR Instrument Corp.  
100 Wartburg Ave.  
Copiague, NY 11726  
Tel: (516) 842-3344  
Fax: (516) 842-3389

Star Cleaning Miracle, Inc.  
P.O. Box 14  
Hudsonville, MI 49426  
Tel: (616) 875-7234  
Fax: (616) 875-7743

Step Kare Corporation  
P.O. Box 211  
Highland Park, IL 60035  
Tel: (708) 358-2158  
Fax: (708) 358-2158

Storchem Inc.  
3600 Billings Court, Suite 110  
Burlington, Ontario  
Canada L7N 3N6  
Tel: (416) 639-9700  
Fax: (416) 639-5244

Aqueous cleaning machines, part washers using spray, immersion, agitation, and ultrasonics. Range of detergents, cleaners, oil skimmers, exhaust systems, filtering systems, auto rinse systems, and hot air dryers.

Formulations made of hydrocarbons and blends of hydrocarbons and emulsifiers. Also offer aqueous-based formulations containing detergents with and without glycol ethers and some containing d-limonene.

Automated ultrasonic and spray batch cleaners for precision cleaning of metal, plastic, and ceramic parts. Systems clean oils, particulate and other contaminants. Optional waste evaporator.

Ultrasonic cleaning equipment, automated aqueous cleaning systems. Environmentally safe alternatives to cleaning with hazardous solvents.

Water-based flux remover, effective on rosin and non-rosin fluxes; aqueous coating remover. Also removes cutting oils and other contaminants. Non-aqueous coating remover contains no petroleum distillates or glycol ethers. Capable of removing conformal coatings or rosin fluxes in a non-aqueous formulation.

Aqueous-based terpene formulations containing detergents and emulsifiers; semi-aqueous cleaners and degreasers based on terpene alcohols and hydrocarbons; terpene alcohol and hydrocarbon blends used as non-water soluble solvents.

Sunshine Makers, Inc./Simple Green  
15922 Pacific Coast Highway  
Huntington Harbor, CA 92649  
Tel: (310) 795-6000  
(800) 228-0709  
Fax: (310) 592-3034

Surftran  
Division of Robert Bosch Corporation  
30250 Stephenson Hwy  
Madison Heights, MI 48071  
Tel: (810) 691-2560  
Fax: (810) 847-0206

SWR Corporation  
127 East Washtenaw  
Lansing, MI 48933  
Tel: (517) 487-6390  
Fax: (517) 487-8205

Terpene Technologies Inc.  
3400 Ridge Rd. W, Suite 293  
Rochester, NY 14626  
Tel: (716) 546-8455  
(716) 777-0790  
Fax: (716) 227-3834

Texo Corp.  
2801 Highland Ave.  
Cincinnati, OH  
45212  
Tel: (513) 731-3400  
Fax: (513) 731-8113

Thierica  
900 Clancy Ave.  
Grand Rapids, MI 49503  
Tel: (616) 458-1538  
Fax: (616) 458-7120

Concentrated aqueous-based non-toxic, biodegradable, non-flammable cleaner/degreaser containing a blend of high-grade penetrants and surfactants which are activated by water.

Precision and non-precision aqueous cleaning equipment. Environmentally sound chemical cleaners and rust inhibitors for aqueous cleaning.

Cleaners include biodegradable, non-toxic, aqueous cleaner/degreaser surfactants that have a powerful affinity for removing grease, oil and grime emulsions. The SWR™ cleaners also remove oils and grease coatings from machine and electronic parts with no remaining residue. As non-toxic compounds, SWR™ cleaners reduce associated end-use disposal costs.

Terpene alcohol and hydrocarbon blends used as non-water soluble solvents, semi-aqueous cleaners and degreasers based on terpene alcohols and hydrocarbons. Also offer aqueous-based terpene formulations containing detergents and emulsifiers.

Aqueous, semi-aqueous, and various solvent cleaners for replacement of vapor degreasing and handwiping with solvents. Applications of cleaners can be spray immersion, ultrasonic or handwiping. Cleaners can be multimetal safe and contain corrosion inhibitors if necessary.

New low cost spray equipment manages extremely difficult cleaning jobs. Used with large and small parts containing baked grease and paint soils. Designed to be safe and environmentally secure with hydrocarbon and aqueous cleaning agents. Stainless steel construction.

Today & Beyond  
PO Box 690  
Ashland, OH 44805  
Tel: (419) 945-2628

Ultrasound Fabrications, Inc.  
1 Maple St.  
Shelton, CT 06484  
Tel: (203) 924-1624  
Fax: (203) 924-1625

Unitech Industrial Inc.  
PO Box 330  
16 South Ave,  
Wappingers Falls, NY 12590  
Tel: (914) 297-0745  
(800) 277-5522  
Fax: (914) 297-2919

United Laboratories, Inc.  
320 37th Ave.  
St. Charles, IL 60174  
Tel: (708) 773-0252  
Fax: (708) 773-0595

U.S. Polychemical Corp.  
Route 45 Chestnut Ridge Road  
Chestnut Ridge, NY 10977  
Tel: (914) 356-5530  
(800) 431-2072  
Fax: (914) 356-6656

Working Solutions, Inc.  
938 Cortlandt Street  
Houston, TX 77008  
Tel: (800) 829-4419  
Fax: (713) 862-5591

Specialty industrial cleaners formulated utilizing SPC to meet the needs and cleaning requirements for the aerospace, aircraft, automotive, electronics, marine, military and nuclear industries. Existing vapor tanks can be used with minor modification in most cases.

Ultrasonic parts washing systems with standard tank volumes of 5, 10, 20, and 30 gallons, as well as special sizes if required. Systems provide for ultrasonic washing, spray or different types of immersion rinsing and hot air drying to achieve clean, dry, spot free parts.

Closed loop industrial cleaning systems. Spray washers, batch cleaning systems, vapor degreasing, and pretreatment systems available in new equipment and retrofits. Waste water treatment and recycling, 100% oil removal from the cleaning process.

Aqueous cleaners for use on most metals. Can be used from ambient temperatures to 200°, direct spray, spray under immersion, or in ultrasonic operations.

Manufacturers of oil and grease buffing compounds, flux removing chemistries with non-chlorinated solvents, semi-aqueous, and aqueous technologies. Also automated cleaning systems with recirculating agitation or ultrasonics for turn-key applications.

Aqueous, semi-aqueous and solvent cleaning technologies and equipment.

W.R. Grace & Co.  
Metalworking Fluids Group  
55 Hayden Ave.  
Lexington, MA  
02173  
Tel: (617) 861-6600  
Fax: (617) 861-9066

Zelman International  
Ltd. PO Box 1112  
Studio City, CA 91614  
Tel: (818) 786-9488  
(310) 576-6830 sales  
Fax: (818) 787-8560  
(310) 576-6832

Zip-Chem Products  
1860 Dobbin Dr.  
San Jose, CA 95133  
Tel: (408) 729-0291  
(800) 648-2661  
Fax: (408) 272-8062

#### AQUEOUS CLEANING

EQUIPMENT ACCEL  
1825 E. Piano Parkway  
Piano, TX 75074-8129  
Tel: (214) 424-3525  
Fax: (214) 424-7526

ACME-FAB  
Div. of A-F Industries  
11337 Williamson Rd.  
Cincinnati, OH 45249  
Tel: (513) 489-3060  
Fax: (513) 489-6018

Wide range of aqueous cleaning formulations for metal. precision, and maintenance cleaning. Includes formulations that are phosphate-free. Suitable for agitation, soak, spray, ultrasonic and hand wipe applications.

Homogeneous blend of colloids, surfactants, hyper-wetting agents and water in an industrial non-toxic, non-caustic cleaner designed to clean commercial and military aircraft, as well as metal surfaces such as aluminum and magnesium alloys, removing mill markings, mill inks and shop soils such as dirt, coolants, lubricants, forming and cutting oils, and other common shop contaminants. Highly diluted, it is also used in ultrasonic and precision cleaning and degreasing.

Aqueous, semi-aqueous aliphatic hydrocarbon, terpene and alcohol-based cleaners. Application oriented packaging like wipes, aerosols, specialty containers, and other delivery systems available.

System utilizing centrifugal cleaning to provide superior washing, effective rinsing, and drying of populated printed circuit boards and hybrid circuits. Includes automatic solvent recycling and rinse water purification with no required drain. Compatible with chlorocarbons, fluorocarbons, H<sub>2</sub>O, and terpenes.

Batch and conveyORIZED spray cleaning systems, standard machines, or custom designed equipment. Also offer automatic immersion systems incorporating rotation agitation and pump turbulence.

ADF Systems, Ltd.  
1302 19th Street. N.  
Humboldt, IA 50548  
Tel: (515) 332-5400  
Fax: (800) 798-5100

Offers detergents both liquid and powder designed for use in all type of aqueous washing equipment. Offers non-foaming formulations with and without glycol ethers and with and without rust inhibitors for all applications. Has parts washing equipment designed for the type of uses experienced in maintenance operations.

Advanced Curing Systems, Inc.  
3701 S. Ashland Ave.  
Chicago, IL 60609  
Tel: (312) 247-3600

Advanced Deburring and Finishing  
25 Marianne Dr.  
PO Box 2491  
York, PA 17405  
Tel: (717) 767-4843  
(800) 553-7060

Altos Engineering, Inc.  
6009 N. 61 Ave  
Glendale, AZ 85301  
Tel: (602) 931-8434  
Fax: (602) 937-6396

Batch and inline cleaning equipment with non-chemical, thermal vacuum drying of rinse waters. Detergent formulations available with and without glycol ethers.

American Metal Wash, Inc.  
PO Box 265  
360 Euclid Ave.  
Cannonsburg, PA 15317  
Tel: (412) 746-4203  
Fax: (412) 746-5738

Bearing washer for precision cleaning of final assembled race bearings, including points of contact. Equipment can be provided in single or multi-stages for accommodations of washing, rinsing, rust inhibiting, and thorough drying of each bearing. Can accommodate bearing diameters of 7/8" to 20" and can be setup for use with aqueous or semi-aqueous cleaning solutions.

Amtrex Technologies Inc.  
3361 Boulevard Griffith  
Saint-Laurent QC  
Canada H4T 1W5  
Tel: (514) 739-0233  
Fax: (514) 739-1581

Aqueous ultrasonic cleaning/degreasing systems for the metalworking, aerospace, automotive, military, and plating industries.

Ardrox  
16961 Knott Avenue  
La Mirada, CA 90638  
Tel: (714) 739-2821  
Fax: (714) 670-6480

ATCOR Corp.  
150 Great Oaks Blvd.  
San Jose, CA 95119-1367  
Tel: (408) 629-6080  
(800) 827-6080  
Fax: (408) 629-9009

Babcock & Wilcox CIM Systems  
4004 Murray Place  
Lynchburg, VA 24501  
Tel: (804) 948-1361  
Fax: (804) 948-1313

Baron-Blakeslee, Inc.  
1500 West 16th St.  
Long Beach, CA 90813  
Tel: (800) 548-4422  
Fax: (310) 491-1091

Barrett Centrifugals  
Box 15059  
Worcester, MA 01615-0059  
Tel: (508) 755-4306  
(800) 228-6442  
Fax: (508) 753-4805

Better Engineering Mfg., Inc.  
8361 Town Center Court  
Baltimore, MD 21236  
Tel: (410) 931-0000  
(800) 229-3380  
Fax: (410) 931-0053

Full range of aqueous-based formulations as well as aliphatic hydrocarbon-based blends, terpene-based formulations, hydrocarbon-based solvent blends and other cleaning alternatives and equipment.

Provide turnkey automated cleaning and inspection (SQCISPC) systems for complete integration into process cleaning lines, including aqueous and non-aqueous systems, material handling, drying, cleanliness and geometric inspection, and computer protocol communication. Full-scope of services from process selection, development, installation, training, and continued follow-up support.

Full line of cleaning equipment for use with aqueous, semi-aqueous, HCFC, and chlorinated solvents. Closed loop system incorporating vacuum drying available (near zero emissions).

Centrifugal equipment for washing and drying small, irregularly shaped parts using detergent/water solution. With custom fixturing, can be adapted for larger, more complex parts or assemblies.

Manufacturers of industrial cleaning equipment, including automatic jet washers compatible with biodegradable detergents and water solutions. Also cleaning systems with wash, rinse, and dry cycles, custom systems, extended wash cabinets, large capacity systems, and tumbling systems.

Bio-Chem of Illinois, Inc.  
3335 No. Lewis Avenue  
Waukegan, IL 60087  
Tel: (708) 249-5770  
Fax: (708) 623-6919

Blackstone Ultrasonics, Inc.  
9 North Main St.  
Jamestown, NY 14701  
Tel: (716) 665-2340  
(800) 766-6606  
Fax: (716) 665-2480

Blue Wave Ultrasonics  
Div. of Alpheus Cleaning Technologies Corp.  
960 S. Rolff St.  
Davenport, IA 52802  
Tel: (319) 322-0144  
(800) 373-0144  
Fax: (319) 322-7180

Bowden Industries Inc.  
1004 Oster Dr. NW  
Huntsville, AL  
35816  
Tel: (800) 553-3637

Branson Ultrasonics Inc.  
41 Eagle Rd.  
Danbury, CT 06810  
Tel: (203) 796-0400  
Fax: (203) 796-0381

CD Nelson Manufacturing Company  
28979 North Herkey Drive  
Lake Bluff, IL 60044  
Tel: (708) 362-3555  
Fax: (708) 362-0154

Complete range of ultrasonic cleaning products from stand-alone and bench-top heated tanks to washmultiple rinseldry console systems with optional material handling and automation. Also, fluxless ultrasonic solder pots for tinning leads and electronics.

Ultrasonic cleaning equipment built for various applications specific to the customer's needs. Effective in cleaning different products and materials throughout the scope of fabricated metals, plastics, and ceramics. Also offer aqueous-based detergents that are environmentally safe.

Ultrasonic cleaning equipment and integrated cleaning systems for metal, electronic, and precision cleaning requirements. Manual and fully automated material handlingtransport systems. Equipment for aqueous, semi-aqueous and solvent chemistry.

Steam cleaning equipment for removing polishing paste, oils, pollutants, and other contaminants from metals, plastics, ceramics, silicone wafers. Removal of small burrs, rouges, casting materials, waxes from precious metals, ferrous and non-ferrous metals, ceramics, plastics. Ultrasonic cleaning of all above materials.

Chem-Tech International  
1800 Diagonal Rd., Suite 600  
Alexandria, VA 22314  
Tel: (703) 549-1001  
Fax: (703) 549-1003

Cincinnati Industrial Machinery  
PO Box 62027  
3280 Hageman St.  
Cincinnati, OH 45241 (street add.)  
45262 (PO Box)  
Tel: (513) 769-0700  
Fax: (513) 769-0697

Conax Buffalo Corporation  
2300 Walden Avenue  
Buffalo, NY 14225  
Tel: (716) 684-4500  
(800) 223-2389  
Fax: (716) 684-7433

Container Products Corp.  
PO Box 3767  
Wilmington, NC 28406  
Tel: (919) 392-6100  
Fax: (919) 392-6778

Creative Enterprizes  
105 Anyway, Suite 209  
Lake Jackson, TX 77566  
Tel: (409) 292-0244  
Fax: (409) 292-0440

Crest Ultrasonics  
Scotch Rd. - Mercer County Airport  
PO Box 7266  
Trenton, NJ 08628  
Tel: (609) 883-4000  
(800) 441-9675  
Fax: (609) 883-6452

Aqueous-based formulations containing detergents with and without glycol ethers as well as blends of hydrocarbons and emulsifiers which, when used in combination, provide residue-free cleaning. Can be used on all metals, teflon, plastic, and painted coatings. Also specially designed cleaning equipment.

Custom designed machines for cleaning, surface preparation and other processing of metal and non-metallic parts.

Ultrasonic cleaning equipment and systems for cleaning machine components, fabricated parts, assemblies. Related support devices available.

Systems incorporating a variety of aqueous cleaning techniques which include filtered negative pressure chambers, high pressure chambers, and mobile cleaning systems.

Specialize in low cost conversion of existing facilities to safely use alternative cleaning agents. Design new or custom cleaning equipment and processes. Also design environmentally secure drying equipment and processes.

Precision cleaning equipment (primarily ultrasonic systems) from standard wash-rinse-dry cleaning consoles to large custom automated batch cleaning equipment. Ultrasonic generator is sweep frequency generator capable of cavitating both aqueous and semi-aqueous chemistries. Full line of aqueous-based cleaning chemistries for ultrasonic applications as well.

Detrex Corporation  
4000 Town Center, Suite 1100  
Southfield, MI 48075  
Tel: (313) 358-5800  
Fax: (313) 358-5803

Durr Industries, Inc.  
10301 Enterprises Dr.  
Davisburg, MI 48350  
Tel: (313) 625-5400  
Fax: (313) 625-5966

Ecolink  
1481 Rock Mountain Blvd.  
Stone Mountain, GA 30083  
Tel: (404) 621-8240  
(800) 886-8240  
Fax: (404) 621-8245

Electronic Controls Design, Inc.  
4287-A SE International Way  
Milwaukie, OR 97006  
Tel: (503) 659-6100  
(800) 323-4548  
Fax: (503) 659-4422

Environmental Recovery Resources, Inc.  
PO Box 36  
South Salem, NY 10590  
Tel: (914) 533-6175  
Fax: (914) 533-6275

FMT Inc. (Findlay Machine & Tool)  
1950 Industrial Dr.  
Findlay, OH  
45840 Tel: (419)  
422-0768  
(800) 878-8011  
Fax: (419) 422-0072

Aqueous micro-emulsion solution for gross metal cleaning and equipment for use with the cleaning solution. Alternatively vapor degreasing process, specialty equipment and solvents for metals and electronics cleaning, chlorinated and HCFC solvents, and aqueous and semi-aqueous solvents.

All aqueous and semi-aqueous systems recycle and reuse process water. Solvent systems reduce emissions by 99% over conventional degreasing systems.

Wide range of aqueous, semi-aqueous and non-aqueous chemistries. Formulations include a variety of hydrocarbon, NMP, DBE and terpene products as well as non-ozone depleting halogenated solvents. Manufacture a complete line of batch cleaning units for use with these solvents.

Floating, dispersed, and dissolved hydrocarbon contaminants removed to surface water discharge limits, using: no coalescing plates, no centrifugal, no carbon absorption, no sorbent waste. Also offer systems and services to extend cleaning bath 'life' for more cost effective aqueous systems and waste water processing, and waste-minimized settling-pond and separator maintenance/ remediation.

Custom engineered parts cleaning equipment, standard parts cleaning equipment, and pollution control equipment.

Finishing Equipment Inc.  
3640 Kennebec Dr.  
St. Paul, MN 55122  
Tel: (612) 452-1860  
Fax: (612) 452-9851

Forward Technology Ind. Inc.  
13500 County Rd. 6  
Minneapolis, MN 55441  
Tel: (612) 559-1785  
Fax: (612) 559-3929

Fremont Industries, Inc.  
4400 Valley Industrial Park  
Shakopee, MN 55379  
Tel: (612) 445-4121  
Fax: (612) 496-3027

George Koch Sons Inc.  
10 South 11th Ave.  
Evansville, IN 47744  
Tel: (812) 426-9600  
Fax: (812) 465-9724

Graymills Corporation  
3705 N. Lincoln Ave.  
Chicago, IL 60613-3594  
Tel: (312) 248-6825  
(312) 477-4100  
Fax: (312) 477-8673

The Hotsy Corp.  
21 Inverness Way E.  
Englewood, CO 80112-5796  
Tel: (303) 792-5200

Aqueous, semi-aqueous and solvent cleaning systems available. From manual systems to automated high-production cleaning lines, with ultrasonics available as needed. Specialize in automated enclosed vapor degreasers for efficient use of the non-ozone depleting chlorinated solvents.

Standard and custom aqueous, systems featuring batch and part-by-part high speed automation, ultrasonics, high pressure sprays, hot air drying, IPA drying, vacuum dryers, and environmentally controlled enclosures. Also, semi-aqueous and solvent formulations available.

Aqueous-based metal cleaning and non-metallic substrate cleaning formulations and application equipment. Includes spray, soak, and ultrasonic cleaners in rinse and no-rinse formulations.

Hurricane Systems, Inc.  
2080 Brooklyn Rd.  
PO Box 867  
Jackson, MI 49204  
Tel: (517) 787-3481  
Fax: (517) 787-2349

Hurri-Kleen Corp.  
PO Box 29  
Trussville, AL 35173  
Tel: (205) 655-8808  
Fax: (205) 655-5392

Hydro-Blast, Inc.  
6917 NE 39th Court  
Vancouver, WA 98661  
Tel: (206) 690-4400  
Fax: (206) 696-5948

Jensen Fabricating Engineers, Inc.  
PO Box 307  
East Berlin, CT 06023  
Tel: (203) 828-6516

JM Associates, Inc.  
225 Railroad Avenue  
Bedford Hills, NY 10507  
Tel: (914) 241-3795  
Fax: (914) 241-3731

K.E.W. Cleaning Systems, Inc.  
130B E. St. Charles Rd.  
Carol Stream, IL  
60188  
Tel: (708) 690-3000

Wide range of “off-the-shelf”, semi-custom, and custom parts cleaning systems using water-based cleaning compounds. Systems include: belt, rotary and overhead conveyors for continuous and batch processing; carousel, cabinet, and agitation tank washers; multi-stage wash, rinse, oxidation inhibit, and dry; oil removal and oil skimming devices; electric, gas, and steam heat packages.

Aqueous-based biodegradable cleaners with and without glycol ethers.

Full line of cabinet style aqueous cleaning systems with built in waste water evaporation system. Cleaning solution can be heated with electricity or natural gas. Systems available in powder coated or all stainless steel.

New bioremediation technology: safe, non-toxic, non-caustic, neutral pH, non-flammable aqueous cleaning solution with hydrocarbons. Has successfully replaced hazardous solvents in vehicle maintenance, metals cleaning and precision manufacturing operations. Also solvents for auto, marine, contaminated soil and grease cleaning. Application of cleaners by immersion, spray or within closed-loop industrial systems.

Kleer-Flo Company  
15151 Technology Dr.  
Eden Prairie, MN 55344  
Tel: (612) 934-2555  
(800) 328-7942  
Fax: (612) 934-3909

KLN Ultraschall  
GmbH Siegfriedstrasse  
124  
D-64646 Heppenheim  
GERMANY  
Tel: +49-6252-14-0  
Fax: +49-6252-14-277

Lewis Corp.  
102 Willenbrock Rd.  
Oxford, CT 06478-  
1033  
Tel: (203) 264-3100  
Fax: (203) 264-3102

NAPCO  
Plymouth Industrial Park  
Terryville, CT 06786  
Tel: (203) 589-7800  
Fax: (203) 589-7304

Ney Ultrasonics  
1280 Blue Hills Avenue  
Bloomfield, CT 06002  
Tel: (203) 286-6149  
Fax: (203) 286-6150

O.C.S. Systems  
PO Box 370  
429 Madera St.  
San Gabriel, CA 91778-0370  
Tel: (818) 458-2471  
Fax: (818) 458-2437

Standard and custom aqueous systems featuring various types of batch automation, ultrasonics, high pressure sprays, hot air drying, IPA drying, vacuum dryers. Environmentally controlled enclosures. Also, semi-aqueous and solvent formulations available.

Manufacturer of industrial cleaning systems, specializing in aqueous-based chemistries. Both ultrasonic and non-ultrasonic washers available.

Equipment for batch manual and batch automated cleaning using aqueous, water-miscible, semi-aqueous, and solvent chemistries. Complete application development laboratory to assist users.

Aqueous-based formulation containing detergents with and without EGBE. Biodegradable, sewerable. Ultrasonics, spray wash systems, dishwashers, cabinet washers for cleaning, defluxing any and all parts. Complete closed loop systems, including D.I. water systems.

Proceco  
7300 Tellier St.  
Montreal, Quebec  
Canada H1N 3T7  
Tel: (514) 254-8494  
Fax: (514) 254-8184  
(514) 254-6922

Ramco Equipment Corporation  
32 Montgomery Street  
Hillside, NJ 07205  
Tel: (908) 687-6700  
Fax: (908) 687-0653

Ransohoff Co.  
North 5th St at Ford Boulevard  
Hamilton, OH 45011  
Tel: (513) 863-5813  
(800) 248-WASH  
Fax: (513) 863-8908

Rapid Engineering, Inc.  
P.O. Box 700  
1100 Seven Mile Road N.W.  
Comstock Park, MI 49321-0700  
Tel: (616) 784-0500  
Fax: (616) 784-0435

R.G. Hanson Co., Inc.  
703 E. Lincoln  
Bloomington, IL 61701  
Tel: (309) 828-5070  
(800) 392-0903  
Fax: (309) 829-3294

RotoJet  
2819 San Fernando Blvd.  
Burbank, CA 91504  
Tel: (818) 841-1520  
Fax: (818) 841-6448

Aqueous spray washers (turntable, belt conveyor, and immersion types). Also supply contaminated cleaning solutions recycling systems.

Standard line of single and multi-station aqueous degreasing systems with a wide selection of options including platform oscillation, directional turbulence, oil removal, ultrasonics, filtration, parts rotators and dryers. Nationwide network of application engineers to assist from process development through installation.

Standard and custom aqueous and semi-aqueous cleaning equipment for small through high production parts cleaning requirements, as well as very small to large part configurations and various part materials. Expertise in precision cleaning. Patented, mechanically agitated aqueous technology for high volume intricately shaped or machined parts as a direct replacement of solvent vapor degreasing and ultrasonic cleaning systems.

Parts washers utilizing low to medium pressure spraying of aqueous solutions on metal and plastic substrates. Exhaust incinerators for lowering VOC discharge to the atmosphere.

Aqueous cleaning chemicals and equipment. New equipment using only steam to clean also available.

SAMSCO, Inc.  
18 Cote Avenue  
Goffstown, NH 03045  
Tel: (603) 668-7111  
Fax: (603) 647-0537

S.A.S., Inc.  
2435 North Indian Hill Blvd  
Claremont, CA 91711-1730  
Tel: (909) 624-0396  
Fax: (909) 624-6336

S & C Co., .td.  
North America Division  
PO Box 902141  
Palmdale, CA 93590-2141  
Tel: (805) 267-0799  
Fax: (805) 267-2324

Smart Sonic Precision Cleaning Systems  
2373 Teller Rd., #107  
Newbury Park, CA 91320  
Tel: (805) 499-7440  
Fax: (805) 375-5781

SONICOR Instrument Corp.  
100 Wartburg Ave.  
Copiague, NY 11726  
Tel: (516) 842-3344  
Fax: (516) 842-3389

Sonitech Inc.  
239 East Stephenson St.  
Freeport, I. 61032  
Tel: (815) 235-2400  
Fax: (815) 232-2150

Stoelting  
502 Highway 67  
Kiel, WI 53042  
Tel: (414) 894-2293  
(800) 558-5807  
Fax: (414) 894-7029

The SAMSCO water evaporator evaporates efficiently and economically. Typical applications include machininggrinding coolants, alkaline cleaners, floor scrubber waters, vibratory solutions, stampingdrawing compounds, wire drawing compounds and die casting solutions.

Aqueous cleaning machines, part washers using spray, immersion, agitation, and ultrasonics. Range of detergents, cleaners, oil skimmers, exhaust systems, filtering systems, auto rinse systems, and hot air dryers.

Four frequency ultrasonic generator and ultrasonic spray cleaner suited for the cleaning of silicon waters and other precision parts.

Automated ultrasonic and spray batch cleaners for precision cleaning of metal, plastic, and ceramic parts. Systems clean oils, particulate and other contaminates. Optional waste evaporator.

Ultrasonic cleaning equipment, automated aqueous cleaning systems. Environmentally safe alternatives to cleaning with hazardous solvents.

Ultrasonic cleaning equipment using aqueous or semi-aqueous chemistries for a wide range of applications. Complete systems include cleaning tanks, rinse, tanks, dryers and closed loop rinse water recirculation systems. System uses alcohol or other solvents with perfluorinated chemistry for rinsing and drying non-water contact applications.

Surface Dynamics Inc.  
9185 General Court  
Plymouth, MI 48170  
Tel: (313) 459-0010

Surftran  
Division of Robert Bosch Corporation  
30250 Stephenson Hwy  
Madison Heights, MI 48071  
Tel: (810) 691-2560  
Fax: (810) 847-0206

Swen Sonic Corp.  
PO Box 4347  
Davenport, IA 52808  
Tel: (319) 322-0144  
Fax: (319) 322-7180

Tally Cleaning Systems  
Division of Metfab Engineering  
332 John Diestch Blvd.  
Attleboro Falls, MA 02763  
Tel: (508) 695-1007  
Fax: (508) 695-6335

Thierica  
900 Clancy Ave.  
Grand Rapids, MI 49503  
Tel: (616) 458-1538  
Fax: (616) 458-7120

Tiyoda Mfg. U.S.A., Inc.  
1613 Lockness Place  
Torrance, CA 90501  
Tel: (310) 539-5471  
Fax: (310) 539-5881

Ultrasound Fabrications, Inc.  
1 Maple St.  
Shelton, CT 06484  
Tel: (203) 924-1624  
Fax: (203) 924-1625

Precision and non-precision aqueous cleaning equipment. Environmentally sound chemical cleaners and rust inhibitors for aqueous cleaning.

Single and multiple stage ultrasonic cleaning systems which utilize aqueous-based cleaning formulations. Complete systems available which include ultrasonic, wash, rinse, rustinhibit, hot air dry, particle filtration, oil separation, etc. Standard or custom engineered units.

New low cost spray equipment manages extremely difficult cleaning jobs. Used with large and small parts containing baked grease and paint soils. Designed to be safe and environmentally secure with hydrocarbon and aqueous cleaning agents. Stainless steel construction.

Vacuum desiring ultrasonic batch cleaning system provides instantaneous cleaning solution penetration into small tubes and holes and promotes superior cleaning. Vacuum drying system uses vacuum, hot air, ultra-pure steam heating and far-infrared heater.

Ultrasonic parts washing systems with standard tank volumes of 5, 10, 20, and 30 gallons, as well as special sizes if required. Systems provide for ultrasonic washing, spray or different types of immersion rinsing and hot air drying to achieve clean, dry, spot free parts.

Unique Industries, Inc.  
PO Box 417  
Mohawk Ave. Extension  
Derby, CT 06418  
Tel: (203) 735-8751

Unitech Industrial Inc.  
PO Box 330  
16 South Ave,  
Wappingers Falls, NY 12590  
Tel: (914) 297-0745  
(800) 277-5522  
Fax: (914) 297-2919

U.S. Polychemical Corp.  
Route 45 Chestnut Ridge Road  
Chestnut Ridge, NY 10977  
Tel: (914) 356-5530  
(800) 431-2072  
Fax: (914) 356-6656

Vitronics Corp.  
Forbes Rd.  
Newmarket Industrial Park  
Newmarket, NH 03857  
Tel: (603) 659-6550  
Fax: (603) 659-7194

Working Solutions, Inc.  
938 Cortlandt Street  
Houston, TX 77008  
Tel: (800) 829-4419  
Fax: (713) 862-5591

SEMI-AQUEOUS CLEANERS  
Aliphatic Hydrocarbon-Based

Aerocote Corporation  
P.O. Box 15849  
Houston, TX 77220  
Tel: (713) 224-6185  
Fax: (713) 223-5229

Closed loop industrial cleaning systems.  
Spray washers, batch cleaning systems, vapor  
degreasing, and pretreatment systems  
available in new equipment and retrofits.  
Waste water treatment and recycling, 100%  
oil removal from the cleaning process.

Manufacturers of oil and grease buffing  
compounds, flux removing chemistries with  
non-chlorinated solvents, semi-aqueous, and  
aqueous technologies. Also automated  
cleaning systems with recirculating agitation  
or ultrasonics for turn-key applications.

Inline aqueous and semi-aqueous cleaning  
equipment with closed loop water treatment  
systems.

Aqueous, semi-aqueous and solvent cleaning  
technologies and equipment.

Aqueous, semi-aqueous cleaners and  
hydrocarbon solvents. Applications using  
agitation including spray wash cabinets. Also,  
spray in steam cleaning, pressure washing,  
soak immersion, ultrasonic, and hand wiping  
applications.

Aervoe-Pacific Co., Inc.  
1198 Sawmill Road  
Gardnerville, NV 89410  
Tel: (702) 782-0100  
Fax: (702) 782-4027

ARCO Chemical Co.  
3801 West Chester Pike  
Newtown Square, PA 19073-2387  
Tel: (215) 359-2441  
Fax: (215) 359-5753

Ardrox  
16961 Knott Avenue  
La Mirada, CA 90638  
Tel: (714) 739-2821  
Fax: (714) 670-6480

A.W. Chesterton  
225 Fallon Road Middlesex  
Industrial Park Stoneham,  
MA 02180-2999  
Tel: (617) 438-7000  
Fax: (617) 438-8971

Brulin Corporation  
PO Box 270  
2920 Dr. Andrew J. Brown Ave.  
Indianapolis, IN 46206  
Tel: (317) 923-3211  
Fax: (317) 925-4596

Chemical Solvents, Inc.  
3751 Jennings Road  
Cleveland, OH 44109  
Tel: (216) 741-9310  
Fax: (216) 741-4080

Hydrocarbon, alcohol and HFC-based cleaners, defluxers, lubricants, dust off and circuit freezing formulations designed for electronics. All products sold contain zero ozone depleting substances.

Full range of aqueous-based formulations as well as aliphatic hydrocarbon-based blends, terpene-based formulations, hydrocarbon-based solvent blends and other cleaning alternatives and equipment.

A complete line of aqueous cleaners containing detergents, with and without glycol ethers. Hydrocarbon solvents and solvent blends. Non-ozone depleting chlorinated solvents. Provide free assistance to customers wishing to replace ozone-depleting chemicals. Synthetic machining fluids, lubricants and maintenance specialties.

Advanced technology aqueous detergent systems for spray, immersion, ultrasonic, and passive process cleaning of fabricated metal or plastic parts.

Aliphatic hydrocarbon blends, terpenes, surfactants, biodegradable emulsifiers, non-ozone depleting halogenated solvents, HCFCs. Specialty formulations for metal, urethane fiberglass (resin) clean-up processes via spray, wipe and immersion systems. Turn-key parts cleaning services. Recycling, disposal of generated waste solvents and waters.

Chemtronics, Inc.  
8125 Cobb Center Dr.  
Kennesaw, GA 30144  
Tel: (404) 424-4888  
Fax: (404) 424-4267

Circle-Prosco, Inc.  
2017 Yost Ave.  
Bloomington, IN 47403  
Tel: (812) 339-3653  
Fax: (812) 331-2566

Cobehn, Inc.  
640 Airport Road  
Winchester, VA 22602  
Tel: (703) 665-0707  
Fax: (703) 665-0768

Coleman Chemical, Inc.  
One Gemstar Lane  
Joliet, IL 60435  
Tel: (815) 727-3900  
Fax: (815) 727-3998

Creative Enterprises  
105 Anyway, Suite 209  
Lake Jackson, TX 77566  
Tel: (409) 292-0244  
Fax: (409) 292-0440

Dow U.S.A.  
Midland, MI 48674  
Tel: (800) 447-4369  
Fax: (517) 832-1465

Ecolink  
1481 Rock Mountain Blvd.  
Stone Mountain, GA 30083  
Tel: (404) 621-8240  
(800) 886-8240  
Fax: (404) 621-8245

Ultra-pure cleaners for electronics and metals.

Aqueous, alkaline, etchant cleaners for ferrous and non-ferrous applications. Aqueous, acidic, neutral, and alkaline oil rejecting cleaners with or without glycol ethers for ferrous and non-ferrous applications. Water miscible, semi-aqueous cleaners (electronics cleaning). Water emulsifiable cleaners containing aliphatic and terpene solvents. Evaporative oils for no clean applications.

Manufacturer of a non-solvent-based precision batch cleaning system, utilizing solvent materials filtered to .2um ppm. Process removes flux, oils and particulates by agitation, wetting and drying in an inert atmosphere. Also used for hybrids, and PCBs.

Specialty formulations of non-ozone depleting HFCs available in 1995.

Specialize in low cost conversion of existing facilities to safely use alternative cleaning agents. Design new or custom cleaning equipment and processes. Also design environmentally secure drying equipment and processes.

Formulations composed of paraffinic hydrocarbons and glycol ethers and blends of paraffinic hydrocarbons, glycol ethers, and surfactants.

Wide range of aqueous, semi-aqueous and non-aqueous chemistries. Formulations include a variety of hydrocarbon, NMP, DBE and terpene products as well as non-ozone depleting halogenated solvents. Manufacture a complete line of batch cleaning units for use with these solvents.

ETUS, Inc.  
1511 Kastner Place  
Sanford, F. 32771  
Tel: (407) 321-7910  
Fax: (407) 321-3098

Fine Organics Corp.  
205 Main St.  
PO Box 687  
odi, NJ 07644-0687  
Tel: (201) 472-6800  
(800) 526-7480  
Fax: (201) 472-6810

Firefreeze Worldwide, Inc.  
270 Route 46 East  
Rockaway, NJ 07866  
Tel: (973) 627-0722  
Fax: (973) 627-2982

JnJ Industries  
195 E. Main St.  
Suite 303  
Milford, MA 01757  
Tel: (800) 554-9994  
Fax: (508) 478-2221

Kleer-Flo Company  
15151 Technology Dr.  
Eden Prairie, MN 55344  
Tel: (612) 934-2555  
(800) 328-7942  
Fax: (612) 934-3909

MacDermid, Inc.  
245 Freight St.  
Waterbury, CT 06702  
Tel: (203) 575-5700  
Fax: (203) 575-5630

Formulations made of hydrocarbons and blends of hydrocarbons and emulsifiers. Also offer aqueous-based formulations containing detergents with and without glycol ethers.

Non-hazardous and biodegradable solvent and solvent-emulsion based alternatives. Products are applicable to the transportation, aviation, electronics, and coatings industries. Also offer water-based alternative products.

Aqueous based degreasing, cleaning and odor eliminating formulations. Products are plant derived, environmentally friendly, non-corrosive, non-flammable, and fully biodegradable. Unique applications for waste water and sludge treatment and oilgrease separation and removal. Can be used in hand sprayers, water pressurized units, power washers, and other spray equipment.

Manufacturer of eight non-CFC formulations including a supersaturated wipe solvent.

Full range of aqueous-based formulations and terpene-based formulations for the metalworking, aerospace, automotive, electronic, military, and printing industries. Designed to meet military specifications. Products leave no residue following proper cleaning and rinsing. Formulations available with and without glycol ethers.

Micro Care Corp.  
34 Ronzo Road  
Bristol, CT 06010  
Tel: (203) 585-7912  
Fax: (203) 585-7378

Navy Brand Mfg Co.  
Division of Chemstar, Inc.  
5111 Southwest Avenue  
St. Louis, MO 63110-3496  
Tel: (800) 325-3312  
(314) 865-5500  
Fax: (314) 865-5509

Petroferm Inc.  
5415 First Coast Highway  
Fernandina Beach, FL 32034  
Tel: (904) 261-8286  
Fax: (904) 261-6994

P-T Technologies, Inc.  
108 4th Ave. South  
Safety Harbor, FL 34695  
Tel: (800) 441-7874  
Fax: (813) 725-9544

Ramco Equipment Corporation  
32 Montgomery Street  
Hillside, NJ 07205  
Tel: (908) 687-6700  
Fax: (908) 687-0653

The Rission Group Inc.  
13349 Michigan Ave.  
Dearborn, MI 48126  
Tel: (313) 581-2620  
Fax: (313) 581-3758

Solvent cleaners based on but not limited to terpene hydrocarbon, alcohol, or HCFC technologies. Formulations are engineered for use in non-automated hand cleaning applications where rinsing is not available. Cleaners are effective in touch-up cleaning and precision cleaning of all types of flux residues, oils, grease and grime.

Industrial degreasers for metal cleaning and parts cleaning. Formulations are based on non-ozone depleting solvents. Also solvent-based, aqueous-based and also semi-aqueous-based products for a variety of cleaning applications on a host of substrates, both metallic and non-metallic.

Broad line of formulations based on terpenes, ester, and aliphatic hydrocarbons and blends of these organic solvents with surfactants. Products are used for cold (hand) cleaning and in combination with various cleaning equipment. Products can be removed by evaporation, water, alcohols or nonflammable fluorinated solvents. Both products and rinse media can be recycled.

Non-halogenated hydrocarbon-based specialty cleaning and degreasing formulations for precision cleaning. Also offer vapor degreaser alternatives, ionic contaminant removers, acetone, MEK alternatives for specific industrial applications.

Standard line of single and multi-station aqueous degreasing systems with a wide selection of options including platform oscillation, directional turbulence, oil removal, ultrasonics, filtration, parts rotators and dryers. Nationwide network of application engineers to assist from process development through installation.

Aqueous and non-aqueous formulations containing surfactants with and without glycol ethers. Hydrocarbons and blends of hydrocarbons with emulsifiers also available.

Rochester Midland Corp.  
333 Hollenbeck St.  
Rochester, NY 14621  
Tel: (716) 336-2200  
Fax: (716) 467-4406

Selig Chemical Industries  
PO Box 43106  
840 Selig Dr. SW  
Atlanta, GA 30378  
Tel: (404) 691-9220  
Fax: (404) 699-7024

Step Kare Corporation  
P.O. Box 211  
Highland Park, IL 60035  
Tel: (708) 358-2158  
Fax: (708) 358-2158

Texo Corp.  
2801 Highland Ave.  
Cincinnati, OH  
45212  
Tel: (513) 731-3400  
Fax: (513) 731-8113

U.S. Polychemical Corp.  
Route 45 Chestnut Ridge Road  
Chestnut Ridge, NY 10977  
Tel: (914) 356-5530  
(800) 431-2072  
Fax: (914) 356-6656

Working Solutions, Inc.  
938 Cortlandt Street  
Houston, TX 77008  
Tel: (800) 829-4419  
Fax: (713) 862-5591

Formulations comprised of hydrocarbon and/or terpene solvents. Some also contain surfactants. Many contain alkaline builders and chelants as well as glycol ethers. Some aqueous-based or water-compatible formulations exhibit good biodegradability. Many products allow for good oil/grease separation upon standing.

Formulations made of hydrocarbons and blends of hydrocarbons and emulsifiers. Also offer aqueous-based formulations containing detergents with and without glycol ethers and some containing d-limonene.

Water-based flux remover, effective on rosin and non-rosin fluxes; aqueous coating remover. Also removes cutting oils and other contaminants. Non-aqueous coating remover contains no petroleum distillates or glycol ethers. Capable of removing conformal coatings or rosin fluxes in a non-aqueous formulation.

Aqueous, semi-aqueous, and various solvent cleaners for replacement of vapor degreasing and handwiping with solvents. Applications of cleaners can be spray immersion, ultrasonic or handwiping. Cleaners can be multimetal safe and contain corrosion inhibitors if necessary.

Manufacturers of oil and grease buffing compounds, flux removing chemistries with non-chlorinated solvents, semi-aqueous, and aqueous technologies. Also automated cleaning systems with recirculating agitation or ultrasonics for turn-key applications.

Aqueous, semi-aqueous and solvent cleaning technologies and equipment.

Zip-Chem Products  
1860 Dobbin Dr.  
San Jose, CA 95133  
Tel: (408) 729-0291  
(800) 648-2661  
Fax: (408) 272-8062

Terpene-Based

Aerocote Corporation  
P.O. Box 15849  
Houston, TX 77220  
Tel: (713) 224-6185  
Fax: (713) 223-5229

Ardrox  
16961 Knott Avenue  
La Mirada, CA 90638  
Tel: (714) 739-2821  
Fax: (714) 670-6480

BioChem Systems  
14452 W. 44th Avenue  
Golden, Colorado 80403  
Tel: (303) 277-9700  
(800) 777-7870  
Fax: (303) 277-9596

Chemical Solvents, Inc.  
3751 Jennings Road  
Cleveland, OH 44109  
Tel: (216) 741-9310  
Fax: (216) 741-4080

Chemtronics, Inc.  
8125 Cobb Center Dr.  
Kennesaw, GA 30144  
Tel: (404) 424-4888  
Fax: (404) 424-4267

Aqueous, semi-aqueous aliphatic hydrocarbon, terpene and alcohol-based cleaners. Application oriented packaging like wipes, aerosols, specialty containers, and other delivery systems available.

Aqueous, semi-aqueous cleaners and hydrocarbon solvents. Applications using agitation including spray wash cabinets. Also, spray in steam cleaning, pressure washing, soak immersion, ultrasonic, and hand wiping applications.

Full range of aqueous-based formulations as well as aliphatic hydrocarbon-based blends, terpene-based formulations, hydrocarbon-based solvent blends and other cleaning alternatives and equipment.

Complete line of safe environmentally friendly products based on terpene chemistry for use in many cleaning and degreasing operations. Both water dilutable and non-dilutable products are offered which will remove most organic contaminants from a wide variety of substrates and leave a clean, virtually residue free surface with no adverse effects on the surface being cleaned.

Aliphatic hydrocarbon blends, terpenes, surfactants, biodegradable emulsifiers, non-ozone depleting halogenated solvents, HCFCs. Specialty formulations for metal, urethane fiberglass (resin) clean-up processes via spray, wipe and immersion systems. Turn-key parts cleaning services. Recycling, disposal of generated waste solvents and waters.

Ultra-pure cleaners for electronics and metals.

Circle-Proscio, Inc.  
2017 Yost Ave.  
Bloomington, IN 47403  
Tel: (812) 339-3653  
Fax: (812) 331-2566

Coleman Chemical, Inc.  
One Gemstar Lane  
Joliet, IL 60435  
Tel: (815) 727-3900  
Fax: (815) 727-3998

Ecolink  
1481 Rock Mountain Blvd.  
Stone Mountain, GA 30083  
Tel: (404) 621-8240  
(800) 886-8240  
Fax: (404) 621-8245

Environmental Scientific, Inc.  
P.O. Box 13486  
Research Triangle Park, NC 27709-3486  
Tel: (919) 941-0847  
Fax: (919) 941-0652

Environmental Solvents Corp.  
1840 Southside Blvd.  
Jacksonville, FL 32216  
Tel: (904) 724-1990  
Fax: (904) 724-2508

Envirosolutions Inc.  
335 Post Road West  
Westport, CT 06880  
Tel: (203) 454-5902  
Fax: (203) 222-0190

Aqueous, alkaline, etchant cleaners for ferrous and non-ferrous applications. Aqueous, acidic, neutral, and alkaline oil rejecting cleaners with or without glycol ethers for ferrous and non-ferrous applications. Water miscible, semi-aqueous cleaners (electronics cleaning). Water emulsifiable cleaners containing aliphatic and terpene solvents. Evaporative oils for no clean applications.

Specialty formulations of non-ozone depleting HFCs available in 1995.

Wide range of aqueous, semi-aqueous and non-aqueous chemistries. Formulations include a variety of hydrocarbon, NMP, DBE and terpene products as well as non-ozone depleting halogenated solvents. Manufacture a complete line of batch cleaning units for use with these solvents.

A wide variety of corrosion inhibitors, hydrocarbon emulsifiers and carbon product removers that are non-hazardous and non-toxic.

Blend of coniferous (pine) terpenes with and without surfactants. Non-surfactant-containing solvent is very easy and inexpensive to use with closed-loop water recycling. All flash points over 140°F. Very high solvency for hydrocarbon soils.

Biodegradable, non-caustic, neutral pH cleaner which is used in a closed loop parts washing system. Several different formulations developed to suit a variety of cleaning needs. Customized parts washing equipment is matched to the cleaning chemicals to ensure optimum performance.

Fine Organics Corp.  
205 Main St.  
PO Box 687  
Lodi, NJ 07644-0687  
Tel: (201) 472-6800  
(800) 526-7480  
Fax: (201) 472-6810

Glidco Organics  
P.O. Box 389  
Jacksonville, FL 32201  
Tel: (800) 231-6728  
(904) 768-5800  
Fax: (904) 768-2200

Inland Technology, Inc.  
2612 Pacific Highway East  
Tacoma, WA 98424  
Tel: (206) 922-8932  
(800) 552-3100  
Fax: (206) 926-0577

MacDermid, Inc.  
245 Freight St.  
Waterbury, CT 06702  
Tel: (203) 575-5700  
Fax: (203) 575-5630

Micro Care Corp.  
34 Ronzo Road  
Bristol, CT 06010  
Tel: (203) 585-7912  
Fax: (203) 585-7378

Navy Brand Mfg Co.  
Division of Chemstar, Inc.  
5111 Southwest Avenue  
St. Louis, MO 63110-3496  
Tel: (800) 325-3312  
(314) 865-5500  
Fax: (314) 865-5509

Non-hazardous and biodegradable solvent and solvent-emulsion based alternatives. Products are applicable to the transportation, aviation, electronics, and coatings industries. Also offer water-based alternative products.

State-of-the-art terpene-based cleaning agents for cold cleaning, hand-wipe cleaning, semi-aqueous cleaning, maintenance cleaning, and solvent-solvent cleaning. Glidsafe® cleaning agents employ unique terpene systems for optimal performance.

Range of aqueous cleaners used in hand-wipe cleaning. Also other non ozone-depleting biodegradable solvents for various cleaning applications, including vapor degreasing, precision cleaning, paint stripping, and resin removal.

Full range of aqueous-based formulations and terpene-based formulations for the metalworking, aerospace, automotive, electronic, military, and printing industries. Designed to meet military specifications. Products leave no residue following proper cleaning and rinsing. Formulations available with and without glycol ethers.

Solvent cleaners based on but not limited to terpene hydrocarbon, alcohol, or HCFC technologies. Formulations are engineered for use in non-automated hand cleaning applications where rinsing is not available. Cleaners are effective in touch-up cleaning and precision cleaning of all types of flux residues, oils, grease and grime.

Industrial degreasers for metal cleaning and parts cleaning. Formulations are based on non-ozone depleting solvents. Also solvent-based, aqueous-based and also semi-aqueous-based products for a variety of cleaning applications on a host of substrates, both metallic and non-metallic.

Oakite Products, Inc.  
50 Valley Road  
Berkeley Heights, NJ 07922  
Tel: (908) 508-2107  
Fax: (908) 464-9250

High-tech, state-of-the-art, recyclable cleaning products for use in immersion, ultrasonic, hand wipe, and other cleaning applications. Many aqueous and semi-aqueous formulations adhere to the Clean Air Act, OSHA regulations, and do not contain SARA 313 ingredients. Comprehensive lines of products that exhibit biodegradability, oil splitting or emulsifying features. Terpene-based cleaners have no flash point, and alkaline, aqueous formulations include non-phosphated, non-chelated, mildly alkaline cleaners.

Petroferm Inc.  
5415 First Coast Highway  
Fernandina Beach, F. 32034  
Tel: (904) 261-8286  
Fax: (904) 261-6994

Broad line of formulations based on terpenes, ester, and aliphatic hydrocarbons and blends of these organic solvents with surfactants. Products are used for cold (hand) cleaning and in combination with various cleaning equipment. Products can be removed by evaporation, water, alcohols or nonflammable fluorinated solvents. Both products and rinse media can be recycled.

Rite Off, Inc.  
Seaford Industrial Park  
P.O. Box 1070  
Seaford, DE 19973  
Tel: (800) 645-5853  
(302) 628-2100  
Fax: (800) 571-2211

Wide variety of cleaning and maintenance formulations using alcohols, terpenes, HFCs, hydrocarbons and chlorinated solvents. Specialists in aerosol technology, liquid formulations also available.

Rochester Midland Corp.  
333 Hollenbeck St.  
Rochester, NY 14621  
Tel: (716) 336-2200  
Fax: (716) 467-4406

Formulations comprised of hydrocarbon and/or terpene solvents. Some also contain surfactants. Many contain alkaline builders and chelants as well as glycol ethers. Some aqueous-based or water-compatible formulations exhibit good biodegradability. Many products allow for good oil/grease separation upon standing.

Selig Chemical Industries  
PO Box 43106  
840 Selig Dr. SW  
Atlanta, GA 30378  
Tel: (404) 691-9220  
Fax: (404) 699-7024

Formulations made of hydrocarbons and blends of hydrocarbons and emulsifiers. Also offer aqueous-based formulations containing detergents with and without glycol ethers and some containing d-limonene.

Storchem Inc.  
3600 Billings Court, Suite 110  
Burlington, Ontario  
Canada .7N 3N6  
Tel: (416) 639-9700  
Fax: (416) 639-5244

Terpene Technologies Inc.  
3400 Ridge Rd. W, Suite 293  
Rochester, NY 14626  
Tel: (716) 546-8455  
(716) 777-0790  
Fax: (716) 227-3834

Ultrasound Fabrications, Inc.  
1 Maple St.  
Shelton, CT 06484  
Tel: (203) 924-1624  
Fax: (203) 924-1625

Union Camp Corp.  
Bush Boake Allen Division  
PO Box 37617  
Jacksonville, F. 32236  
Tel: (904) 783-2180  
(800) 874-9220  
Fax: (904) 786-6495

U.S. Polychemical Corp.  
Route 45 Chestnut Ridge Road  
Chestnut Ridge, NY 10977  
Tel: (914) 356-5530  
(800) 431-2072  
Fax: (914) 356-6656

Working Solutions, Inc.  
938 Cortlandt Street  
Houston, TX 77008  
Tel: (800) 829-4419  
Fax: (713) 862-5591

Aqueous-based terpene formulations containing detergents and emulsifiers; semi-aqueous cleaners and degreasers based on terpene alcohols and hydrocarbons; terpene alcohol and hydrocarbon blends used as non-water soluble solvents.

Terpene alcohol and hydrocarbon blends used as non-water soluble solvents, semi-aqueous cleaners and degreasers based on terpene alcohols and hydrocarbons. Also offer aqueous-based terpene formulations containing detergents and emulsifiers.

Ultrasonic parts washing systems with standard tank volumes of 5, 10, 20, and 30 gallons, as well as special sizes if required. Systems provide for ultrasonic washing, spray or different types of immersion rinsing and hot air drying to achieve clean, dry, spot free parts.

Range of wood terpene-based alternative solvents for semi-aqueous and solvent only cleaning processes and maintenance cleaning applications. High solvency and high soil loading properties for removal of solder fluxes, heavy oils and greases, polishing compounds, carbonaceous deposits etc. to the highest cleanliness standards.

Manufacturers of oil and grease buffing compounds, flux removing chemistries with non-chlorinated solvents, semi-aqueous, and aqueous technologies. Also automated cleaning systems with recirculating agitation or ultrasonics for turn-key applications.

Aqueous, semi-aqueous and solvent cleaning technologies and equipment.

Zip-Chem Products  
1860 Dobbin Dr.  
San Jose, CA 95133  
Tel: (408) 729-0291  
(800) 648-2661  
Fax: (408) 272-8062

Alcohol-Based

Aervoe-Pacific Co., Inc.  
1198 Sawmill Road  
Gardnerville, NV 89410  
Tel: (702) 782-0100  
Fax: (702) 782-4027

Ambassador Marketing  
Route 1-Box 207  
St. David, AZ 85630  
Tel: (602) 720-4310  
Fax: (602) 720-4068

ARCO Chemical Co.  
3801 West Chester Pike  
Newtown Square, PA 19073-2387  
Tel: (215) 359-2441  
Fax: (215) 359-5753

Chemtronics, Inc.  
8125 Cobb Center Dr.  
Kennesaw, GA 30144  
Tel: (404) 424-4888  
Fax: (404) 424-4267

Cobehn, Inc.  
640 Airport Road  
Winchester, VA 22602  
Tel: (703) 665-0707  
Fax: (703) 665-0768

Coleman Chemical, Inc.  
One Gemstar Lane  
Joliet, IL 60435  
Tel: (815) 727-3900  
Fax: (815) 727-3998

Aqueous, semi-aqueous aliphatic hydrocarbon, terpene and alcohol-based cleaners. Application oriented packaging like wipes, aerosols, specialty containers, and other delivery systems available.

Hydrocarbon, alcohol and HFC-based cleaners, defluxers, lubricants, dust off and circuit freezing formulations designed for electronics. All products sold contain zero ozone depleting substances.

Aqueous and alcohol-based cleaners for low residue degreasing and dewaxing applications. Formulations are nonflammable and nonfuming.

Ultra-pure cleaners for electronics and metals.

Manufacturer of a non-solvent-based precision batch cleaning system, utilizing solvent materials filtered to .2um ppm. Process removes flux, oils and particulates by agitation, wetting and drying in an inert atmosphere. Also used for hybrids, and PCBs.

Specialty formulations of non-ozone depleting HFCs available in 1995.

Conceptronic, Inc.  
6 Post Rd.  
Portsmouth, NH 03801  
Tel: (603) 431-6262  
Fax: (603) 431-3303

Dell-Chem of Arizona  
7119 E. Shea Blvd., Suite 106-224  
Scottsdale, AZ 85254  
Tel: (602) 951-5812  
Fax: (602) 948-4172

Insitu Environmental Chemical Co.  
8402 East Redwing Rd.  
Scottsdale, AZ 85250-5740  
Tel: (602) 948-9209  
Fax: (602) 951-0715

JnJ Industries  
195 E. Main St.  
Suite 303  
Milford, MA 01757  
Tel: (800) 554-9994  
Fax: (508) 478-2221

Ken Seika Corp.  
314 Willow Dr.  
Little Silver, NJ 07739  
Tel: (908) 741-4920  
Fax: (908) 758-9531

Kester Solder Division Patton Industries  
515 E. Touhy Avenue  
Des Plaines, IL 60018-2675  
Tel: (708) 297-1600  
Fax: (708) 390-9338

Semi-aqueous, spray-based, totally closed-loop modular batch cleaning systems utilizing non-flammable, naturally derived alcohol solvents in solution with water. Also have an ultrasonic batch cleaning system for metallic and non-metallic electronic surfaces and other difficult-to-clean non-electronic parts of unusual geometric shape.

Aqueous and alcohol-based cleaners for low residue degreasing and dewaxing applications. Formulations are nonflammable and nonfuming.

Aqueous and alcohol-based cleaners for low residue degreasing and dewaxing applications. Formulations are nonflammable and nonfuming.

Manufacturer of eight non-CFC formulations including a supersaturated wipe solvent.

Organic intermediates, specialty monomers- polymers, oligomers, etc. MMB for metal cleaning applications.

Alcohol-based cleaners, solvent blends, and aqueous saponifiers. Also manufacture no-clean, water-clean, and VOC-free; fluxes, solders, and solder pastes.

Kyzen Corp.  
413 Harding Industrial Dr.  
Nashville, TN 37211  
Tel: (615) 831-0888  
(800) 845-5524  
Fax: (615) 831-0889

Micro Care Corp.  
34 Ronzo Road  
Bristol, CT 06010  
Tel: (203) 585-7912  
Fax: (203) 585-7378

Navy Brand Mfg Co.  
Division of Chemstar, Inc.  
5111 Southwest Avenue  
St. Louis, MO 63110-3496  
Tel: (800) 325-3312  
(314) 865-5500  
Fax: (314) 865-5509

Oakite Products, Inc.  
50 Valley Road  
Berkeley Heights, NJ 07922  
Tel: (908) 508-2107  
Fax: (908) 464-9250

A broad line of non-hazardous, zero ODP, biodegradable, and low VOC cleaning products. Kyzen products are used for cold cleaning, immersion solvent cleaning, and aqueous spray cleaning. These materials are compatible with a wide range of cleaning machines: spray in air, spray in immersion, soak, and ultrasonic. Kyzen products can be used in closed looped systems for low zero discharge by a variety of commonly available water reuse systems.

Solvent cleaners based on but not limited to terpene hydrocarbon, alcohol, or HCFC technologies. Formulations are engineered for use in non-automated hand cleaning applications where rinsing is not available. Cleaners are effective in touch-up cleaning and precision cleaning of all types of flux residues, oils, grease and grime.

Industrial degreasers for metal cleaning and parts cleaning. Formulations are based on non-ozone depleting solvents. Also solvent-based, aqueous-based and also semi-aqueous-based products for a variety of cleaning applications on a host of substrates, both metallic and non-metallic.

High-tech, state-of-the-art, recyclable cleaning products for use in immersion, ultrasonic, hand wipe, and other cleaning applications. Many aqueous and semi-aqueous formulations adhere to the Clean Air Act, OSHA regulations, and do not contain SARA 313 ingredients. Comprehensive lines of products that exhibit biodegradability, oil splitting or emulsifying features. Terpene-based cleaners have no flash point, and alkaline, aqueous formulations include non-phosphated, non-chelated, mildly alkaline cleaners.

QO Chemicals, Inc.  
P.O. Box 2500  
One Great Lakes Blvd  
West Lafayette, IN 47906  
Tel: (800) 621-9521  
Fax: (317) 497-6287

The Rission Group Inc.  
13349 Michigan Ave.  
Dearborn, MI 48126  
Tel: (313) 581-2620  
Fax: (313) 581-3758

Rite Off, Inc.  
Seaford Industrial Park  
P.O. Box 1070  
Seaford, DE 19973  
Tel: (800) 645-5853  
(302) 628-2100  
Fax: (800) 571-2211

Selig Chemical Industries  
PO Box 43106  
840 Selig Dr. SW  
Atlanta, GA 30378  
Tel: (404) 691-9220  
Fax: (404) 699-7024

Ultrasound Fabrications, Inc.  
1 Maple St.  
Shelton, CT 06484  
Tel: (203) 924-1624  
Fax: (203) 924-1625

U.S. Polychemical Corp.  
Route 45 Chestnut Ridge Road  
Chestnut Ridge, NY 10977  
Tel: (914) 356-5530  
(800) 431-2072  
Fax: (914) 356-6656

Specialty solvents used in various cleaning applications. Solvents are bio-degradable, water miscible, and not photo-chemically reactive.

Aqueous and non-aqueous formulations containing surfactants with and without glycol ethers. Hydrocarbons and blends of hydrocarbons with emulsifiers also available.

Wide variety of cleaning and maintenance formulations using alcohols, terpenes, HFCs, hydrocarbons and chlorinated solvents. Specialists in aerosol technology, liquid formulations also available.

Formulations made of hydrocarbons and blends of hydrocarbons and emulsifiers. Also offer aqueous-based formulations containing detergents with and without glycol ethers and some containing d-limonene.

Ultrasonic parts washing systems with standard tank volumes of 5, 10, 20, and 30 gallons, as well as special sizes if required. Systems provide for ultrasonic washing, spray or different types of immersion rinsing and hot air drying to achieve clean, dry, spot free parts.

Manufacturers of oil and grease buffing compounds, flux removing chemistries with non-chlorinated solvents, semi-aqueous, and aqueous technologies. Also automated cleaning systems with recirculating agitation or ultrasonics for turn-key applications.

Zip-Chem Products  
1860 Dobbin Dr.  
San Jose, CA 95133  
Tel: (408) 729-0291  
(800) 648-2661  
Fax: (408) 272-8062

Aqueous, semi-aqueous aliphatic hydrocarbon, terpene and alcohol-based cleaners. Application oriented packaging like wipes, aerosols, specialty containers, and other delivery systems available.

#### SEMI-AQUEOUS CLEANING EQUIPMENT

ACCE.  
1825 E. Piano Parkway  
Piano, TX 75074-8129  
Tel: (214) 424-3525  
Fax: (214) 424-7526

System utilizing centrifugal cleaning to provide superior washing, effective rinsing, and drying of populated printed circuit boards and hybrid circuits. Includes automatic solvent recycling and rinse water purification with no required drain. Compatible with chlorocarbons, fluorocarbons, H<sub>2</sub>O, and terpenes.

Altos Engineering, Inc.  
6009 N. 61 Ave  
Glendale, AZ 85301  
Tel: (602) 931-8434  
Fax: (602) 937-6396

Batch and inline cleaning equipment with non-chemical, thermal vacuum drying of rinse waters. Detergent formulations available with and without glycol ethers.

American Metal Wash, Inc.  
PO Box 265  
360 Euclid Ave.  
Cannonsburg, PA 15317  
Tel: (412) 746-4203  
Fax: (412) 746-5738

Bearing washer for precision cleaning of final assembled race bearings, including points of contact. Equipment can be provided in single or multi-stages for accommodations of washing, rinsing, rust inhibiting, and thorough drying of each bearing. Can accommodate bearing diameters of 7/8" to 20" and can be setup for use with aqueous or semi-aqueous cleaning solutions.

Babcock & Wilcox CIM Systems  
4004 Murray Place  
Richmond, VA 24501  
Tel: (804) 948-1361  
Fax: (804) 948-1313

Provide turnkey automated cleaning and inspection (SQCiSPC) systems for complete integration into process cleaning lines, including aqueous and non-aqueous systems, material handling, drying, cleanliness and geometric inspection, and computer protocol communication. Full-scope of services from process selection, development, installation, training, and continued follow-up support.

Baron-Blakeslee, Inc.  
1500 West 16th St.  
Long Beach, CA 90813  
Tel: (800) 548-4422  
Fax: (310) 491-1091

Blackstone Ultrasonics, Inc.  
9 North Main St.  
Jamestown, NY 14701  
Tel: (716) 665-2340  
(800) 766-6606  
Fax: (716) 665-2480

Blue Wave Ultrasonics  
Div. of Alpheus Cleaning Technologies Corp.  
960 S. Rolff St.  
Davenport, IA 52802  
Tel: (319) 322-0144  
(800) 373-0144  
Fax: (319) 322-7180

Branson Ultrasonics Inc.  
41 Eagle Rd.  
Danbury, CT 06810  
Tel: (203) 796-0400  
Fax: (203) 796-0381

CD Nelson Manufacturing Company  
28979 North Herkey Drive  
Lake Bluff, IL 60044  
Tel: (708) 362-3555  
Fax: (708) 362-0154

Cincinnati Industrial Machinery  
PO Box 62027  
3280 Hageman St.  
Cincinnati, OH 45241 (street add.)  
45262 (PO Box)  
Tel: (513) 769-0700  
Fax: (513) 769-0697

Full line of cleaning equipment for use with aqueous, semi-aqueous, HCFC, and chlorinated solvents. Closed loop system incorporating vacuum drying available (near zero emissions).

Complete range of ultrasonic cleaning products from stand-alone and bench-top heated tanks to wash multiple rinse dry console systems with optional material handling and automation. Also, fluxless ultrasonic solder pots for tinning leads and electronics.

Ultrasonic cleaning equipment built for various applications specific to the customer's needs. Effective in cleaning different products and materials throughout the scope of fabricated metals, plastics, and ceramics. Also offer aqueous-based detergents that are environmentally safe.

Ultrasonic cleaning equipment and integrated cleaning systems for metal, electronic, and precision cleaning requirements. Manual and fully automated material handling transport systems. Equipment for aqueous, semi-aqueous and solvent chemistry.

Steam cleaning equipment for removing polishing paste, oils, pollutants, and other contaminants from metals, plastics, ceramics, silicone wafers. Removal of small burrs, rouges, casting materials, waxes from precious metals, ferrous and non-ferrous metals, ceramics, plastics. Ultrasonic cleaning of all above materials.

Custom designed machines for cleaning, surface preparation and other processing of metal and non-metallic parts.

Conax Buffalo Corporation  
2300 Walden Avenue  
Buffalo, NY 14225  
Tel: (716) 684-4500  
(800) 223-2389  
Fax: (716) 684-7433

Conceptronic, Inc.  
6 Post Rd.  
Portsmouth, NH 03801  
Tel: (603) 431-6262  
Fax: (603) 431-3303

Container Products Corp.  
PO Box 3767  
Wilmington, NC 28406  
Tel: (919) 392-6100  
Fax: (919) 392-6778

Creative Enterprizes  
105 Anyway, Suite 209  
Lake Jackson, TX 77566  
Tel: (409) 292-0244  
Fax: (409) 292-0440

Crest Ultrasonics  
Scotch Rd. - Mercer County Airport  
PO Box 7266  
Trenton, NJ 08628  
Tel: (609) 883-4000  
(800) 441-9675  
Fax: (609) 883-6452

Durr Industries, Inc.  
10301 Enterprise Dr.  
Davisburg, MI 48360  
Tel: (313) 625-5400  
Fax: (313) 625-5966

Ultrasonic cleaning equipment and systems for cleaning machine components, fabricated parts, assemblies. Related support devices available.

Semi-aqueous, spray-based, totally closed-loop modular batch cleaning systems utilizing non-flammable, naturally derived alcohol solvents in solution with water. Also have an ultrasonic batch cleaning system for metallic and non-metallic electronic surfaces and other difficult-to-clean non-electronic parts of unusual geometric shape.

Systems incorporating a variety of aqueous cleaning techniques which include filtered negative pressure chambers, high pressure chambers, and mobile cleaning systems.

Specialize in low cost conversion of existing facilities to safely use alternative cleaning agents. Design new or custom cleaning equipment and processes. Also design environmentally secure drying equipment and processes.

Precision cleaning equipment (primarily ultrasonic systems) from standard wash-rinse-dry cleaning consoles to large custom automated batch cleaning equipment. Ultrasonic generator is sweep frequency generator capable of cavitating both aqueous and semi-aqueous chemistries. Full line of aqueous-based cleaning chemistries for ultrasonic applications as well.

All aqueous and semi-aqueous systems recycle and reuse process water. Solvent systems reduce emissions by 99% over conventional degreasing systems.

Ecolink  
1481 Rock Mountain Blvd.  
Stone Mountain, GA 30083  
Tel: (404) 621-8240  
(800) 886-8240  
Fax: (404) 621-8245

Electronic Controls Design, Inc.  
4287-A SE International Way  
Milwaukie, OR 97006  
Tel: (503) 659-6100  
(800) 323-4548  
Fax: (503) 659-4422

Envirosolutions Inc.  
335 Post Road West  
Westport, CT 06880  
Tel: (203) 454-5902  
Fax: (203) 222-0190

Finishing Equipment Inc.  
3640 Kennebec Dr.  
St. Paul, MN 55122  
Tel: (612) 452-1860  
Fax: (612) 452-9851

Forward Technology Industries, Inc.  
13500 County Road 6  
Minneapolis, MN 55446-2777  
Tel: (612) 559-1785  
Fax: (612) 559-3929

Hurri-Kleen Corp.  
PO Box 29  
Trussville, AL 35173  
Tel: (205) 655-8808  
Fax: (205) 655-5392

Wide range of aqueous, semi-aqueous and non-aqueous chemistries. Formulations include a variety of hydrocarbon, NMP, DBE and terpene products as well as non-ozone depleting halogenated solvents. Manufacture a complete line of batch cleaning units for use with these solvents.

Biodegradable, non-caustic, neutral Ph cleaner which is used in a closed loop parts washing system. Several different formulations developed to suit a variety of cleaning needs. Customized parts washing equipment is matched to the cleaning chemicals to ensure optimum performance.

Aqueous, semi-aqueous and solvent cleaning systems available. From manual systems to automated high-production cleaning lines, with ultrasonics available as needed. Specialize in automated enclosed vapor degreasers for efficient use of the non-ozone depleting chlorinated solvents.

Standard and custom aqueous, systems featuring batch and part-by-part high speed automation, ultrasonics, high pressure sprays, hot air drying, IPA drying, vacuum dryers, and environmentally controlled enclosures. Also, semi-aqueous and solvent formulations available.

Kleer-Flo Company  
15151 Technology Dr.  
Eden Prairie, MN 55344  
Tel: (612) 934-2555  
(800) 328-7942  
Fax: (612) 934-3909

K.N. Ultraschall GmbH  
Siegfriedstrasse 124  
D-64646 Heppenheim  
GERMANY  
Tel: +49-6252-14-0  
Fax: +49-6252-14-277

Ney Ultrasonics  
1280 Blue Hills Avenue  
Bloomfield, CT 06002  
Tel: (203) 286-6149  
Fax: (203) 286-6150

Ransohoff Co.  
North 5th St at Ford Boulevard  
Hamilton, OH 45011  
Tel: (513) 863-5813  
(800) 248-WASH  
Fax: (513) 863-8908

Rapid Engineering, Inc.  
P.O. Box 700  
1100 Seven Mile Road N.W.  
Comstock Park, MI 49321-0700  
Tel: (616) 784-0500  
Fax: (616) 784-0435

S&K Products International  
80 Red Schoolhouse Rd. #102  
Chestnut Ridge, NY 10977  
Tel: (914) 425-6200  
Fax: (914) 425-7602

Standard and custom semi-aqueous systems featuring various types of batch automation, ultrasonics, high pressure sprays, hot air drying, IPA drying, vacuum dryers, environmentally controlled enclosures. Also, aqueous and solvent formulations available.

Equipment for batch manual and batch automated cleaning using aqueous, water-miscible, semi-aqueous, and solvent chemistries. Complete application development laboratory to assist users.

Standard and custom aqueous and semi-aqueous cleaning equipment for small through high production parts cleaning requirements, as well as very small to large part configurations and various part materials. Expertise in precision cleaning. Patented, mechanically agitated aqueous technology for high volume intricately shaped or machined parts as a direct replacement of solvent vapor degreasing and ultrasonic cleaning systems.

Parts washers utilizing low to medium pressure spraying of aqueous solutions on metal and plastic substrates. Exhaust incinerators for lowering VOC discharge to the atmosphere.

Solvent wash followed by one or more aqueous rinses, including formulated surfactants; then to spot free, stain free, particulate free drying via isopropyl alcohol.

Smart Sonic Precision Cleaning Systems  
2373 Teller Rd., #107  
Newbury Park, CA 91320  
Tel: (805) 499-7440  
Fax: (805) 375-5781

SONICOR Instrument Corp.  
100 Wartburg Ave.  
Copiague, NY 11726  
Tel: (516) 842-3344  
Fax: (516) 842-3389

Sonitech Inc.  
239 East Stephenson St.  
Freeport, I. 61032  
Tel: (815) 235-2400  
Fax: (815) 232-2150

Tiyoda Mfg. U.S.A., Inc.  
1613 .ockness Place  
Torrance, CA 90501  
Tel: (310) 539-5471  
Fax: (310) 539-5881

Ultrasound Fabrications, Inc.  
1 Maple St.  
Shelton, CT 06484  
Tel: (203) 924-1624  
Fax: (203) 924-1625

Automated ultrasonic and spray batch cleaners for precision cleaning of metal, plastic, and ceramic parts. Systems clean oils, particulate and other contaminants. Optional waste evaporator.

Ultrasonic cleaning equipment, automated aqueous cleaning systems. Environmentally safe alternatives to cleaning with hazardous solvents.

Ultrasonic cleaning equipment using aqueous or semi-aqueous chemistries for a wide range of applications. Complete systems include cleaning tanks, rinse, tanks, dryers and closed loop rinse water recirculation systems. System uses alcohol or other solvents with perfluorinated chemistry for rinsing and drying non-water contact applications.

Vacuum desiring ultrasonic batch cleaning system provides instantaneous cleaning solution penetration into small tubes and holes and promotes superior cleaning. Vacuum drying system uses vacuum, hot air, ultra-pure steam heating and far-infrared heater.

Ultrasonic parts washing systems with standard tank volumes of 5, 10, 20, and 30 gallons, as well as special sizes if required. Systems provide for ultrasonic washing, spray or different types of immersion rinsing and hot air drying to achieve clean, dry, spot free parts.

Unitech Industrial Inc.  
PO Box 330  
16 South Ave,  
Wappingers Falls, NY 12590  
Tel: (914) 297-0745  
(800) 277-5522  
Fax: (914) 297-2919

U.S. Polychemical Corp.  
Route 45 Chestnut Ridge Road  
Chestnut Ridge, NY 10977  
Tel: (914) 356-5530  
(800) 431-2072  
Fax: (914) 356-6656

Vitronics Corp.  
Forbes Rd.  
Newmarket Industrial Park  
Newmarket, NH 03857  
Tel: (603) 659-6550  
Fax: (603) 659-7194

#### HYDROCARBON-BASED SOLVENTS

Advanced Research Technologies  
312 South Vine St.  
Park Ridge, IL 60068  
Tel: (708) 696-9371  
Fax: (708) 696-4984

Aerocote Corporation  
P.O. Box 15849  
Houston, TX 77220  
Tel: (713) 224-6185  
Fax: (713) 223-5229

ARCO Chemical Co.  
3801 West Chester Pike  
Newtown Square, PA 19073-2387  
Tel: (215) 359-2441  
Fax: (215) 359-5753

Ardrox Inc.  
16961 Knott Avenue  
San Ramon, CA 94583  
Tel: (714) 739-2821  
Fax: (714) 670-6480

Closed loop industrial cleaning systems.  
Spray washers, batch cleaning systems, vapor  
degreasing, and pretreatment systems  
available in new equipment and retrofits.  
Waste water treatment and recycling, 100%  
oil removal from the cleaning process.

Manufacturers of oil and grease buffing  
compounds, flux removing chemistries with  
non-chlorinated solvents, semi-aqueous, and  
aqueous technologies. Also automated  
cleaning systems with recirculating agitation  
or ultrasonics for turn-key applications.

Inline aqueous and semi-aqueous cleaning  
equipment with closed loop water treatment  
systems.

Ultra-low residue, high purity terpene  
hydrocarbon cleaning agents. Used in vapor  
degreasing applications for metals cleaning,  
electronics cleaning, and precision cleaning.

Aqueous, semi-aqueous cleaners and  
hydrocarbon solvents. Applications using  
agitation including spray wash cabinets. Also,  
spray in steam cleaning, pressure washing,  
soak immersion, ultrasonic, and hand wiping  
applications.

Full range of aqueous-based formulations as  
well as aliphatic hydrocarbon-based blends,  
terpene-based formulations, hydrocarbon-  
based solvent blends and other cleaning  
alternatives and equipment.

A.W. Chesterton  
225 Fallon Road Middlesex  
Industrial Park Stoneham,  
MA 02180-2999  
Tel: (617) 438-7000  
Fax: (617) 438-8971

BASF Corp.  
100 Cherry Hill Rd.  
Parsippany, NJ 07054

Break-Free, Inc.  
1035 S. Linwood Avenue  
Santa Ana, CA 92705-4396  
Tel: (714) 953-1900  
Fax: (714) 953-0402

The Brulin Corporation  
PO Box 270  
2920 Dr. Andrew J. Brown Ave.  
Indianapolis, IN 46206  
Tel: (317) 923-3211  
Fax: (317) 925-4596

Carroll Company  
2900 W. Kingsley Road  
Garland, TX 75041  
Tel: (800) 527-5722  
Fax: (214) 840-0678

Chemical Marketing Corporation of America  
9945 Flanders Ct NE  
Blaine, MN 55449  
Tel: 763-785-0055  
866-388-6827  
Fax: 763-785-0088

A complete line of aqueous cleaners containing detergents, with and without glycol ethers. Hydrocarbon solvents and solvent blends. Non-ozone depleting chlorinated solvents. Provide free assistance to customers wishing to replace ozone-depleting chemicals. Synthetic machining fluids, lubricants and maintenance specialties.

Unique blend of orange oils and highly refined synthetic hydrocarbons formulated as a safe replacement for most chlorinated or halogenated, ozone-depleting solvents. Applications include degreasing, removal of oils, wax, tar, adhesives, fresh paint and oil-based inks. Also water-based, alkaline cleaners for the removal of heavy soil contaminants.

Advanced technology aqueous detergent systems for spray, immersion, ultrasonic, and passive process cleaning of fabricated metal or plastic parts.

Aqueous cleaning formulations containing detergents with and without glycol ethers. Formulations made from hydrocarbons and terpenes with and without emulsifiers. Specialty solvent blends for printing ink cleanup, electric motor degreasing, cleaning printed circuit boards, and assorted textile mill applications.

Common solvents including aliphatics, aromatics, alcohols, chlorinateds, and ketones.

Chemical Solvents, Inc.  
3751 Jennings Rd.  
Cleveland, OH 44109  
Tel: (216) 741-9310  
(800) 362-0693  
Fax: (216) 741-4080

Chemical Technologies, Inc.  
1610 Clara Street  
Jackson, MI 49203  
Tel: (800) 688-8262  
Fax: (517) 782-2448

Chem-Tech International  
1800 Diagonal Rd., Suite 600  
Alexandria, VA 22314  
Tel: (703) 549-1001  
Fax: (703) 549-1003

Chemtronics, Inc.  
8125 Cobb Center Dr.  
Kennesaw, GA 30144  
Tel: (404) 424-4888  
Fax: (404) 424-4267

Cobehn, Inc.  
640 Airport Road  
Winchester, VA 22602  
Tel: (703) 665-0707  
Fax: (703) 665-0768

Coleman Chemical, Inc.  
One Gemstar Lane  
Joliet, IL 60435  
Tel: (815) 727-3900  
Fax: (815) 727-3998

CRC Industries, Inc.  
885 Louis Dr.  
Warminster, PA 18974  
Tel: (215) 674-4300  
Fax: (215) 674-2196

Aliphatic hydrocarbon blends, terpenes, surfactants, biodegradable emulsifiers, non-ozone depleting halogenated solvents, HCFCs. Specialty formulations for metal, urethane fiberglass (resin) clean-up processes via spray, wipe and immersion systems. Turn-key parts cleaning services. Recycling, disposal of generated waste solvents and waters.

Odor-free synthetic carbon blends to replace ozone-depleting halogenated solvents. Also aqueous and semi-aqueous degreasers and aqueous cleaners providing corrosion protection.

Aqueous-based formulations containing detergents with and without glycol ethers as well as blends of hydrocarbons and emulsifiers which, when used in combination, provide residue-free cleaning. Can be used on all metals, teflon, plastic, and painted coatings. Also specially designed cleaning equipment.

Ultra-pure cleaners for electronics and metals.

Manufacturer of a non-solvent-based precision batch cleaning system, utilizing solvent materials filtered to .2um ppm. Process removes flux, oils and particulates by agitation, wetting and drying in an inert atmosphere. Also used for hybrids, and PCBs.

Specialty formulations of non-ozone depleting HFCs available in 1995.

Mixtures of hydrocarbon solvents with and without glycol ethers. Package types include aerosols and bulk.

Creative Enterprizes  
105 Anyway, Suite 209  
Lake Jackson, TX 77566  
Tel: (409) 292-0244  
Fax: (409) 292-0440

Detrex Corp.  
4000 Town Center, Suite 1100  
Southfield, MI 48175  
Tel: (313) 358-5800  
Fax: (313) 358-5803

Ecolink  
1481 Rock Mountain Blvd.  
Stone Mountain, GA 30083  
Tel: (404) 621-8240  
(800) 886-8240  
Fax: (404) 621-8245

Electrolube Corporation USA  
8200 Saint James Ave.  
Elmhurst, NY 11373  
Tel: (718) 565-5200  
Fax: (718) 565-5715

Environmental Recovery Resources, Inc.  
PO Box 36  
South Salem, NY 10590  
Tel: (914) 533-6175  
Fax: (914) 533-6275

Enviro Tech International  
2201 Clement Ave. #43  
Alameda, CA 94501-1487  
Tel: (510) 436-7603  
Fax: (510) 436-7345

Specialize in low cost conversion of existing facilities to safely use alternative cleaning agents. Design new or custom cleaning equipment and processes. Also design environmentally secure drying equipment and processes.

Aqueous micro-emulsion solution for gross metal cleaning and equipment for use with the cleaning solution. Alternative vapor degreasing process, specialty equipment and solvents for metals and electronics cleaning, chlorinated and HCFC solvents, and aqueous and semi-aqueous solvents.

Wide range of aqueous, semi-aqueous and non-aqueous chemistries. Formulations include a variety of hydrocarbon, NMP, DBE and terpene products as well as non-ozone depleting halogenated solvents. Manufacture a complete line of batch cleaning units for use with these solvents.

Non-toxic, non-flammable, biodegradable aqueous solvents suitable for in-line and batch equipment without modification. Also ideal for screen and pallet cleaning and precision metal degreasing (ferrous and non-ferrous).

Floating, dispersed, and dissolved hydrocarbon contaminants removed to surface water discharge limits, using: no coalescing plates, no centrifugal, no carbon absorption, no sorbent waste. Also offer systems and services to extend cleaning bath 'life' for more cost effective aqueous systems and waste water processing, and waste-minimized settling-pond and separator maintenance/ remediation.

Non-flammable, drop-in replacement solvent for vapor degreasing of metals, electronics, and precision components. Leaves no residue. Requires no additional cleaning. For use in existing vapor degreasers. Also, cold or wipe cleaning applications of metals, high voltage circuits, oxygen system cleaning, and spot cleaning of electronics.

ETUS, Inc.  
1511 Kastner Place  
Sanford, F. 32771  
Tel: (407) 321-7910  
Fax: (407) 321-3098

EXXON Chemical Co.  
PO Box 3272  
Houston, TX 77253-3272  
Tel: (800) 526-0749  
Fax: (713) 870-6661

Fine Organics Corp.  
205 Main St.  
PO Box 687  
Lodi, NJ 07644-0687  
Tel: (201) 472-6800  
(800) 526-7480  
Fax: (201) 472-6810

Firefreeze Worldwide, Inc.  
270 Route 46 East  
Rockaway, NJ 07866  
Tel: (973) 627-0722  
Fax: (973) 627-2982

Inland Technology, Inc.  
2612 Pacific Highway East  
Tacoma, WA 98424  
Tel: (206) 922-8932  
(800) 552-3100  
Fax: (206) 926-0577

International Specialty Products  
1361 Alps Rd.  
Wayne, NJ 07470  
Tel: (201) 628-3000  
Fax: (201) 628-4117

Formulations made of hydrocarbons and blends of hydrocarbons and emulsifiers. Also offer aqueous-based formulations containing detergents with and without glycol ethers.

Cleaners comprised of narrow boiling range, high flash point aliphatic hydrocarbons. Low olefin and aromatic content. Low residue, low corrosivity to metals, low odor, low toxicity. Require no water handling, recyclable by distillation. Effective against a wide range of waxes, oils and greases found in metal and precision cleaning.

Non-hazardous and biodegradable solvent and solvent-emulsion based alternatives. Products are applicable to the transportation, aviation, electronics, and coatings industries. Also offer water-based alternative products.

Aqueous based degreasing, cleaning and odor eliminating formulations. Products are plant derived, environmentally friendly, non-corrosive, non-flammable, and fully biodegradable. Unique applications for waste water and sludge treatment and oil/grease separation and removal. Can be used in hand sprayers, water pressurized units, power washers, and other spray equipment.

Range of aqueous cleaners used in hand-wipe cleaning. Also other non ozone-depleting biodegradable solvents for various cleaning applications, including vapor degreasing, precision cleaning, paint stripping, and resin removal.

Specialty solvents comprised of N-methyl-2-pyrrolidone (NMP) and gamma-butyrolactone (B.O) as well as other proprietary ingredients. Products are biodegradable, water soluble, and recyclable.

JnJ Industries  
195 E. Main St., Suite 303  
Milford, MA 01757  
Tel: (800) 554-9994  
Fax: (508) 478-2221

Koch Specialty Chemicals  
P.O. Box 2608  
Corpus Christi, TX 78403  
Tel: (512) 242-8350  
Fax: (512) 242-8353

MacDermid Incorporated  
245 Freight Street  
Waterbury, CT 06702  
Tel: (203) 575-5700  
Fax: (203) 575-5630

Micro Care Corp.  
34 Ronzo Road  
Bristol, CT 06010  
Tel: (203) 585-7912  
Fax: (203) 585-7378

Navy Brand Mfg Co.  
Division of Chemstar, Inc.  
5111 Southwest Avenue  
St. Louis, MO 63110-3496  
Tel: (800) 325-3312  
(314) 865-5500  
Fax: (314) 865-5509

Manufacturer of eight non-CFC formulations including a supersaturated wipe solvent.

A variety of aromatic and aliphatic hydrocarbon solvents, with a range of flashpoints, solvency power, and HAP content.

Low residue, low toxicity formulations, used for hand wipe operations, cold immersion tanks or other areas where precision cleaning is required.

Solvent cleaners based on but not limited to terpene hydrocarbon, alcohol, or HCFC technologies. Formulations are engineered for use in non-automated hand cleaning applications where rinsing is not available. Cleaners are effective in touch-up cleaning and precision cleaning of all types of flux residues, oils, grease and grime.

Industrial degreasers for metal cleaning and parts cleaning. Formulations are based on non-ozone depleting solvents. Also solvent-based, aqueous-based and also semi-aqueous-based products for a variety of cleaning applications on a host of substrates, both metallic and non-metallic.

Oakite Products, Inc.  
50 Valley Road  
Berkeley Heights, NJ 07922  
Tel: (908) 508-2107  
Fax: (908) 464-9250

High-tech, state-of-the-art, recyclable cleaning products for use in immersion, ultrasonic, hand wipe, and other cleaning applications. Many aqueous and semi-aqueous formulations adhere to the Clean Air Act, OSHA regulations, and do not contain SARA 313 ingredients. Comprehensive lines of products that exhibit biodegradability, oil splitting or emulsifying features. Terpene-based cleaners have no flash point, and alkaline, aqueous formulations include non-phosphated, non-chelated, mildly alkaline cleaners.

Occidental Chemical  
Corp. Technical Center  
PO Box 344  
Niagara Falls, NY 14302  
Tel: (800) 733-1165  
Fax: (716) 278-7297

Specially stabilized methylene chloride for a wide variety of applications. Formulations of halogenated toluenes and benzotrifluorides for cold cleaning of metals and electronics. Ethylene based glycol ethers for use in many cleaning formulations.

Orange Sol Industrial Products, Inc.  
955 North Fiesta Blvd, Suite 1  
Gilbert, AZ 85233-2801  
Tel: (602) 497-8822  
Fax: (602) 497-0444

Aqueous, semi-aqueous cleaners, hydrocarbon-based products and other cleaning alternatives and equipment (parts, washers). Effective cleaners for metal, electronic, precision and maintenance cleaning, suitable for agitation, soak, spray, ultrasonic and handwipe cleaning.

PDM Incorporated  
3512-6 Silverside Road  
Wilmington, DE 19810  
Tel: (302) 478-0768  
Fax: (302) 478-0299

Solvent formulations for cleaning/ removing grease, adhesives, tars/asphalt, waxes, and also used in degreasers, hand wipe cleaners, carpet cleaners and general purpose cleaners.

Petroferm Inc.  
5415 First Coast Highway  
Fernandina Beach, FL 32034  
Tel: (904) 261-8286  
Fax: (904) 261-6994

Broad line of formulations based on terpenes, ester, and aliphatic hydrocarbons and blends of these organic solvents with surfactants. Products are used for cold (hand) cleaning and in combination with various cleaning equipment. Products can be removed by evaporation, water, alcohols or nonflammable fluorinated solvents. Both products and rinse media can be recycled.

P-T Technologies, Inc.  
108 4th Ave. South  
Safety Harbor, FL 34695  
Tel: (800) 441-7874  
Fax: (813) 725-9544

Purac America, Inc  
111 Barclay Blvd  
Suite 280  
Lincolnshire, IL 60069  
Tel: (708) 634-6330  
Fax: (708) 634-1992

QO Chemicals, Inc.  
P.O. Box 2500  
One Great Lakes Blvd  
West Lafayette, IN 47906  
Tel: (800) 621-9521  
Fax: (317) 497-6287

The Rission Group Inc.  
13349 Michigan Ave.  
Dearborn, MI 48126  
Tel: (313) 581-2620  
Fax: (313) 581-3758

Rite Off, Inc.  
Seaford Industrial Park  
P.O. Box 1070  
Seaford, DE 19973  
Tel: (800) 645-5853  
(302) 628-2100  
Fax: (800) 571-2211

Rochester Midland Corp.  
333 Hollenbeck St.  
Rochester, NY 14621  
Tel: (716) 336-2200  
Fax: (716) 467-4406

Non-halogenated hydrocarbon-based specialty cleaning and degreasing formulations for precision cleaning. Also offer vapor degreaser alternatives, ionic contaminant removers, acetone, MEK alternatives for specific industrial applications.

Range of lactate esters used as safe and environmental friendly cleaners. Applications include general degreasing, flux removal, polymer removal, metal finishing, wipe solvent, precision cleaning in various industries.

Specialty solvents used in various cleaning applications. Solvents are bio-degradable, water miscible, and not photo-chemically reactive.

Aqueous and non-aqueous formulations containing surfactants with and without glycol ethers. Hydrocarbons and blends of hydrocarbons with emulsifiers also available.

Wide variety of cleaning and maintenance formulations using alcohols, terpenes, HFCs, hydrocarbons and chlorinated solvents. Specialists in aerosol technology, liquid formulations also available.

Formulations comprised of hydrocarbon and/or terpene solvents. Some also contain surfactants. Many contain alkaline builders and chelants as well as glycol ethers. Some aqueous-based or water-compatible formulations exhibit good biodegradability. Many products allow for good oil/grease separation upon standing.

Roly International  
P.O. Box 5103  
Ventura, CA 93005  
Tel: (805) 644-8664  
Fax: (805) 650-8222

Selig Chemical Industries  
PO Box 43106  
840 Selig Dr. SW  
Atlanta, GA 30378  
Tel: (404) 691-9220  
Fax: (404) 699-7024

Solvent Kleene, Inc.  
131.5 .ynnfield Street  
Peabody, MA 01960  
Tel: (508) 531-2279  
Fax: (508) 532-9304

Storchem Inc.  
3600 Billings Court, Suite 110  
Burlington, Ontario  
Canada .7N 3N6

Terpene Technologies Inc.  
3400 Ridge Rd. W, Suite 293  
Rochester, NY 14626  
Tel: (716) 546-8455  
(716) 777-0790  
Fax: (716) 227-3834

Thierica  
900 Clancy Ave.  
Grand Rapids, MI 49503  
Tel: (616) 458-1538  
Fax: (616) 458-7120

Cleaners for degreasing, cleaning and corrosion protection applications. Also other cleaners designed for avionics, computer applications, turbine blades used in jet engines, and glass cleaning.

Formulations made of hydrocarbons and blends of hydrocarbons and emulsifiers. Also offer aqueous-based formulations containing detergents with and without glycol ethers and some containing d-limonene.

Formulations, replacing chlorinated solvents, compatible with existing equipment, suitable with ferrous and non-ferrous metals, for oil removal, degreasing, removing flux, wax. Company offers on-site solvent-recovery closed-loop systems.

Aqueous-based terpene formulations containing detergents and emulsifiers; semi-aqueous cleaners and degreasers based on terpene alcohols and hydrocarbons; terpene alcohol and hydrocarbon blends used as non-water soluble solvents.

Terpene alcohol and hydrocarbon blends used as non-water soluble solvents, semi-aqueous cleaners and degreasers based on terpene alcohols and hydrocarbons. Also offer aqueous-based terpene formulations containing detergents and emulsifiers.

New low cost spray equipment manages extremely difficult cleaning jobs. Used with large and small parts containing baked grease and paint soils. Designed to be safe and environmentally secure with hydrocarbon and aqueous cleaning agents. Stainless steel construction.

Union Camp Corp.  
Bush Boake Allen Division  
PO Box 37617  
Jacksonville, F. 32236  
Tel: (904) 783-2180  
(800) 874-9220  
Fax: (904) 786-6495

Range of wood terpene-based alternative solvents for semi-aqueous and solvent only cleaning processes and maintenance cleaning applications. High solvency and high soil loading properties for removal of solder fluxes, heavy oils and greases, polishing compounds, carbonaceous deposits etc. to the highest cleanliness standards.

U.S. Polychemical Corp.  
Route 45 Chestnut Ridge Road  
Chestnut Ridge, NY 10977  
Tel: (914) 356-5530  
(800) 431-2072  
Fax: (914) 356-6656

Manufacturers of oil and grease buffing compounds, flux removing chemistries with non-chlorinated solvents, semi-aqueous, and aqueous technologies. Also automated cleaning systems with recirculating agitation or ultrasonics for turn-key applications.

Working Solutions, Inc.  
938 Cortlandt Street  
Houston, TX 77008  
Tel: (800) 829-4419  
Fax: (713) 862-5591

Aqueous, semi-aqueous and solvent cleaning technologies and equipment.

W.R. Grace & Co.  
Metalworking Fluids Group  
55 Hayden Ave.  
Lexington, MA 02173  
Tel: (617) 861-6600  
Fax: (617) 861-6600

Wide range of aqueous cleaning formulations for metal. precision, and maintenance cleaning. Includes formulations that are phosphate-free. Suitable for agitation, soak, spray, ultrasonic and hand wipe applications.

Zip-Chem Products  
1860 Dobbin Dr.  
San Jose, CA 95133  
Tel: (408) 729-0291  
(800) 648-2661  
Fax: (408) 272-8062

Aqueous, semi-aqueous aliphatic hydrocarbon, terpene and alcohol-based cleaners. Application oriented packaging like wipes, aerosols, specialty containers, and other delivery systems available.

#### NON-OZONE DEPLETING CHLORINATED SOLVENTS

Asahi Glass America, Inc.  
450 Lexington Ave., Suite 1920  
New York, NY 10017-3911  
Tel: (212) 687-4600  
Fax: (212) 687-4663

Methylene chloride for general metals, electronics and precision cleaning.

A.W. Chesterton  
225 Fallon Road Middlesex  
Industrial Park Stoneham,  
MA 02180-2999  
Tel: (617) 438-7000  
Fax: (617) 438-8971

Carroll Company  
2900 W. Kingsley Road  
Garland, TX 75041  
Tel: (800) 527-5722  
Fax: (214) 840-0678

Chemical Marketing Corporation of America  
180 Humboldt Avenue North  
Minneapolis, MN 55405  
Tel: (612) 377-1971  
Fax: (612) 377-5597

Chemical Solvents, Inc.  
3751 Jennings Rd.  
Cleveland, OH 44109  
Tel: (216) 741-9310  
(800) 362-0693  
Fax: (216) 741-4080

Chemtronics, Inc.  
8125 Cobb Center Dr.  
Kennesaw, GA 30144  
Tel: (404) 424-4888  
Fax: (404) 424-4267

Cobehn, Inc.  
640 Airport Road  
Winchester, VA 22602  
Tel: (703) 665-0707  
Fax: (703) 665-0768

A complete line of aqueous cleaners containing detergents, with and without glycol ethers. Hydrocarbon solvents and solvent blends. Non-ozone depleting chlorinated solvents. Provide free assistance to customers wishing to replace ozone-depleting chemicals. Synthetic machining fluids, lubricants and maintenance specialties.

Aqueous cleaning formulations containing detergents with and without glycol ethers. Formulations made from hydrocarbons and terpenes with and without emulsifiers. Specialty solvent blends for printing ink cleanup, electric motor degreasing, cleaning printed circuit boards, and assorted textile mill applications.

Common solvents including aliphatics, aromatics, alcohols, chlorinateds, and ketones.

Aliphatic hydrocarbon blends, terpenes, surfactants, biodegradable emulsifiers, non-ozone depleting halogenated solvents, HCFCs. Specialty formulations for metal, urethane fiberglass (resin) clean-up processes via spray, wipe and immersion systems. Turn-key parts cleaning services. Recycling, disposal of generated waste solvents and waters.

Ultra-pure cleaners for electronics and metals.

Manufacturer of a non-solvent-based precision batch cleaning system, utilizing solvent materials filtered to .2um ppm. Process removes flux, oils and particulates by agitation, wetting and drying in an inert atmosphere. Also used for hybrids, and PCBs.

Coleman Chemical, Inc.  
One Gemstar Lane  
Joliet, IL 60435  
Tel: (815) 727-3900  
Fax: (815) 727-3998

Container Products Corp.  
PO Box 3767  
Wilmington, NC 28406  
Tel: (919) 392-6100  
Fax: (919) 392-6778

Detrex Corp.  
4000 Town Center, Suite 1100  
Southfield, MI 48175  
Tel: (313) 358-5800  
Fax: (313) 358-5803

Dow U.S.A.  
Midland, MI 48674  
Tel: (800) 337-4369  
Fax: (517) 832-1465

Ecolink  
1481 Rock Mountain Blvd.  
Stone Mountain, GA 30083  
Tel: (404) 621-8240  
(800) 886-8240  
Fax: (404) 621-8245

Electrolube Corporation USA  
8200 Saint James Ave.  
Elmhurst, NY 11373  
Tel: (718) 565-5200  
Fax: (718) 565-5715

Hubbard-Hall, Inc.  
PO Box 790  
Waterbury, CT 06725  
Tel: (203) 754-2171  
(800) 648-3412  
Fax: (203) 596-9544  
(203) 756-9017

Specialty formulations of non-ozone depleting HFCs available in 1995.

Systems incorporating a variety of aqueous cleaning techniques which include filtered negative pressure chambers, high pressure chambers, and mobile cleaning systems.

Aqueous micro-emulsion solution for gross metal cleaning and equipment for use with the cleaning solution. Alternative vapor degreasing process, specialty equipment and solvents for metals and electronics cleaning, chlorinated and HCFC solvents, and aqueous and semi-aqueous solvents.

Trichloroethylene, methylene chloride, and perchloroethylene.

Wide range of aqueous, semi-aqueous and non-aqueous chemistries. Formulations include a variety of hydrocarbon, NMP, DBE and terpene products as well as non-ozone depleting halogenated solvents. Manufacture a complete line of batch cleaning units for use with these solvents.

Non-toxic, non-flammable, biodegradable aqueous solvents suitable for in-line and batch equipment without modification. Also ideal for screen and pallet cleaning and precision metal degreasing (ferrous and non-ferrous).

Kester Solder Division .itton Industries  
515 E. Touhy Avenue  
Des Plaines, IL 60018-2675  
Tel: (708) 297-1600  
Fax: (708) 390-9338

Navy Brand Mfg Co.  
Division of Chemstar, Inc.  
5111 Southwest Avenue  
St. Louis, MO 63110-3496  
Tel: (800) 325-3312  
(314) 865-5500  
Fax: (314) 865-5509

Oakite Products, Inc.  
50 Valley Road  
Berkeley Heights, NJ 07922  
Tel: (908) 508-2107  
Fax: (908) 464-9250

Occidental Chemical  
Corp. Technical Center  
PO Box 344  
Niagara Falls, NY 14302  
Tel: (800) 733-1165  
Fax: (716) 278-7297

PPG Industries, Inc.  
Chemicals Group  
One PPG Place  
Pittsburgh, PA 15272  
Tel: (800) 243-6774  
Fax: (412) 434-2401

Alcohol-based cleaners, solvent blends, and aqueous saponifiers. Also manufacture no-clean, water-clean, and VOC-free; fluxes, solders, and solder pastes.

Industrial degreasers for metal cleaning and parts cleaning. Formulations are based on non-ozone depleting solvents. Also solvent-based, aqueous-based and also semi-aqueous-based products for a variety of cleaning applications on a host of substrates, both metallic and non-metallic.

High-tech, state-of-the-art, recyclable cleaning products for use in immersion, ultrasonic, hand wipe, and other cleaning applications. Many aqueous and semi-aqueous formulations adhere to the Clean Air Act, OSHA regulations, and do not contain SARA 313 ingredients. Comprehensive lines of products that exhibit biodegradability, oil splitting or emulsifying features. Terpene-based cleaners have no flash point, and alkaline, aqueous formulations include non-phosphated, non-chelated, mildly alkaline cleaners.

Specially stabilized methylene chloride for a wide variety of applications. Formulations of halogenated toluenes and benzotrifluorides for cold cleaning of metals and electronics. Ethylene based glycol ethers for use in many cleaning formulations.

Trichloroethylene, perchloroethylene, and methylene chloride.

Rite Off, Inc.  
Seaford Industrial Park  
P.O. Box 1070  
Seaford, DE 19973  
Tel: (800) 645-5853  
(302) 628-2100  
Fax: (800) 571-2211

Rochester Midland Corp.  
333 Hollenbeck St.  
Rochester, NY 14621  
Tel: (716) 336-2200  
Fax: (716) 467-4406

Selig Chemical Industries  
PO Box 43106  
840 Selig Dr. SW  
Atlanta, GA 30378  
Tel: (404) 691-9220  
Fax: (404) 699-7024

Working Solutions, Inc.  
938 Cortlandt Street  
Houston, TX 77008  
Tel: (800) 829-4419  
Fax: (713) 862-5591

Zip-Chem Products  
1860 Dobbin Dr.  
San Jose, CA 95133  
Tel: (408) 729-0291  
(800) 648-2661  
Fax: (408) 272-8062

#### HCFCs

Allied-Signal  
PO Box 1139R  
Morristown, NJ 07960  
Tel: (201) 455-4848  
Fax: (201) 455-2745

Wide variety of cleaning and maintenance formulations using alcohols, terpenes, HFCs, hydrocarbons and chlorinated solvents. Specialists in aerosol technology, liquid formulations also available.

Formulations comprised of hydrocarbon and/or terpene solvents. Some also contain surfactants. Many contain alkaline builders and chelants as well as glycol ethers. Some aqueous-based or water-compatible formulations exhibit good biodegradability. Many products allow for good oil/grease separation upon standing.

Formulations made of hydrocarbons and blends of hydrocarbons and emulsifiers. Also offer aqueous-based formulations containing detergents with and without glycol ethers and some containing d-limonene.

Aqueous, semi-aqueous and solvent cleaning technologies and equipment.

Aqueous, semi-aqueous aliphatic hydrocarbon, terpene and alcohol-based cleaners. Application oriented packaging like wipes, aerosols, specialty containers, and other delivery systems available.

Asahi Glass America, Inc.  
450 Lexington Ave., Suite 1920  
New York, NY 10017-3911  
Tel: (212) 687-4600  
Fax: (212) 687-4663

Atochem North America  
Three Parkway  
Philadelphia, PA 19102  
Tel: (215) 587-7192  
Fax: (215) 587-7199

A.W. Chesterton  
225 Fallon Road Middlesex  
Industrial Park Stoneham,  
MA 02180-2999  
Tel: (617) 438-7000  
Fax: (617) 438-8971

Chemical Solvents, Inc.  
3751 Jennings Road  
Cleveland, OH 44109  
Tel: (216) 741-9310  
Fax: (216) 741-4080

Chemtronics, Inc.  
8125 Cobb Center Dr.  
Kennesaw, GA 30144  
Tel: (404) 424-4888  
Fax: (404) 424-4267

Cobehn, Inc.  
640 Airport Road  
Winchester, VA 22602  
Tel: (703) 665-0707  
Fax: (703) 665-0768

HCFC-225caicb can be used as a single product as well as an alcohol mixture or with surface active agents. Compatible with most metals and plastics, and applicable for degreasing, defluxing, particle-removing, drying and dry-cleaning, with low total energy consumption.

A complete line of aqueous cleaners containing detergents, with and without glycol ethers. Hydrocarbon solvents and solvent blends. Non-ozone depleting chlorinated solvents. Provide free assistance to customers wishing to replace ozone-depleting chemicals. Synthetic machining fluids, lubricants and maintenance specialties.

Aliphatic hydrocarbon blends, terpenes, surfactants, biodegradable emulsifiers, non-ozone depleting halogenated solvents, HCFCs. Specialty formulations for metal, urethane fiberglass (resin) clean-up processes via spray, wipe and immersion systems. Turn-key parts cleaning services. Recycling, disposal of generated waste solvents and waters.

Ultra-pure cleaners for electronics and metals.

Manufacturer of a non-solvent-based precision batch cleaning system, utilizing solvent materials filtered to .2um ppm. Process removes flux, oils and particulates by agitation, wetting and drying in an inert atmosphere. Also used for hybrids, and PCBs.

Coleman Chemical, Inc.  
One Gemstar Lane  
Joliet, IL 60435  
Tel: (815) 727-3900  
Fax: (815) 727-3998

CRC Industries, Inc.  
885 Louis Dr.  
Warminster, PA 18974  
Tel: (215) 674-4300  
Fax: (215) 674-2196

Detrex Corp.  
4000 Town Center, Suite 1100  
Southfield, MI 48175  
Tel: (313) 358-5800  
Fax: (313) 358-5803

Ecolink  
1481 Rock Mountain Blvd.  
Stone Mountain, GA 30083  
Tel: (404) 621-8240  
(800) 886-8240  
Fax: (404) 621-8245

Electrolube Corporation USA  
8200 Saint James Ave.  
Elmhurst, NY 11373  
Tel: (718) 565-5200  
Fax: (718) 565-5715

Micro Care Corp.  
34 Ronzo Road  
Bristol, CT 06010  
Tel: (203) 585-7912  
Fax: (203) 585-7378

Specialty formulations of non-ozone depleting HFCs available in 1995.

Aerosol and bulk packages of HCFCs.  
Nonflammable and leaves no residue. May not be compatible with some plastics such as polycarbonates and polystyrene.

Aqueous micro-emulsion solution for gross metal cleaning and equipment for use with the cleaning solution. Alternative vapor degreasing process, specialty equipment and solvents for metals and electronics cleaning, chlorinated and HCFC solvents, and aqueous and semi-aqueous solvents.

Wide range of aqueous, semi-aqueous and non-aqueous chemistries. Formulations include a variety of hydrocarbon, NMP, DBE and terpene products as well as non-ozone depleting halogenated solvents. Manufacture a complete line of batch cleaning units for use with these solvents.

Non-toxic, non-flammable, biodegradable aqueous solvents suitable for in-line and batch equipment without modification. Also ideal for screen and pallet cleaning and precision metal degreasing (ferrous and non-ferrous).

Solvent cleaners based on but not limited to terpene hydrocarbon, alcohol, or HCFC technologies. Formulations are engineered for use in non-automated hand cleaning applications where rinsing is not available. Cleaners are effective in touch-up cleaning and precision cleaning of all types of flux residues, oils, grease and grime.

Rite Off, Inc.  
Seaford Industrial Park  
P.O. Box 1070  
Seaford, DE 19973  
Tel: (800) 645-5853  
(302) 628-2100  
Fax: (800) 571-2211

Selig Chemical Industries  
840 Selig Dr. SW  
Atlanta, GA 30336-2240  
Tel: (404) 691-9220  
Fax: (404) 699-7024

Working Solutions, Inc.  
938 Cortlandt Street  
Houston, TX 77008  
Tel: (800) 829-4419  
Fax: (713) 862-5591

Wide variety of cleaning and maintenance formulations using alcohols, terpenes, HFCs, hydrocarbons and chlorinated solvents. Specialists in aerosol technology, liquid formulations also available.

Formulations made of hydrocarbons and blends of hydrocarbons and emulsifiers. Also offer aqueous-based formulations containing detergents with and without glycol ethers and some containing d-limonene.

Aqueous, semi-aqueous and solvent cleaning technologies and equipment.

## OTHER CLEANING ALTERNATIVES AND EQUIPMENT

3M Company  
Specialty Chemicals Division  
Building 223-65-04  
St. Paul, MN 55144  
Tel: (612) 733-1710  
Fax: (612) 733-6791

ACCE.  
1825 E. Piano Parkway  
Piano, TX 75074-8129  
Tel: (214) 424-3525  
Fax: (214) 424-7526

Altos Engineering, Inc.  
6009 N. 61 Ave  
Glendale, AZ 85301  
Tel: (602) 931-8434  
Fax: (602) 937-6396

Ambassador Marketing  
Route 1-Box 207  
St. David, AZ 85630  
Tel: (602) 720-4310  
Fax: (602) 720-4068

Ardrox Inc.  
16961 Knott Avenue  
La Mirada, CA 90638  
Tel: (714) 739-2821  
Fax: (714) 670-6480

A.W. Chesterton  
225 Fallon Road Middlesex  
Industrial Park Stoneham,  
MA 02180-2999  
Tel: (617) 438-7000  
Fax: (617) 438-8971

Perfluorocarbon-based fluids used as rinsing materials in specialty niche cleaning applications. These fluids are especially designed for cleaning processes for high-value parts when aqueous or semi-aqueous cleaning are not viable options.

System utilizing centrifugal cleaning to provide superior washing, effective rinsing, and drying of populated printed circuit boards and hybrid circuits. Includes automatic solvent recycling and rinse water purification with no required drain. Compatible with chlorocarbons, fluorocarbons, H<sub>2</sub>O, and terpenes.

Batch and inline cleaning equipment with non-chemical, thermal vacuum drying of rinse waters. Detergent formulations available with and without glycol ethers.

Aqueous and alcohol-based cleaners for low residue degreasing and dewaxing applications. Formulations are nonflammable and nonfuming.

Full range of aqueous-based formulations as well as aliphatic hydrocarbon-based blends, terpene-based formulations, hydrocarbon-based solvent blends and other cleaning alternatives and equipment.

A complete line of aqueous cleaners containing detergents, with and without glycol ethers. Hydrocarbon solvents and solvent blends. Non-ozone depleting chlorinated solvents. Provide free assistance to customers wishing to replace ozone-depleting chemicals. Synthetic machining fluids, lubricants and maintenance specialties.

Babcock & Wilcox CIM Systems  
4004 Murray Place  
Richmond, VA 24501  
Tel: (804) 948-1361  
Fax: (804) 948-1313

Baron-Blakeslee, Inc.  
1500 West 16th St.  
Long Beach, CA 90813  
Tel: (800) 548-4422  
Fax: (310) 491-1091

Blackstone Ultrasonics, Inc.  
9 North Main St.  
Jamestown, NY 14701  
Tel: (716) 665-2340  
(800) 766-6606  
Fax: (716) 665-2480

Branson Ultrasonics Inc.  
41 Eagle Rd.  
Danbury, CT 06810  
Tel: (203) 796-0400  
Fax: (203) 796-0381

Break-Free, Inc.  
1035 S. Linwood Avenue  
Santa Ana, CA 92705-4396  
Tel: (714) 953-1900  
Fax: (714) 953-0402

Provide turnkey automated cleaning and inspection (SQCiSPC) systems for complete integration into process cleaning lines, including aqueous and non-aqueous systems, material handling, drying, cleanliness and geometric inspection, and computer protocol communication. Full-scope of services from process selection, development, installation, training, and continued follow-up support.

Full line of cleaning equipment for use with aqueous, semi-aqueous, HCFC, and chlorinated solvents. Closed loop system incorporating vacuum drying available (near zero emissions).

Complete range of ultrasonic cleaning products from stand-alone and bench-top heated tanks to wash multiple rinse dry console systems with optional material handling and automation. Also, fluxless ultrasonic solder pots for tinning leads and electronics.

Ultrasonic cleaning equipment and integrated cleaning systems for metal, electronic, and precision cleaning requirements. Manual and fully automated material handling transport systems. Equipment for aqueous, semi-aqueous and solvent chemistry.

Unique blend of orange oils and highly refined synthetic hydrocarbons formulated as a safe replacement for most chlorinated or halogenated, ozone-depleting solvents. Applications include degreasing, removal of oils, wax, tar, adhesives, fresh paint and oil-based inks. Also water-based, alkaline cleaners for the removal of heavy soil contaminants.

Carroll Company  
2900 W. Kingsley Road  
Garland, TX 75041  
Tel: (800) 527-5722  
Fax: (214) 840-0678

Castrol, N.A., Specialty Products Division  
16715 Von Karman Avenue, Suite 230  
Irvine, CA 92714  
Tel: (714) 660-9414  
Fax: (714) 660-9374

CF TECHnologies, Inc.  
1 Westinghouse Plaza, Suite 200  
Hyde Park, MA 02136-2059  
Tel: (617) 364-2500  
Fax: (617) 364-2550

Chemical Solvents, Inc.  
3751 Jennings Road  
Cleveland, OH 44109  
Tel: (216) 741-9310  
Fax: (216) 741-4080

Chem-Tech International  
1800 Diagonal Rd., Suite 600  
Alexandria, VA 22314  
Tel: (703) 549-1001  
Fax: (703) 549-1003

Church & Dwight Co., Inc.  
469 N. Harrison St.  
Princeton, NJ 08543-5297  
Tel: (609) 497-7230

Aqueous cleaning formulations containing detergents with and without glycol ethers. Formulations made from hydrocarbons and terpenes with and without emulsifiers. Specialty solvent blends for printing ink cleanup, electric motor degreasing, cleaning printed circuit boards, and assorted textile mill applications.

Fluoroclean™ X-100, a PFC, which is acceptable for use in certain high performance cleaning and drying applications such as the residual free removal of specialized halogenated lubricants used with aerospace and avionics components, oxygen service equipment and components, medical services and equipment, critical analytical devices, and oil and gas exploration and associated supply components.

Supercritical fluid extraction cleaning process for removing organic solvent, oil and lubricant residues. May also be effective for particulate removal when used in conjunction with agitation and/or ultrasonics.

Aliphatic hydrocarbon blends, terpenes, surfactants, biodegradable emulsifiers, non-ozone depleting halogenated solvents, HCFCs. Specialty formulations for metal, urethane fiberglass (resin) clean-up processes via spray, wipe and immersion systems. Turn-key parts cleaning services. Recycling, disposal of generated waste solvents and waters.

Aqueous-based formulations containing detergents with and without glycol ethers as well as blends of hydrocarbons and emulsifiers which, when used in combination, provide residue-free cleaning. Can be used on all metals, teflon, plastic, and painted coatings. Also specially designed cleaning equipment.

Cincinnati Industrial Machinery  
PO Box 62027  
3280 Hageman St.  
Cincinnati, OH 45241 (street add.)  
45262 (PO Box)  
Tel: (513) 769-0700  
Fax: (513) 769-0697

Circle-Proscio, Inc.  
2017 Yost Ave.  
Bloomington, IN 47403  
Tel: (812) 339-3653  
Fax: (812) 331-2566

Cobehn, Inc.  
640 Airport Road  
Winchester, VA 22602  
Tel: (703) 665-0707  
Fax: (703) 665-0768

Cold Jet, Inc.  
455 Wards Corner Rd.  
Cincinnati, OH 45140  
Tel: (513) 831-3211  
Fax: (513) 831-1209

Conceptronic, Inc.  
6 Post Rd.  
Portsmouth, NH 03801  
Tel: (603) 431-6262  
Fax: (603) 431-3303

Container Products Corp.  
PO Box 3767  
Wilmington, NC 28406  
Tel: (919) 392-6100  
Fax: (919) 392-6778

Custom designed machines for cleaning,  
surface preparation and other processing of  
metal and non-metallic parts.

Aqueous, alkaline, etchant cleaners for ferrous  
and non-ferrous applications. Aqueous,  
acidic, neutral, and alkaline oil rejecting  
cleaners with or without glycol ethers for  
ferrous and non-ferrous applications. Water  
miscible, semi-aqueous cleaners (electronics  
cleaning). Water emulsifiable cleaners  
containing aliphatic and terpene solvents.  
Evaporative oils for no clean applications.

Manufacturer of a non-solvent-based  
precision batch cleaning system, utilizing  
solvent materials filtered to .2um ppm.  
Process removes flux, oils and particulates by  
agitation, wetting and drying in an inert  
atmosphere. Also used for hybrids, and PCBs.

Dry ice blasting process using small pellets of  
carbon dioxide (dry ice) as the blasting media.  
Pellets sublime on contact leaving no media  
for containment or disposal. Process currently  
being used in molded products, baking food  
production, hazardous cleaning, automotive,  
aerospace (military and commercial) and  
contract cleaning industries.

Semi-aqueous, spray-based, totally closed-  
loop modular batch cleaning systems utilizing  
non-flammable, naturally derived alcohol  
solvents in solution with water. Also have an  
ultrasonic batch cleaning system for metallic  
and non-metallic electronic surfaces and other  
difficult-to-clean non-electronic parts of  
unusual geometric shape.

Systems incorporating a variety of aqueous  
cleaning techniques which include filtered  
negative pressure chambers, high pressure  
chambers, and mobile cleaning systems.

Creative Enterprizes  
105 Anyway, Suite 209  
Lake Jackson, TX 77566  
Tel: (409) 292-0244  
Fax: (409) 292-0440

Crest Ultrasonics  
Scotch Rd. - Mercer County Airport  
PO Box 7266  
Trenton, NJ 08628  
Tel: (609) 883-4000  
(800) 441-9675  
Fax: (609) 883-6452

DEF.EX Corp.  
631 Ruberta Ave.  
Glendale, CA 91201  
Tel: (818) 241-7500  
Fax: (818) 241-7532

Dell-Chem of Arizona  
7119 E. Shea Blvd., Suite 106-224  
Scottsdale, AZ 85254  
Tel: (602) 951-5812  
Fax: (602) 948-4172

Dow Corning Corp.  
PO Box 994  
Midland, MI 48686-0994  
Tel: (517) 496-4000  
Fax: (517) 496-4511

Durr Industries, Inc.  
10301 Enterprise Dr.  
Davisburg, MI 48350  
Tel: (313) 625-5400  
Fax: (313) 625-5966

Specialize in low cost conversion of existing facilities to safely use alternative cleaning agents. Design new or custom cleaning equipment and processes. Also design environmentally secure drying equipment and processes.

Precision cleaning equipment (primarily ultrasonic systems) from standard wash-rinse-dry cleaning consoles to large custom automated batch cleaning equipment. Ultrasonic generator is sweep frequency generator capable of cavitating both aqueous and semi-aqueous chemistries. Full line of aqueous-based cleaning chemistries for ultrasonic applications as well.

Energized supercritical fluids. Gross and precision cleaning machines which accept most standard baskets and loads to 250 lbs for cleaning a variety of products. Other products include dense fluid recycling systems and various racks/fixtures.

Aqueous and alcohol-based cleaners for low residue degreasing and dewaxing applications. Formulations are nonflammable and nonfuming.

Volatile methyl siloxane (VMS) fluids containing no additives. Effective in removing cutting fluids, greases, body oils, and particles in cleaning of precision parts and metals. Easily recyclable by distillation or filtration.

All aqueous and semi-aqueous systems recycle and reuse process water. Solvent systems reduce emissions by 99% over conventional degreasing systems.

Ecolink  
1481 Rock Mountain Blvd.  
Stone Mountain, GA 30083  
Tel: (404) 621-8240  
(800) 886-8240  
Fax: (404) 621-8245

EcoSoft Systems Industrial  
104 Clearfield Lane, Suite 204  
Coatesville, PA 19320  
Tel: (215) 384-7200  
Fax: (215) 383-9951

Electronic Controls Design Inc.  
4287-A SE International Way  
Milwaukie, OR 97006  
Tel: (503) 659-6100  
(800) 323-4548  
Fax: (503) 659-4422

Environmental Solvents Corp.  
1840 Southside Blvd.  
Jacksonville, FL 32216  
Tel: (904) 724-1990  
Fax: (904) 724-2508

EnviroPro Technologies  
PO Box 5051  
2930 West 22nd St.  
Erie, PA 16512  
Tel: (814) 838-5888  
Fax: (814) 833-0145

Envirosolutions Inc.  
335 Post Road West  
Westport, CT 06880  
Tel: (203) 454-5902  
Fax: (203) 222-0190

Wide range of aqueous, semi-aqueous and non-aqueous chemistries. Formulations include a variety of hydrocarbon, NMP, DBE and terpene products as well as non-ozone depleting halogenated solvents. Manufacture a complete line of batch cleaning units for use with these solvents.

Electronic descaling systems for hard water treatment.

Coniferous (pine) terpene alternatives to hydrocarbon-based solvent cleaning. Can be used in single cold immersion or in solvent-wash/solvent rinse/dry process for water-free precision cleaning and defluxing.

One step cleaning system using supercritical carbon dioxide.

Biodegradable, non-caustic, neutral pH cleaner which is used in a closed loop parts washing system. Several different formulations developed to suit a variety of cleaning needs. Customized parts washing equipment is matched to the cleaning chemicals to ensure optimum performance.

Exxon Chemical Co.  
PO Box 3272  
Houston, TX 77253-3272  
Tel: (800) 526-0749  
Fax: (713) 870-6661

Acetate ester cleaners, as well as hydrocarbon fluid components with a broad range of properties available for use in blended formulations. Low residue, low corrosivity to metals. Effective for broad range of grimes (electronics). Formulations comprised of esters and hydrocarbon components effective in removing greases, oils and waxes found in metal, electronics, and precision cleaning.

Forward Technology Industries, Inc.  
13500 County Road 6  
Minneapolis, MN 55446-2777  
Tel: (612) 559-1785  
Fax: (612) 559-3929

Standard and custom FM-approved flammable solvent vapor degreasers for use with alcohol, cyclohexane, VMS solvents, azeotropes, and co-solvent applications. MiBACT vapor degreasers for use with PFCs, HCFCs and HFCs. Automation and superheat drying offered. Also other custom aqueous and semi-aqueous cleaning equipment available.

Finishing Equipment Inc.  
3640 Kennebec Dr.  
St. Paul, MN 55122  
Tel: (612) 452-1860  
Fax: (612) 452-9851

Aqueous, semi-aqueous and solvent cleaning systems available. From manual systems to automated high-production cleaning lines, with ultrasonics available as needed. Specialize in automated enclosed vapor degreasers for efficient use of the non-ozone depleting chlorinated solvents.

Firefreeze Worldwide, Inc.  
270 Route 46 East  
Rockaway, NJ 07866  
Tel: (973) 627-0722  
Fax: (973) 627-2982

Aqueous based degreasing, cleaning and odor eliminating formulations. Products are plant derived, environmentally friendly, non-corrosive, non-flammable, and fully biodegradable. Unique applications for waste water and sludge treatment and oilgrease separation and removal. Can be used in hand sprayers, water pressurized units, power washers, and other spray equipment.

Flura Corporation  
610 Rock Hill Road  
Newport, TN 37821  
Tel: (615) 623-4111  
Fax: (615) 623-4111

FMT Inc. (Findlay Machine & Tool)  
1950 Industrial Dr.  
Findlay, OH 45840  
Tel: (419) 422-0768  
(800) 878-8011  
Fax: (419) 422-0072

Fremont Industries, Inc.  
4400 Valley Industrial Park  
Shakopee, MN 55379  
Tel: (612) 445-4121  
Fax: (612) 496-3027

GaSonicsIPC  
2730 Junction Ave.  
San Jose, CA 95134-1909  
Tel: (408) 944-0212  
Fax: (408) 473-9530

Hurricane Systems, Inc.  
2080 Brooklyn Rd.  
PO Box 867  
Jackson, MI 49204  
Tel: (517) 787-3481  
Fax: (517) 787-2349

Insitu Environmental Chemical Co.  
8402 East Redwing Rd.  
Scottsdale, AZ 85250-5740  
Tel: (602) 948-9209  
Fax: (602) 951-0715

International Specialty Products  
1361 Alps Rd.  
Wayne, NJ 07470  
Tel: (201) 628-3000  
Fax: (201) 628-4117

Perfluorocarbons used for high performance cleaning applications where no other compatible cleaners are available.

Custom engineered parts cleaning equipment, standard parts cleaning equipment, and pollution control equipment.

Aqueous-based metal cleaning and non-metallic substrate cleaning formulations and application equipment. Includes spray, soak, and ultrasonic cleaners in rinse and no-rinse formulations.

Low temperature plasma (RF discharge) equipment process utilizes industrial grade gases such as oxygen, air, and nitrogen or combinations thereof. Highly effective on all materials and widely used in electronic device cleaning, flux/solder removal and medical device cleaning.

Wide range of "off-the-shelf", semi-custom, and custom parts cleaning systems using water-based cleaning compounds. Systems include: belt, rotary and overhead conveyors for continuous and batch processing; carousel, cabinet, and agitation tank washers; multi-stage wash, rinse, oxidation inhibit, and dry; oil removal and oil skimming devices; electric, gas, and steam heat packages.

Aqueous and alcohol-based cleaners for low residue degreasing and dewaxing applications. Formulations are nonflammable and nonfuming.

Specialty solvents comprised of N-methyl-2-pyrrolidone (NMP) and gamma-butyrolactone (B.O.) as well as other proprietary ingredients. Products are biodegradable, water soluble, and recyclable.

JM Associates, Inc.  
225 Railroad Avenue  
Bedford Hills, NY 10507  
Tel: (914) 241-3795  
Fax: (914) 241-3731

JnJ Industries  
195 E. Main St.  
Suite 303  
Milford, MA 01757  
Tel: (800) 554-9994  
Fax: (508) 478-2221

K.N. Ultraschall GmbH  
Siegfriedstr. 124  
D-64646 Heppenheim  
GERMANY  
Tel: +49-6252-14-0  
Fax: +49-6252-14-277

Kyzen Corporation  
430 Harding Industrial Drive  
Nashville, TN 37211  
Tel: (615) 831-0888  
Fax: (615) 831-0889

Lewis Corp.  
102 Willenbrock Rd.  
Oxford, CT 06478-  
1033  
Tel: (203) 264-3100  
Fax: (203) 264-3102

New bioremediation technology: safe, non-toxic, non-caustic, neutral pH, non-flammable aqueous cleaning solution with hydrocarbons. Has successfully replaced hazardous solvents in vehicle maintenance, metals cleaning and precision manufacturing operations. Also solvents for auto, marine, contaminated soil and grease cleaning. Application of cleaners by immersion, spray or within closed-loop industrial systems.

Manufacturer of eight non-CFC formulations including a supersaturated wipe solvent.

Standard and custom flammable solvent vapor degreasers for use with alcohol, cyclohexane, VMS solvents, azeotropes, and co-solvent applications, with automation. IPA dryers for post-aqueous drying. Also other custom aqueous and semi-aqueous cleaning equipment.

A broad line of non-hazardous, zero ODP, biodegradable, and low VOC cleaning products. Kyzen products are used for cold cleaning, immersion solvent cleaning, and aqueous spray cleaning. These materials are compatible with a wide range of cleaning machines: spray in air, spray in immersion, soak, and ultrasonic. Kyzen products can be used in closed looped systems for low zero discharge by a variety of commonly available water reuse systems.

Manufacturer of industrial cleaning systems, specializing in aqueous-based chemistries. Both ultrasonic and non-ultrasonic washers available.

iquid Carbonic Supercritical  
966 Postal Rd.  
Allentown, PA 18103  
Tel: (215) 266-9693  
Fax: (215) 266-1482

Micro Care Corp.  
34 Ronzo Road  
Bristol, CT 06010  
Tel: (203) 585-7912  
Fax: (203) 585-7378

Ney Ultrasonics  
1280 Blue Hills Avenue  
Bloomfield, CT 06002  
Tel: (203) 286-6149  
Fax: (203) 286-6150

Occidental Chemical  
Corp. Technical Center  
PO Box 344  
Niagara Falls, NY 14302  
Tel: (800) 733-1165  
Fax: (716) 278-7297

Performance Manufacturing Co.  
Malsbary Division  
9615 Inter Ocean Drive  
Cincinnati, OH 45246  
Tel: (513) 870-0200  
Fax: (513) 870-0182

Petroferm Inc.  
5415 First Coast Highway  
Fernandina Beach, FL 32034  
Tel: (904) 261-8286  
Fax: (904) 261-6994

Supercritical carbon dioxide cleaning technology and equipment. Closed loop or open loop recirculation systems effectively remove organic material from the component to be cleaned.

Solvent cleaners based on but not limited to terpene hydrocarbon, alcohol, or HCFC technologies. Formulations are engineered for use in non-automated hand cleaning applications where rinsing is not available. Cleaners are effective in touch-up cleaning and precision cleaning of all types of flux residues, oils, grease and grime.

Equipment for batch manual and batch automated cleaning using aqueous, water-miscible, semi-aqueous, and solvent chemistries. Complete application development laboratory to assist users.

Specially stabilized methylene chloride for a wide variety of applications. Formulations of halogenated toluenes and benzotrifluorides for cold cleaning of metals and electronics. Ethylene based glycol ethers for use in many cleaning formulations.

Steam Jet parts cleaning systems used in the removal of machining oils, dye penetrants, wax, and other contaminants from complex machined or cast parts.

Broad line of formulations based on terpenes, ester, and aliphatic hydrocarbons and blends of these organic solvents with surfactants. Products are used for cold (hand) cleaning and in combination with various cleaning equipment. Products can be removed by evaporation, water, alcohols or nonflammable fluorinated solvents. Both products and rinse media can be recycled.

P-T Technologies  
108 4th Avenue South  
Safety Harbor, F. 34695  
Tel: (800) 441-7874  
(813) 726-4644  
Fax: (813) 725-9544

Ramco Equipment Corporation  
32 Montgomery Street  
Hillside, NJ 07205  
Tel: (908) 687-6700  
Fax: (908) 687-0653

Ransohoff Co.  
North 5th St at Ford Boulevard  
Hamilton, OH 45011  
Tel: (513) 863-5813  
(800) 248-WASH  
Fax: (513) 863-8908

Rapid Engineering, Inc.  
P.O. Box 700  
1100 Seven Mile Road N.W.  
Comstock Park, MI 49321-0700  
Tel: (616) 784-0500  
Fax: (616) 784-0435

REM Sales  
34 Bradley Park Road  
East Grandie, CT 06026  
Tel: (203) 653-0071  
Fax: (203) 653-0393

R.G. Hanson Co., Inc.  
703 E. .incoln  
Bloomington, I. 61701  
Tel: (309) 828-5070  
(800) 392-0903  
Fax: (309) 829-3294

Non-halogenated hydrocarbon-based specialty cleaning and degreasing formulations for precision cleaning. Also offer vapor degreaser alternatives, ionic contaminant removers, acetone, MEK alternatives for specific industrial applications.

Standard line of single and multi-station aqueous degreasing systems with a wide selection of options including platform oscillation, directional turbulation, oil removal, ultrasonics, filtration, parts rotators and dryers. Nationwide network of application engineers to assist from process development through installation.

Standard and custom aqueous and semi-aqueous cleaning equipment for small through high production parts cleaning requirements, as well as very small to large part configurations and various part materials. Expertise in precision cleaning. Patented, mechanically agitated aqueous technology for high volume intricately shaped or machined parts as a direct replacement of solvent vapor degreasing and ultrasonic cleaning systems.

Parts washers utilizing low to medium pressure spraying of aqueous solutions on metal and plastic substrates. Exhaust incinerators for lowering VOC discharge to the atmosphere.

Very low emission, closed-loop vapor degreasing equipment for chlorinated solvents.

Aqueous cleaning chemicals and equipment. New equipment using only steam to clean also available.

S.A.S., Inc.  
2435 North Indian Hill Blvd  
Claremont, CA 91711-1730  
Tel: (909) 624-0396  
Fax: (909) 624-6336

Aqueous cleaning machines, part washers using spray, immersion, agitation, and ultrasonics. Range of detergents, cleaners, oil skimmers, exhaust systems, filtering systems, auto rinse systems, and hot air dryers.

Serec Corp.  
P.O. Box 28129  
Providence, RI 02908  
Tel: (401) 421-6080  
Fax: (401) 521-5690

Manufacturers and designers of cleaning equipment using organic and chlorinated solvents. Equipment design uses vacuum technology to reduce emissions to near zero without refrigeration.

S&K Products International  
80 Red Schoolhouse Rd. #102  
Chestnut Ridge, NY 10977  
Tel: (914) 425-6200  
Fax: (914) 425-7602

Isopropyl alcohol cleaning, degreasing, vapor drying systems.

Smart Sonic Precision Cleaning Systems  
2372 Teller Rd., #107  
Newbury Park, CA 91320  
Tel: (805) 499-7440  
Fax: (805) 375-5781

Automated ultrasonic and spray batch cleaners for precision cleaning of metal, plastic, and ceramic parts. Systems clean oils, particulate and other contaminants. Optional waste evaporator.

Solidstrip Inc.  
601 Interchange Blvd.  
Newark, DE 19711  
Tel: (302) 292-8340  
(800) 677-4568  
Fax: (302) 292-8321

Acrylic plastic blasting media for paint stripping.

Sonitech Inc.  
239 East Stephenson St.  
Freeport, I. 61032  
Tel: (815) 235-2400  
Fax: (815) 232-2150

Ultrasonic cleaning equipment using aqueous or semi-aqueous chemistries for a wide range of applications. Complete systems include cleaning tanks, rinse, tanks, dryers and closed loop rinse water recirculation systems. System uses alcohol or other solvents with perfluorinated chemistry for rinsing and drying non-water contact applications.

Step Kare Corporation  
P.O. Box 211  
Highland Park, IL 60035  
Tel: (708) 358-2158  
Fax: (708) 358-2158

Sub-Micron Cleaning Systems  
P.O. Box 219  
Carpinteria, CA 93013  
Tel: (805) 566-3830  
Fax: (805) 566-3813

Surftran  
Division of Robert Bosch Corporation  
30250 Stephenson Hwy  
Madison Heights, MI 48071  
Tel: (810) 691-2560  
Fax: (810) 847-0206

Tally Cleaning Systems  
Division of .etfab Engineering  
332 John Diestch Blvd.  
Attleboro Falls, MA 02763  
Tel: (508) 695-1007  
Fax: (508) 695-6335

Thierica  
900 Clancy Ave.  
Grand Rapids, MI 49503  
Tel: (616) 458-1538  
Fax: (616) 458-7120

Water-based flux remover, effective on rosin and non-rosin fluxes; aqueous coating remover. Also removes cutting oils and other contaminants. Non-aqueous coating remover contains no petroleum distillates or glycol ethers. Capable of removing conformal coatings or rosin fluxes in a non-aqueous formulation.

Solidigas CO<sub>2</sub> spray cleaning equipment for removing particulate contamination from critical surfaces, and the removal of sub-micron size particles. Applications include cleaning commercial and military optical components and systems, hard disk drives, semiconductor manufacturing equipment, electro-plating and polishing, and cleaning medical equipment.

Precision and non-precision aqueous cleaning equipment. Environmentally sound chemical cleaners and rust inhibitors for aqueous cleaning.

Single and multiple stage flat belt spraywashers, monorail spraywashers and rotary drum spraywashers which utilize aqueous-based cleaning formulations. Complete custom systems available which include spraywash, sprayrinse, rustinhibit, hot air dry, particle filtration, oil separation, etc.

New low cost spray equipment manages extremely difficult cleaning jobs. Used with large and small parts containing baked grease and paint soils. Designed to be safe and environmentally secure with hydrocarbon and aqueous cleaning agents. Stainless steel construction.

Tiyoda Mfg. U.S.A., Inc.  
1613 Lockness Place  
Torrance, CA 90501  
Tel: (310) 539-5471  
Fax: (310) 539-5881

Ultrasonic Power Systems Ltd.  
Unit C1  
Hortonwood 10  
Telford, Shropshire  
ENG.AND TF1 4ES  
Tel: 0952 676646  
Fax: 0952 676599

Ultronix Inc.  
104 Niantic Rd.  
Barto, PA 19504  
Tel: (800) 553-7881  
Fax: (215) 845-3995

Unitech Industrial Inc.  
PO Box 330  
16 South Ave,  
Wappingers Falls, NY 12590  
Tel: (914) 297-0745  
(800) 277-5522  
Fax: (914) 297-2919

Vector Environmental, Inc.  
3374 West Hopkins Street  
Milwaukee, WI 53216  
Tel: (414) 444-4010  
Fax: (414) 449-2628

Closed-loop and self-contained ultrasonic batch cleaning system. Ultrasonic immersion (spray is optional) and vapor cleaning combined with vacuum drying provide complete cleaning and drying of virtually any component or part. Near zero emissions.

Alcohol cleaning using perfluorocarbons as a vapor blanket to inhibit flammability.

Retrofit existing equipment for HCFCs, chlorinated solvents, perfluorinated chemicals, and hydrocarbon-based solvents. New equipment (manual or automated) for efficient use of non-aqueous vapor phase chemicals.

Closed loop industrial cleaning systems. Spray washers, batch cleaning systems, vapor degreasing, and pretreatment systems available in new equipment and retrofits. Waste water treatment and recycling, 100% oil removal from the cleaning process.

Manufacturers of solvent emission control technologies including closed-loop systems for flushing, spraying, degreasing, ultrasonics, drying, coating, and bonding. All equipment compatible with flammable solvents, blends, and azeotropes.

Zip-Chem Products  
1860 Dobbin Dr.  
San Jose, CA 95133  
Tel: (408) 729-0291  
(800) 648-2661  
Fax: (408) 272-8062

Aqueous, semi-aqueous aliphatic hydrocarbon, terpene and alcohol-based cleaners. Application oriented packaging like wipes, aerosols, specialty containers, and other delivery systems available.

#### PO..UTION CONTRO. EQUIPMENT

American Metal Wash, Inc.  
PO Box 265  
360 Euclid Ave.  
Canonsburg, PA 15317  
Tel: (412) 746-4203  
Fax: (412) 746-5738

.ine of evaporators, coalescers, and solution filtration systems designed to assist in cleaning up the cleaning solutions. Units can be provided as batch components to be added to current systems or totally automated to be incorporated with an existing system or with new cleaning equipment.

Baron-Blakeslee, Inc.  
1500 West 16th St.  
.ong Beach, CA 90813  
Tel: (800) 548-4422  
Fax: (310) 491-1091

Full line of cleaning equipment for use with aqueous, semi-aqueous, HCFC, and chlorinated solvents. Closed loop system incorporating vacuum drying available (near zero emissions).

Better Engineering Mfg., Inc.  
8361 Town Center Court  
Baltimore, MD 21236-4964  
Tel: (410) 931-0000  
(800) 229-3380  
Fax: (410) 931-0053

Break-Free, Inc.  
1035 S. Linwood Avenue  
Santa Ana, CA 92705-4396  
Tel: (714) 953-1900  
Fax: (714) 953-0402

CF TECHNOLOGIES, Inc.  
1 Westinghouse Plaza, Suite 200  
Hyde Park, MA 02136-2059  
Tel: (617) 364-2500  
Fax: (617) 364-2550

Cincinnati Industrial Machinery  
PO Box 62027  
3280 Hageman St.  
Cincinnati, OH 45241 (street add.)  
45262 (PO Box)  
Tel: (513) 769-0700  
Fax: (513) 769-0697

Cobehn, Inc.  
640 Airport Road  
Winchester, VA 22602  
Tel: (703) 665-0707  
Fax: (703) 665-0768

Container Products Corp.  
PO Box 3767  
Wilmington, NC 28406  
Tel: (919) 392-6100  
Fax: (919) 392-6778

Manufacturers of industrial cleaning equipment, including automatic jet washers compatible with biodegradable detergents and water solutions. Also cleaning systems with wash, rinse, and dry cycles, custom systems, extended wash cabinets, large capacity systems, and tumbling systems.

Unique blend of orange oils and highly refined synthetic hydrocarbons formulated as a safe replacement for most chlorinated or halogenated, ozone-depleting solvents. Applications include degreasing, removal of oils, wax, tar, adhesives, fresh paint and oil-based inks. Also water-based, alkaline cleaners for the removal of heavy soil contaminants.

Supercritical fluid extraction cleaning process for removing organic solvent, oil and lubricant residues. May also be effective for particulate removal when used in conjunction with agitation and/or ultrasonics.

Custom designed machines for cleaning, surface preparation and other processing of metal and non-metallic parts.

Manufacturer of a non-solvent-based precision batch cleaning system, utilizing solvent materials filtered to .2um ppm. Process removes flux, oils and particulates by agitation, wetting and drying in an inert atmosphere. Also used for hybrids, and PCBs.

Systems incorporating a variety of aqueous cleaning techniques which include filtered negative pressure chambers, high pressure chambers, and mobile cleaning systems.

Creative Enterprizes  
105 Anyway, Suite 209  
Lake Jackson, TX 77566  
Tel: (409) 292-0244  
Fax: (409) 292-0440

Ecolink  
1481 Rock Mountain Blvd.  
Stone Mountain, GA 30083  
Tel: (404) 621-8240  
(800) 886-8240  
Fax: (404) 621-8245

Ecology Systems, Inc.  
PO Box 391  
Bellingham, MA 02019  
Tel: (508) 966-0396

Environmental Recovery Resources, Inc.  
PO Box 36  
South Salem, NY 10590  
Tel: (914) 533-6175  
Fax: (914) 533-6275

ETUS, Inc.  
1511 Kastner Place  
Sanford, F. 32771  
Tel: (407) 321-7910  
Fax: (407) 321-3098

FMT Inc. (Findlay Machine & Tool)  
1950 Industrial Dr.  
Findlay, OH 45840  
Tel: (419) 422-0768  
(800) 878-8011  
Fax: (419) 422-0072

Hotsy Equipment Co.  
67 Sprague St.  
Boston, MA 02136  
Tel: (800) 544-7790

Specialize in low cost conversion of existing facilities to safely use alternative cleaning agents. Design new or custom cleaning equipment and processes. Also design environmentally secure drying equipment and processes.

Wide range of aqueous, semi-aqueous and non-aqueous chemistries. Formulations include a variety of hydrocarbon, NMP, DBE and terpene products as well as non-ozone depleting halogenated solvents. Manufacture a complete line of batch cleaning units for use with these solvents.

Floating, dispersed, and dissolved hydrocarbon contaminants removed to surface water discharge limits, using: no coalescing plates, no centrifugal, no carbon absorption, no sorbent waste. Also offer systems and services to extend cleaning bath 'life' for more cost effective aqueous systems and waste water processing, and waste-minimized settling-pond and separator maintenance/ remediation.

Formulations made of hydrocarbons and blends of hydrocarbons and emulsifiers. Also offer aqueous-based formulations containing detergents with and without glycol ethers.

Custom engineered parts cleaning equipment, standard parts cleaning equipment, and pollution control equipment.

Hoyt Corp.  
Forgs Rd.  
Westport, MA 02790-0217  
Tel: (508) 636-8811  
Fax: (508) 636-2088

Hurricane Systems, Inc.  
2080 Brooklyn Rd.  
PO Box 867  
Jackson, MI 49204  
Tel: (517) 787-3481  
Fax: (517) 787-2349

Infinitex  
PO Box 383  
10100 Main St.  
Clarence, NY 14031  
Tel: (716) 759-6983  
Fax: (716) 759-2050

JM Associates, Inc.  
225 Railroad Avenue  
Bedford Hills, NY 10507  
Tel: (914) 241-3795  
Fax: (914) 241-3731

.ewis Corp.  
102 Willenbrock Rd.  
Oxford, CT 06478-1033  
Tel: (203) 264-3100  
Fax: (203) 264-3102

Membrex, Inc.  
155 Route 46 West  
Fairfield, NJ 07004  
Tel: (201) 575-8388  
Fax: (201) 575-7011

Wide range of “off-the-shelf”, semi-custom, and custom parts cleaning systems using water-based cleaning compounds. Systems include: belt, rotary and overhead conveyors for continuous and batch processing; carousel, cabinet, and agitation tank washers; multi-stage wash, rinse, oxidation inhibit, and dry; oil removal and oil skimming devices; electric, gas, and steam heat packages.

Ultrafiltration systems for oil and water separation.

New bioremediation technology: safe, non-toxic, non-caustic, neutral pH, non-flammable aqueous cleaning solution with hydrocarbons. Has successfully replaced hazardous solvents in vehicle maintenance, metals cleaning and precision manufacturing operations. Also solvents for auto, marine, contaminated soil and grease cleaning. Application of cleaners by immersion, spray or within closed-loop industrial systems.

Manufacturer of industrial cleaning systems, specializing in aqueous-based chemistries. Both ultrasonic and non-ultrasonic washers available.

Membrane based separation processes to recycle, wash, and rinse waters from aqueous-based and organic cleaning solutions.

Met-Pro Corp.  
Systems Division  
160 Cassell Rd.  
Harleysville, PA 19438  
Tel: (215) 723-6751  
Fax: (215) 723-6161

Midbrook Industries  
1745 West Hamlin Rd.  
Rochester Hills, MI 48309  
Tel: (313) 852-2490  
(800) 966-9274  
Fax: (313) 852-5520

NAPCO, Inc.  
Division of Thermo Electron  
Plymouth Industrial Park  
Terryville, CT 06786  
Tel: (203) 589-7800  
Fax: (203) 589-7304

North American BioIndustries Corp.  
400 N. Executive Drive, Ste 467  
Brookfield, WI 53005  
Tel: (414) 789-2724  
(800) 395-8070  
Fax: (414) 789-2725

Proceco  
7300 Tellier St.  
Montreal, Quebec  
Canada H1N 3T7  
Tel: (514) 254-8494  
Fax: (514) 254-8184  
(514) 254-6922

Activated carbon fiber adsorption systems for control and recovery of cleaning solvent air emissions. Recovers solvent in higher quality and with less energy use than granular carbon. Systems can be regenerated with steam, air or nitrogen.

Chemical flocculation waste water treatment systems for heavy metal emulsified oil, suspended solid removal to render industrial waste water suitable for sewerage. Ultrafiltration waste water treatment systems for pretreatment of oily waste water for either reuse or disposal. Metal working fluid filtration systems to extend working life of fluids. Oil separation systems including skimmers and coalescers to separate tramp oils from metal working fluids.

Aqueous cleaning systems using a series of tanks to clean, rinse, and dry parts in either manual or fully automated systems. Parts are cleaned using soak, spray under immersion, mechanical agitation or ultrasonic activation. Aqueous cleaning systems are available separately or in conjunction with a wide range of waste treatment systems including closed loop systems for zero discharge.

Aqueous surfactants and microbes for hard surface degreasing and to initiate bioremediation of oily waste water. Also offer and service bioreactors for treatment of oily waste water.

Aqueous spray washers (turntable, belt conveyor, and immersion types). Also supply contaminated cleaning solutions recycling systems.

Prosys Corp.  
187 Billarica Rd.  
Chelmsford, MA 01824  
Tel: (508) 250-4940  
Fax: (508) 250-4977

Quantum Technologies  
PO Box 223  
Jones Mill Industrial Park  
Jones Mill, AR 72105  
Tel: (501) 844-4700  
Fax: (501) 844-4711

Rapid Engineering, Inc.  
P.O. Box 700  
1100 Seven Mile Road N.W.  
Comstock Park, MI 49321-0700  
Tel: (616) 784-0500  
Fax: (616) 784-0435

R.G. Hanson Co., Inc.  
703 E. Lincoln  
Bloomington, IL 61701  
Tel: (309) 828-5070  
(800) 392-0903  
Fax: (309) 829-3294

SAMSCO, Inc.  
18 Cote Ave.  
Goffstown, NH 03045  
Tel: (603) 668-7111  
Fax: (603) 647-0537

Separation Technologists, Inc.  
100 Griffin Brook Park  
Methuen, MA 01844  
Tel: (508) 794-1170  
Fax: (508) 794-0933

S&K Products International  
80 Red Schoolhouse Rd. #102  
Chestnut Ridge, NY 10977  
Tel: (914) 425-6200  
Fax: (914) 425-7602

Parts washers utilizing low to medium pressure spraying of aqueous solutions on metal and plastic substrates. Exhaust incinerators for lowering VOC discharge to the atmosphere.

Aqueous cleaning chemicals and equipment. New equipment using only steam to clean also available.

Smart Sonic Precision Cleaning Systems  
2373 Teller Rd., #107  
Newbury Park, CA 91320  
Tel: (805) 499-7440  
Fax: (805) 375-5781

Solvent Kleene, Inc.  
131.5 Lynnfield Street  
Peabody, MA 01960  
Tel: (508) 531-2279  
Fax: (508) 532-9304

Sonitech Inc.  
239 East Stephenson St.  
Freeport, I. 61032  
Tel: (815) 235-2400  
Fax: (815) 232-2150

Ultronix Inc.  
104 Niantic Rd.  
Barto, PA 19504  
Tel: (800) 553-7881  
Fax: (215) 845-3995

Unitech Industrial Inc.  
PO Box 330  
16 South Ave,  
Wappingers Falls, NY 12590  
Tel: (914) 297-0745  
(800) 277-5522  
Fax: (914) 297-2919

Vector Environmental, Inc.  
3374 West Hopkins Street  
Milwaukee, WI 53216  
Tel: (414) 444-4010  
Fax: (414) 449-2628

Westek  
400 Rolyn Place  
Arcadia, CA 91007  
Tel: (818) 446-4444  
Fax: (818) 446-7341

Automated ultrasonic and spray batch cleaners for precision cleaning of metal, plastic, and ceramic parts. Systems clean oils, particulate and other contaminants. Optional waste evaporator.

Formulations, replacing chlorinated solvents, compatible with existing equipment, suitable with ferrous and non-ferrous metals, for oil removal, degreasing, removing flux, wax. Company offers on-site solvent-recovery closed-loop systems.

Ultrasonic cleaning equipment using aqueous or semi-aqueous chemistries for a wide range of applications. Complete systems include cleaning tanks, rinse, tanks, dryers and closed loop rinse water recirculation systems. System uses alcohol or other solvents with perfluorinated chemistry for rinsing and drying non-water contact applications.

Retrofit existing equipment for HCFCs chlorinated solvents, perfluorinated chemicals, and hydrocarbon-based solvents. New equipment (manual or automated) for efficient use of non-aqueous vapor phase chemicals.

Closed loop industrial cleaning systems. Spray washers, batch cleaning systems, vapor degreasing, and pretreatment systems available in new equipment and retrofits. Waste water treatment and recycling, 100% oil removal from the cleaning process.

Manufacturers of solvent emission control technologies including closed-loop systems for flushing, spraying, degreasing, ultrasonics, drying, coating, and bonding. All equipment compatible with flammable solvents, blends, and azeotropes.

Working Solutions, Inc.  
938 Cortlandt Street  
Houston, TX 77008  
Tel: (800) 829-4419  
Fax: (713) 862-5591

Zenon Environmental Inc.  
845 Harrington Court  
Burlington, Ontario  
Canada .7N 3P3  
Tel: (416) 639-6320  
Fax: (416) 639-1812

Zenon-Kyzen, Inc.  
13 Hampshire Drive  
Hudson, NH 03051  
Tel: (603) 886-8200  
Fax: (603) 886-8272

Aqueous, semi-aqueous and solvent cleaning technologies and equipment.

Membrane, filtration, distillation and biodegradation technologies for industrial water generation and reuse system requirements. These systems are designed for use with small batch equipment up to the largest in-line processes.

#### RETROFIT ALTERNATIVES

Allied-Signal PO Box  
1139R Morristown, NJ  
07960  
Tel: (201) 455-4848  
Fax: (201) 455-2745

Altos Engineering, Inc.  
6009 N. 61 Ave  
Glendale, AZ 85301  
Tel: (602) 931-8434  
Fax: (602) 937-6396

Baron-Blakeslee, Inc.  
1500 West 16th St.  
Long Beach, CA 90813  
Tel: (800) 548-4422  
Fax: (310) 491-1091

Batch and inline cleaning equipment with non-chemical, thermal vacuum drying of rinse waters. Detergent formulations available with and without glycol ethers.

Full line of cleaning equipment for use with aqueous, semi-aqueous, HCFC, and chlorinated solvents. Closed loop system incorporating vacuum drying available (near zero emissions).

Blue Wave Ultrasonics  
Div. of Alpheus Cleaning Technologies Corp.  
960 S. Rolff St.  
Davenport, IA 52802  
Tel: (319) 322-0144  
(800) 373-0144  
Fax: (319) 322-7180

Branson Ultrasonics Inc.  
41 Eagle Rd.  
Danbury, CT 06810  
Tel: (203) 796-0400  
Fax: (203) 796-0381

Coleman Chemical, Inc.  
One Gemstar Lane  
Joliet, IL 60435  
Tel: (815) 727-3900  
Fax: (815) 727-3998

Creative Enterprises  
105 Anyway, Suite 209  
Lake Jackson, TX 77566  
Tel: (409) 292-0244  
Fax: (409) 292-0440

Environmental Recovery Resources, Inc.  
PO Box 36  
South Salem, NY 10590  
Tel: (914) 533-6175  
Fax: (914) 533-6275

Environmental Solvents Corp.  
1840 Southside Blvd.  
Jacksonville, FL 32216  
Tel: (904) 724-1990  
Fax: (904) 724-2508

Ultrasonic cleaning equipment built for various applications specific to the customer's needs. Effective in cleaning different products and materials throughout the scope of fabricated metals, plastics, and ceramics. Also offer aqueous-based detergents that are environmentally safe.

Ultrasonic cleaning equipment and integrated cleaning systems for metal, electronic, and precision cleaning requirements. Manual and fully automated material handling/transport systems. Equipment for aqueous, semi-aqueous and solvent chemistry.

Specialty formulations of non-ozone depleting HFCs available in 1995.

Specialize in low cost conversion of existing facilities to safely use alternative cleaning agents. Design new or custom cleaning equipment and processes. Also design environmentally secure drying equipment and processes.

Floating, dispersed, and dissolved hydrocarbon contaminants removed to surface water discharge limits, using: no coalescing plates, no centrifugal, no carbon absorption, no sorbent waste. Also offer systems and services to extend cleaning bath 'life' for more cost effective aqueous systems and waste water processing, and waste-minimized settling-pond and separator maintenance/remediation.

Inexpensive retrofit kit for existing small two sump degreasers. Designed for use with terpene-based solvents in water-free cleaning. Small production capacity.

Envirosolutions Inc.  
335 Post Road West  
Westport, CT 06880  
Tel: (203) 454-5902  
Fax: (203) 222-0190

ETUS, Inc.  
1511 Kastner Place  
Sanford, F. 32771  
Tel: (407) 321-7910  
Fax: (407) 321-3098

Finishing Equipment Inc.  
3640 Kennebec Dr.  
St. Paul, MN 55122  
Tel: (612) 452-1860  
Fax: (612) 452-9851

FMT Inc. (Findlay Machine & Tool)  
1950 Industrial Dr.  
Findlay, OH  
45840 Tel: (419)  
422-0768  
(800) 878-8011  
Fax: (419) 422-0072

Occidental Chemical  
Corp. Technical Center  
PO Box 344  
Niagara Falls, NY 14302  
Tel: (800) 733-1165  
Fax: (716) 278-7297

Petroferm Inc.  
5415 First Coast Highway  
Fernandina Beach, F. 32034  
Tel: (904) 261-8286  
Fax: (904) 261-6994

Biodegradable, non-caustic, neutral pH cleaner which is used in a closed loop parts washing system. Several different formulations developed to suit a variety of cleaning needs. Customized parts washing equipment is matched to the cleaning chemicals to ensure optimum performance.

Formulations made of hydrocarbons and blends of hydrocarbons and emulsifiers. Also offer aqueous-based formulations containing detergents with and without glycol ethers.

Aqueous, semi-aqueous and solvent cleaning systems available. From manual systems to automated high-production cleaning lines, with ultrasonics available as needed. Specialize in automated enclosed vapor degreasers for efficient use of the non-ozone depleting chlorinated solvents.

Custom engineered parts cleaning equipment, standard parts cleaning equipment, and pollution control equipment.

Specially stabilized methylene chloride for a wide variety of applications. Formulations of halogenated toluenes and benzotrifluorides for cold cleaning of metals and electronics. Ethylene based glycol ethers for use in many cleaning formulations.

Broad line of formulations based on terpenes, ester, and aliphatic hydrocarbons and blends of these organic solvents with surfactants. Products are used for cold (hand) cleaning and in combination with various cleaning equipment. Products can be removed by evaporation, water, alcohols or nonflammable fluorinated solvents. Both products and rinse media can be recycled.

Rapid Engineering, Inc.  
P.O. Box 700  
1100 Seven Mile Road N.W.  
Comstock Park, MI 49321-0700  
Tel: (616) 784-0500  
Fax: (616) 784-0435

SAMSCO, Inc.  
18 Cote Avenue  
Goffstown, NH 03045  
Tel: (603) 668-7111  
Fax: (603) 647-0537

S.A.S., Inc.  
2435 North Indian Hill Blvd  
Claremont, CA 91711-1730  
Tel: (909) 624-0396  
Fax: (909) 624-6336

SONICOR Instrument Corp.  
100 Wartburg Ave.  
Copiague, NY 11726  
Tel: (516) 842-3344  
Fax: (516) 842-3389

Ultronix Inc.  
104 Niantic Rd.  
Barto, PA 19504  
Tel: (800) 553-7881  
Fax: (215) 845-3995

Unitech Industrial Inc.  
PO Box 330  
16 South Ave,  
Wappingers Falls, NY 12590  
Tel: (914) 297-0745  
(800) 277-5522  
Fax: (914) 297-2919

U.S. Polychemical Corp.  
Route 45 Chestnut Ridge Road  
Chestnut Ridge, NY 10977  
Tel: (914) 356-5530  
(800) 431-2072  
Fax: (914) 356-6656

Parts washers utilizing low to medium pressure spraying of aqueous solutions on metal and plastic substrates. Exhaust incinerators for lowering VOC discharge to the atmosphere.

The SAMSCO water evaporator evaporates efficiently and economically. Typical applications include machining/grinding coolants, alkaline cleaners, floor scrubber waters, vibratory solutions, stamping/drawing compounds, wire drawing compounds and die casting solutions.

Aqueous cleaning machines, part washers using spray, immersion, agitation, and ultrasonics. Range of detergents, cleaners, oil skimmers, exhaust systems, filtering systems, auto rinse systems, and hot air dryers.

Ultrasonic cleaning equipment, automated aqueous cleaning systems. Environmentally safe alternatives to cleaning with hazardous solvents.

Retrofit existing equipment for HCFCs chlorinated solvents, perfluorinated chemicals, and hydrocarbon-based solvents. New equipment (manual or automated) for efficient use of non-aqueous vapor phase chemicals.

Closed loop industrial cleaning systems. Spray washers, batch cleaning systems, vapor degreasing, and pretreatment systems available in new equipment and retrofits. Waste water treatment and recycling, 100% oil removal from the cleaning process.

Manufacturers of oil and grease buffing compounds, flux removing chemistries with non-chlorinated solvents, semi-aqueous, and aqueous technologies. Also automated cleaning systems with recirculating agitation or ultrasonics for turn-key applications.

Working Solutions, Inc.  
938 Cortlandt Street  
Houston, TX 77008  
Tel: (800) 829-4419  
Fax: (713) 862-5591

#### NO CLEAN ALTERNATIVES

Blackstone Ultrasonics, Inc.  
9 North Main St.  
Jamestown, NY 14701  
Tel: (716) 665-2340  
(800) 766-6606  
Fax: (716) 665-2480

Circle-Proscio, Inc.  
2017 Yost Ave.  
Bloomington, IN 47403  
Tel: (812) 339-3653  
Fax: (812) 331-2566

Kester Solder Division, Itticon Industries  
515 E. Touhy Avenue  
Des Plaines, IL 60018-2675  
Tel: (708) 297-1600  
Fax: (708) 390-9338

Aqueous, semi-aqueous and solvent cleaning technologies and equipment.

Complete range of ultrasonic cleaning products from stand-alone and bench-top heated tanks to wash multiple rinse/dry console systems with optional material handling and automation. Also, fluxless ultrasonic solder pots for tinning leads and electronics.

Aqueous, alkaline, etchant cleaners for ferrous and non-ferrous applications. Aqueous, acidic, neutral, and alkaline oil rejecting cleaners with or without glycol ethers for ferrous and non-ferrous applications. Water miscible, semi-aqueous cleaners (electronics cleaning). Water emulsifiable cleaners containing aliphatic and terpene solvents. Evaporative oils for no clean applications.

Alcohol-based cleaners, solvent blends, and aqueous saponifiers. Also manufacture no-clean, water-clean, and VOC-free; fluxes, solders, and solder pastes.

## MAINTENANCE CLEANING

ADF Systems, Inc.  
1302 19th Street. N.  
Humboldt, IA 50548  
Tel: (515) 332-5400  
Fax: (800) 798-5100

Offers detergents both liquid and powder designed for use in all type of aqueous washing equipment. Offers non-foaming formulations with and without glycol ethers and with and without rust inhibitors for all applications. Has parts washing equipment designed for the type of uses experienced in maintenance operations.

A.W. Chesterton  
225 Fallon Road Middlesex  
Industrial Park Stoneham,  
MA 02180-2999  
Tel: (617) 438-7000  
Fax: (617) 438-8971

A complete line of aqueous cleaners containing detergents, with and without glycol ethers. Hydrocarbon solvents and solvent blends. Non-ozone depleting chlorinated solvents. Provide free assistance to customers wishing to replace ozone-depleting chemicals. Synthetic machining fluids, lubricants and maintenance specialties.

Better Engineering Mfg., Inc.  
8361 Town Center Court  
Baltimore, MD 21236-4964  
Tel: (410) 931-0000  
(800) 229-3380  
Fax: (410) 931-0053

Manufacturers of industrial cleaning equipment, including automatic jet washers compatible with biodegradable detergents and water solutions. Also cleaning systems with wash, rinse, and dry cycles, custom systems, extended wash cabinets, large capacity systems, and tumbling systems.

BioChem Systems  
14452 W. 44th Avenue  
Golden, Colorado 80403  
Tel: (303) 277-9700  
(800) 777-7870  
Fax: (303) 277-9596

Complete line of safe environmentally friendly products based on terpene chemistry for use in many cleaning and degreasing operations. Both water dilutable and non-dilutable products are offered which will remove most organic contaminants from a wide variety of substrates and leave a clean, virtually residue free surface with no adverse effects on the surface being cleaned.

Break-Free, Inc.  
1035 S. Linwood Avenue  
Santa Ana, CA 92705-4396  
Tel: (714) 953-1900  
Fax: (714) 953-0402

Unique blend of orange oils and highly refined synthetic hydrocarbons formulated as a safe replacement for most chlorinated or halogenated, ozone-depleting solvents. Applications include degreasing, removal of oils, wax, tar, adhesives, fresh paint and oil-based inks. Also water-based, alkaline cleaners for the removal of heavy soil contaminants.

BY\*PAS International Corporation  
P.O. Box 14  
Hudsonville, MI 49426  
Tel: (616) 875-7234  
Fax: (616) 875-7743

Calgon Corp.  
Chemical Technologies Group  
PO Box 1346  
Pittsburgh, PA 15230  
Tel: (800) 955-0090  
Fax: (412) 777-8927

Formulations include non-chelating, non-phosphate, readily biodegradable aqueous-based cleaners, non-chlorinated solvent cleaners and paint removing compounds, non-glycol based solvent enhanced general cleaners, neutral pH process cleaners, and industrial waste treatment polymers.

Carroll Company  
2900 W. Kingsley Road  
Garland, TX 75041  
Tel: (800) 527-5722  
Fax: (214) 840-0678

Aqueous cleaning formulations containing detergents with and without glycol ethers. Formulations made from hydrocarbons and terpenes with and without emulsifiers. Specialty solvent blends for printing ink cleanup, electric motor degreasing, cleaning printed circuit boards, and assorted textile mill applications.

Chemtronics, Inc.  
8125 Cobb Center Dr.  
Kennesaw, GA 30144  
Tel: (404) 424-4888  
Fax: (404) 424-4267

Ultra-pure cleaners for electronics and metals.

Cobehn, Inc.  
640 Airport Road  
Winchester, VA 22602  
Tel: (703) 665-0707  
Fax: (703) 665-0768

Manufacturer of a non-solvent-based precision batch cleaning system, utilizing solvent materials filtered to .2um ppm. Process removes flux, oils and particulates by agitation, wetting and drying in an inert atmosphere. Also used for hybrids, and PCBs.

Coleman Chemical, Inc.  
One Gemstar Lane  
Joliet, IL 60435  
Tel: (815) 727-3900  
Fax: (815) 727-3998

Creative Enterprises  
105 Anyway, Suite 209  
Lake Jackson, TX 77566  
Tel: (409) 292-0244  
Fax: (409) 292-0440

EXXON Chemical Co.  
PO Box 3272  
Houston, TX 77253-3272  
Tel: (800) 526-0749  
Fax: (713) 870-6661

International Products Corp.  
P.O. Box 70  
Burlington, NJ 08016-0070  
Tel: (609) 386-8770  
Fax: (609) 386-8438

JM Associates, Inc.  
225 Railroad Avenue  
Bedford Hills, NY 10507  
Tel: (914) 241-3795  
Fax: (914) 241-3731

JnJ Industries  
195 E. Main St., Suite 303  
Milford, MA 01757  
Tel: (800) 554-9994  
Fax: (508) 478-2221

Specialty formulations of non-ozone depleting  
HFCs available in 1995.

Cleaners comprised of narrow boiling range,  
high flash point aliphatic hydrocarbons. Low  
olefin and aromatic content. Low residue,  
low corrosivity to metals, low odor, low  
toxicity. Requires no water handling.  
Recycle by distillation. Effective against a  
wide range of waxes, oils, and greases.

Biodegradable formulations with low toxicity,  
no phosphates or CFCs used in precision and  
critical cleaning operations.

New bioremediation technology: safe, non-  
toxic, non-caustic, neutral pH, non-flammable  
aqueous cleaning solution with hydrocarbons.  
Has successfully replaced hazardous solvents  
in vehicle maintenance, metals cleaning and  
precision manufacturing operations. Also  
solvents for auto, marine, contaminated soil  
and grease cleaning. Application of cleaners  
by immersion, spray or within closed-loop  
industrial systems.

Manufacturer of eight non-CFC formulations  
including a supersaturated wipe solvent.

Kleer-Flo Company  
15151 Technology Dr.  
Eden Prairie, MN 55344  
Tel: (612) 934-2555  
(800) 328-7942  
Fax: (612) 934-3909

Kyzen Corporation  
430 Harding Industrial Drive  
Nashville, TN 37211  
Tel: (615) 831-0888  
Fax: (615) 831-0889

A broad line of non-hazardous, zero ODP, biodegradable, and low VOC cleaning products. Kyzen products are used for cold cleaning, immersion solvent cleaning, and aqueous spray cleaning. These materials are compatible with a wide range of cleaning machines: spray in air, spray in immersion, soak, and ultrasonic. Kyzen products can be used in closed looped systems for low zero discharge by a variety of commonly available water reuse systems.

.PS .aboratories, Inc.  
4647 Hugh Howell Rd.  
Tucker, GA 30084  
Tel: (800) 241-8334  
Fax: (404) 493-9206

MacDermid Incorporated  
245 Freight Street  
Waterbury, CT 06702  
Tel: (203) 575-5700  
Fax: (203) 575-5630

Environmentally safe products, aqueous and hydrocarbon-based blends for degreasing.

Micro Care Corp.  
34 Ronzo Rd.  
Bristol, CT 06010  
Tel: (203) 585-7912  
Fax: (203) 585-7378

Solvent cleaners based on but not limited to terpene hydrocarbon, alcohol, or HCFC technologies. Formulations are engineered for use in non-automated hand cleaning applications where rinsing is not available. Cleaners are effective in touch-up cleaning and precision cleaning of all types of flux residues, oils, grease and grime.

Miller-Stephenson Chemical Co., Inc.  
George Washington Highway  
Danbury, CT 06810  
Tel: (203) 743-4447  
Fax: (203) 791-8702

Navy Brand Mfg Co.  
Division of Chemstar, Inc.  
5111 Southwest Avenue  
St. Louis, MO 63110-3496  
Tel: (800) 325-3312  
(314) 865-5500  
Fax: (314) 865-5509

Ney Ultrasonics  
1280 Blue Hills Avenue  
Bloomfield, CT 06002  
Tel: (203) 286-6149  
Fax: (203) 286-6150

North American BioIndustries Corp.  
400 N. Executive Drive, Ste 467  
Brookfield, WI 53005  
Tel: (414) 789-2724  
(800) 395-8070  
Fax: (414) 789-2725

Oakite Products, Inc.  
50 Valley Road  
Berkeley Heights, NJ 07922  
Tel: (908) 508-2107  
Fax: (908) 464-9250

Industrial degreasers for metal cleaning and parts cleaning. Formulations are based on non-ozone depleting solvents. Also solvent-based, aqueous-based and also semi-aqueous-based products for a variety of cleaning applications on a host of substrates, both metallic and non-metallic.

Equipment for batch manual and batch automated cleaning using aqueous, water-miscible, semi-aqueous, and solvent chemistries. Complete application development laboratory to assist users.

Aqueous surfactants and microbes for hard surface degreasing and to initiate bioremediation of oily waste water. Also offer and service bioreactors for treatment of oily waste water.

High-tech, state-of-the-art, recyclable cleaning products for use in immersion, ultrasonic, hand wipe, and other cleaning applications. Many aqueous and semi-aqueous formulations adhere to the Clean Air Act, OSHA regulations, and do not contain SARA 313 ingredients. Comprehensive lines of products that exhibit biodegradability, oil splitting or emulsifying features. Terpene-based cleaners have no flash point, and alkaline, aqueous formulations include non-phosphated, non-chelated, mildly alkaline cleaners.

Petroferm Inc.  
5415 First Coast Highway  
Fernandina Beach, F. 32034  
Tel: (904) 261-8286  
Fax: (904) 261-6994

Broad line of formulations based on terpenes, ester, and aliphatic hydrocarbons and blends of these organic solvents with surfactants. Products are used for cold (hand) cleaning and in combination with various cleaning equipment. Products can be removed by evaporation, water, alcohols or nonflammable fluorinated solvents. Both products and rinse media can be recycled.

P-T Technologies  
108 4th Avenue South  
Safety Harbor, F. 34695  
Tel: (800) 441-7874  
(813) 726-4644  
Fax: (813) 725-9544

Non-halogenated hydrocarbon-based specialty cleaning and degreasing formulations for precision cleaning. Also offer vapor degreaser alternatives, ionic contaminant removers, acetone, MEK alternatives for specific industrial applications.

Ramco Equipment Corporation  
32 Montgomery Street  
Hillside, NJ 07205  
Tel: (908) 687-6700  
Fax: (908) 687-0653

Standard line of single and multi-station aqueous degreasing systems with a wide selection of options including platform oscillation, directional turbulation, oil removal, ultrasonics, filtration, parts rotators and dryers. Nationwide network of application engineers to assist from process development through installation.

Rite Off, Inc.  
Seaford Industrial Park  
P.O. Box 1070  
Seaford, DE 19973  
Tel: (800) 645-5853  
(302) 628-2100  
Fax: (800) 571-2211

Wide variety of cleaning and maintenance formulations using alcohols, terpenes, HFCs, hydrocarbons and chlorinated solvents. Specialists in aerosol technology, liquid formulations also available.

Rochester Midland Corp.  
333 Hollenbeck St.  
Rochester, NY 14621  
Tel: (716) 336-2200  
Fax: (716) 467-4406

Formulations comprised of hydrocarbon and/or terpene solvents. Some also contain surfactants. Many contain alkaline builders and chelants as well as glycol ethers. Some aqueous-based or water-compatible formulations exhibit good biodegradability. Many products allow for good oil/grease separation upon standing.

S.A.S., Inc.  
2435 North Indian Hill Blvd  
Claremont, CA 91711-1730  
Tel: (909) 624-0396  
Fax: (909) 624-6336

Star Cleaning Miracle, Inc.  
P.O. Box 14  
Hudsonville, MI 49426  
Tel: (616) 875-7234  
Fax: (616) 875-7743

SWR Corporation  
127 East Washtenaw  
Ann Arbor, MI 48106  
Tel: (517) 487-6390  
Fax: (517) 487-8205

Terpene Technologies Inc.  
3400 Ridge Rd. W, Suite 293  
Rochester, NY 14626  
Tel: (716) 546-8455  
(716) 777-0790  
Fax: (716) 227-3834

Texo Corporation  
2801 Highland Ave.  
Cincinnati, OH  
45212  
Tel: (513) 731-3400  
Fax: (513) 731-8113

Aqueous cleaning machines, part washers using spray, immersion, agitation, and ultrasonics. Range of detergents, cleaners, oil skimmers, exhaust systems, filtering systems, auto rinse systems, and hot air dryers.

Cleaners include biodegradable, non-toxic, aqueous cleaner/degreaser surfactants that have a powerful affinity for removing grease, oil and grime emulsions. The SWR™ cleaners also remove oils and grease coatings from machine and electronic parts with no remaining residue. As non-toxic compounds, SWR™ cleaners reduce associated end-use disposal costs.

Terpene alcohol and hydrocarbon blends used as non-water soluble solvents, semi-aqueous cleaners and degreasers based on terpene alcohols and hydrocarbons. Also offer aqueous-based terpene formulations containing detergents and emulsifiers.

Aqueous, semi-aqueous, and various solvent cleaners for replacement of vapor degreasing and handwiping with solvents. Applications of cleaners can be spray immersion, ultrasonic or handwiping. Cleaners can be multi-metal safe and contain corrosion inhibitors if necessary.

Union Camp Corp.  
Bush Boake Allen Division  
P0 Box 37617  
Jacksonville, F. 32236  
Tel: (904) 783-2180  
(800) 874-9220  
Fax: (904) 786-6495

U.S. Polychemical Corp.  
Route 45 Chestnut Ridge Road  
Chestnut Ridge, NY 10977  
Tel: (914) 356-5530  
(800) 431-2072  
Fax: (914) 356-6656

Working Solutions, Inc.  
938 Cortlandt Street  
Houston, TX 77008  
Tel: (800) 829-4419  
Fax: (713) 862-5591

W.R. Grace & Co.  
Metalworking Fluids Group  
55 Hayden Ave.  
Lexington, MA 02173  
Tel: (617) 861-6600  
Fax: (617) 861-9066

Zip-Chem Products  
1860 Dobbin Dr.  
San Jose, CA 95133  
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(800) 648-2661  
Fax: (408) 272-8062

Range of wood terpene-based alternative solvents for semi-aqueous and solvent only cleaning processes and maintenance cleaning applications. High solvency and high soil loading properties for removal of solder fluxes, heavy oils and greases, polishing compounds, carbonaceous deposits etc. to the highest cleanliness standards.

Manufacturers of oil and grease buffing compounds, flux removing chemistries with non-chlorinated solvents, semi-aqueous, and aqueous technologies. Also automated cleaning systems with recirculating agitation or ultrasonics for turn-key applications

Aqueous, semi-aqueous and solvent cleaning technologies and equipment.

Wide range of aqueous cleaning formulations for metal. precision, and maintenance cleaning. Includes formulations that are phosphate-free. Suitable for agitation, soak, spray, ultrasonic and hand wipe applications.

Aqueous, semi-aqueous aliphatic hydrocarbon, terpene and alcohol-based cleaners. Application oriented packaging like wipes, aerosols, specialty containers, and other delivery systems available.