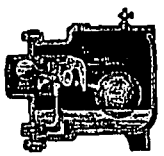
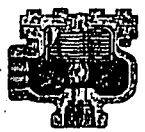
NICHOLSON BUILDS A PLANT-PROVED TRAP FOR EVERY PURPOSE



Advance-Type Drainage Methods are discussed in our Trap *Catalog 448*
This helpful standard reference book merits a ready place in your files. Also see Sweet's.



WEIGHT-OPERATED TRAPS—(above) Three types, for steam, air, gasoline. Pressures to 1500 lbs.

THERMOSTATIC TRAPS—(left) 5 types, steam press. to 225 lbs. 2 to 6 times average drainage cap'y.

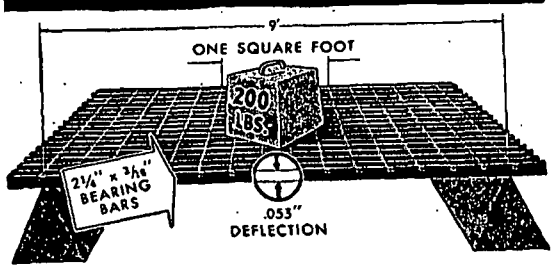


EXPANSION TRAPS—2 types. Any steam pressure, 0 to 250 lbs., without change of valve or seat.

Perhaps the best evidence of the efficiency and the savings in maintenance costs effected by Nicholson steam specialties is the growing list of leading firms which are standardizing on them. Also a complete line of control valves for all mediums; heavy-duty welded floats in all sizes, shapes. Let us furnish you specific engineering details of Nicholson units as applied to your needs.

W. H. NICHOLSON & CO. 125 OREGON ST. WILKES-BARRE, PA.

This is TRI-LOK OPEN STEEL FLOORING



The locked in strength of TRI-LOK enables it to stand up under heavy loads—even on long spans. No rivets, bolts or welds are used in its construction, thus, the possibility of loose joints is eliminated. *Write for Bulletin 1140.*

DRAVO CORPORATION
NATIONAL DEPARTMENT
1103 Pitt Bank Bldg., Pittsburgh 22, Pa.
(*Distributor for THE TRI-LOK COMPANY*)

discusses methods and apparatus for conditioning water and other liquids.

407 BOILER SCALE REMOVAL — American Sand-Banum Co., 9 Rockefeller Pl, New York 20, N. Y. 16-page booklet No. F300-5-47-5M tells how and why Sand-Banum is solving the boiler scale problem.

408 WATER DEMINERALIZERS—Ion Exchange Products Dept, American Cyanamid Co, 30 Rockefeller Pl, New York 20, N. Y. 16-page booklet, entitled "Pfit-R-Brit Demineralizers Deliver Low-Cost, Chemical Equivalent of Distilled Water," cites advantages of demineralized water over distilled water, describes chemical and mechanical principles of demineralization by ion exchange, and gives data on calculating costs for demineralizing various raw waters.

409 WATER TREATMENT—American K & T Corp, 521 Madison Ave, New York 17, N. Y. A series of engineering data sheets cover a particular phase of water treatment, such as scale, corrosion, after treatment and colloids. Sheets show how organic-colloidal treatment and inorganic-chemical methods apply to various phases and problems of water treatment.

410 ZEOLITE REGENERATOR — International Salt Co, Scranton, Pa. Pamphlet describes operating economies that lixate rock-salt dissolver produces in regenerating zeolite water softeners. Pamphlet points out that the Lixator is automatic, eliminates salt handling and produces self-filtered brine.

411 AUTOMATIC PH CONTROL—Milton Roy Co, 1205 E Mermaid Ave, Chestnut Hill, Philadelphia 18, Pa. 8-page reprint, technical paper No. 54, entitled "Automatic pH Control in Water and Industrial Waste Treatment," by Robert T Sheen, describes elements of design and typical installations of automatic pH control.

412 BOILER FEEDWATER—W H & L D Betz, Gillingham and Worth Sts, Frankford, Philadelphia, Pa. 8-page technical paper No. 116, entitled "Substitutes for Soda Ash in the Treatment of Boiler Feed Water," by W A Tansola, R L Reed and J J Maguire, discusses various methods that may be employed to secure properly treated feedwater using little or no soda ash.

413 ION EXCHANGERS—Dept P, Liquid Conditioning Corp, 118 E Price St, Linden, N. J. 4-page bulletin No. 13 on Liquonex ion exchangers includes explanations of correct applications, advantages and characteristics of many types of resin, greensand and synthetic gel zeolites to assist in assuring correct selection for specific water conditions and plant requirements.

414 WATER SOFTENERS AND CONDITIONERS—Elgin Softener Corp, 130 N Grove Ave, Elgin, Ill. 30-page bulletin No. 607 presents benefits and economies of soft water. This bulletin also describes all types of filters, purifiers, aerators, chemical feed systems and water-treating chemicals.

415 WATER TREATMENT — Water Treatment Div, Magnus Chemical Co, Garwood, N. J. 40-page manual on Magnus method of boiler feedwater treatment is divided into seven sections. Section 1 outlines theoretical basis of modern boiler feedwater treatment. Section 2 contains full instructions on the making of the tests. Section 3 contains practical data applying not only to control of boiler feedwater but to many other factors involved in operation of a steam boiler installation.

416 WATER TREATMENT—E F Drew Co, 15 East 26th St, New York, 10, N. Y. Illustrated pamphlet, 8 pages, entitled "Complete Boiler Water Treatment" discusses modern methods of preventing scale, corrosion, carryover and other difficulties.

WELDING

418 ARC WELDERS—Hobart Brothers Co, Hobart Sq, Troy, Ohio. Folder No. DM758 discusses Hobart ac transformer arc welders. Photographs are included.

419 ARC WELDING—Dept 1628, Air Reduction Sales Co, 60 E 42nd St, New York 17, N. Y. 8-page folder describes three types of Heliweld equipment. These are the manual holder, machine holder and electronically controlled automatic head.

420 OXYGEN CUTTING OF STEEL—Dept 1628P, Air Reduction Sales Co, 60 E 42nd St, New York 17, N. Y. 12-page reprint, entitled "Oxygen Cutting of Steel at Elevated Temperatures," by J F Kiernan and J S Sohn, covers this subject thoroughly. It contains useful data that has been derived from over 3000 controlled cutting tests.

421 WELDING FITTINGS — Stainless Alloy Div, Pittsburgh Piping & Equipment Co, 10 43rd St, Pittsburgh, Pa. Catalog No. S-309 gives complete specifications and list prices of 3834 stock items in stainless-steel Types 304, 316 and 347 welding fittings.

422 ARC WELDERS—Hobart Brothers Co, Hobart Sq, Troy, Ohio. 36-page catalog contains descriptions, dimensions and specifications on complete line of arc welders. Also listed is complete line of Hobart arc-welding electrodes and accessories.

423 WELDING FUME EXHAUSTER—Mine Safety Appliances Co, Braddock, Thomas and Meade Sts, Pittsburgh 8, Pa. Bulletin No. CU-1 discusses the new MSA portable welding fume exhauster.

424 GAS WELDING RODS—Page Steel & Wire Div, American Chain & Cable Co, Bridgeport 2, Conn. 24-color, 24-page booklet is devoted exclusively to gas welding wire and its use. It covers application, procedure, proper torch adjustment and physical properties of each gas welding rod.

425 WELDING RODS—Ampco Metal, Inc, 1745 S 38th St, Milwaukee, Wis. Bulletin W-17 contains information on how to weld various alloys using bronze arc-welding electrodes.

426 WELDING EQUIPMENT—Tweco Products Co, P O Box 866, Wichita 1, Kan. 12-page illustrated folder describes electric welding cable connections, including electrode holders, ground clamps, cable connectors, cable splicers, machine terminals, cable lugs and carbon electrode holders. Price list and parts information included.

427 ELECTRODES — Hobart Bros Co, Troy, Ohio. Wall chart shows procedures for every type of arc welding electrode. Shows results of imperfect welding, as well as perfect welds, and cross-sections of all welds.

428 WELDING COPPER—Revere Copper and Brass Inc, 230 Park Ave, New York 17, N. Y. Book, entitled "Techniques in Welding Copper," presents welding techniques and shop practices combined with the metallurgical theory. Book is illustrated with drawings and charts.

429 ARC WELDING—Hobart Bros Co, Box DM758, Troy, Ohio. 24-page folder gives outstanding features of Hobart arc welders.

OTHER EQUIPMENT

435 SMOKE ABATEMENT — Pertex Corp, Milwaukee, Wis. 16-page booklet, entitled "Smoke—Its Cause, Cost and Prevention," deals thoroughly with all phases of smoke prevention and offers a solution to this vital civic and economic problem.

436 INDUSTRIAL ENGINEERS — Design Service Co, 21 Fulton St, Newark 1, N. J. 24-page booklet describes the services of this industrial engineering company. It has a short story on each of its offices.

437 CARBIDES — Carboloy Company, Inc, Detroit, Mich. 20-page booklet describes organization and history of Carboloy Co, plus a quick picture of "carbides," their manufacture and characteristics.

438 COAL CLEANERS—McNally Pittsburgh Mfg Corp, Pittsburg, Kan. 20-page bulletin contains information on four coal cleaning systems with explanatory circuits, illustrations of machines and diagrams of operation.

PROTECTION



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For pressures and vacuums . . . with ranges from water inches up to 30,000 P. S. I. . . . . there's an ACRAGAGE scientifically designed to give you dependable precision on steam, oil, gas, chemicals, water, or brine. ACRAGAGE comes in a wide variety of sizes — 4½", 6", 8½", or 10", with wall, stem, or true flush mountings. ACRAGAGE cuts down your operating expense . . . protects you against costly errors and inaccuracies.



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