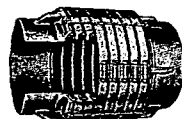




ADSCO DIVISION

Yuba Consolidated Industries, Inc.
20 MILBURN ST., BUFFALO 12, N. Y.
Yuba Plants and Sales Offices Nationwide

ADSCO CORRUFLEX PACKLESS EXPANSION JOINTS



Equalizing, Welding Ends

Adco's Corruflex packless expansion joints absorb pipe expansion and are adaptable to any piping condition. The equalizing joint is used for various types of motions and is suitable for pressures to 300 psi and higher. They are available in sizes 3 in. and larger, with single or multiple corrugations, with flanged as well as welding ends. They can be supplied with covers and telescoping inner sleeves.

ADSCO SLIP-TYPE EXPANSION JOINTS



"PC" Joint, Flanged Ends

Slip-type expansion joints, designed for axial motion, offer long traverse, low initial cost, and produce minimum stresses on pipe anchors. The piston-ring joint, Type "PC", can be unpacked and repacked under full line pressure because of its piston-ring feature. The polished, chrome-plated slip cannot be scored by metal-to-metal contact. Packing can be quickly lubricated. Sizes of Adco slip-type joints range from 1 1/4 in. up, with traverse per slip from 4 in. to 12 in. For working pressures to 900 lb, temperatures to 800 F.



Storage Water Heaters

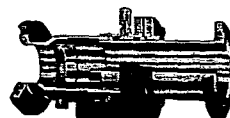
Adco storage heaters are built in accordance with the ASME code for working pressures desired. Tanks are made of flange-quality steel, nickel-clad or stainless-steel, or copper silicon alloy. Where alloy tanks are used, tube sheets are of corrosion-resisting metal, so that service water does not come in contact with any ferrous parts. Steel tanks can be lined with all standard linings, including Adco Phenolic G-2 or Adco bitumastic.



Non-Equalizing, Flanged Ends

This type is generally used to absorb small amounts of expansion and to isolate vibration under vacuum or pressures to 50 psi. Depending on the metal used in the expansion element, both the equalizing and non-equalizing types are suitable for temperatures from sub zero to 1600 F. Adco also manufactures a close-pitch type and a semi-equalizing type with root-rings to reinforce the corrugations.

ADSCO RAM-PAK EXPANSION JOINTS



Ram-Pak

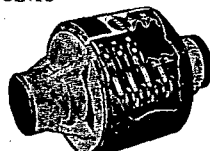
The newly designed Adco Ram-Pak Expansion Joint has a ram opening through which packing can be added when necessary. Lubrication is accomplished through fittings. Five features result from new design: (1) complete and uniform lubrication of packing; (2) new packing can be added under full-line pressure; (3) packing can be replaced without removing expansion joint from line; (4) rugged outward limit stop is provided by internal guide and stop ring; in addition there is an external guide; (5) support base conforms in all respects to ASA standards.

ADSCO STANDARD HEATERS



Instantaneous Heaters

Adco instantaneous heaters are made in a large variety of types, including the simple U-bend instantaneous shown above, which is used to heat water for showers, dishwashers, laundries, and other purposes. These heaters are also used as converters for furnishing hot water to space heating systems. Many straight-tube, float-head units are used as closed feed-water heaters, boiler blow-down heaters, and for various uses in the process industries.



Externally Guided

To insure true axial movement, machined guide surfaces of equalizing rings ride smoothly along bore of external guide. Totally stabilized corrugated element permits high pressure applications. Guide is of heavy-wall, carbon steel construction for effective guiding and rigidity. Guide acts as limit stop to prevent joint from being extended beyond predetermined limit. Guide also acts as an external cover and insulation base.

ADSCO PIPE ALIGNMENT GUIDE



Pipe Alignment Guide

Proper guiding of a pipe line, as obtained by Adco pipe alignment guides, is essential to insure straight axial movement of the pipe to the expansion joint. Misalignment may damage equipment. A pipe line should be considered as a load-bearing column and pipe alignment guides should be used accordingly to prevent bowing and bending. Pipe supports such as hangers, chairs, or rollers are not to be considered as guides. Write for details on the latest designs in Adco pipe alignment guides.



Oil Pre-heaters

Adco oil pre-heaters help obtain highly efficient performance from fuel oil by heating it properly for complete combustion in the burner. In many cases, the work done by oil pre-heaters permits the use of heavier grade, less costly fuel oil. These heaters frequently are used with Adco tank suction heaters, the two units making an efficient team. Tank suction heaters, which heat only the liquid to be pumped and not the full contents of the tank, also are available.



Cobra Metal Hose

5059 S. Kedzie Ave., Chicago 32, Illinois
Phone: REpublic 7-3311

Products shown here are available from plumbing, heating and air conditioning wholesalers from coast to coast. Cobra representatives are located in principal cities. Write, wire or call for the name of the wholesaler or representative near you.

NOISE and VIBRATION ABSORBERS



For absorbing motion and noise on refrigerating units, chillers, compressors, and air conditioners. Available in standard lengths with female tube ends in IDs ranging from 3/4" to 1 1/2". Standard models cataloged in bronze with bronze braided wire sleeve. Working pressures range from 175 PSI to 500 PSI. Listed with Underwriters' Laboratories. Vibration absorbers also available in steel or stainless with single or double braided sleeve for higher working pressures. All standard end fittings available on request. Ask for Catalog 660 for bronze, or 669 for carbon and stainless steel.

SLIDING PISTON TYPE EXPANSION ABSORBER



Made from heavy walled copper. Hygroscopic seal keeps out foreign matter. Leak proof construction. Working pressure: 125 PSI. Temperature range: 40°F to +240°F. Available with male and female tube ends. Factory tested at 150 PSI. Ask for Catalog KE 99.

Nominal Tube or Pipe Size	Closed Length	Expansion Movement
1/2"	5 1/2"	2"
3/4"	6 1/2"	2 1/2"
1"	7 1/2"	3"
1 1/4"	8 1/2"	3 1/2"
1 1/2"	9 1/2"	4"

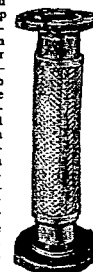
STAINLESS and CARBON STEEL CONNECTORS



For corrosion resistance, high pressure capacity and high temperature resistance Cobra offers a complete selection of connectors in carbon and stainless steel. Designed to absorb pipe motion, and absorb vibration, these connectors have found wide acceptance for transferring chemicals, liquid oxygen, etc. Working pressure range: 750 to 2000 PSI, temperature range: +500°F. Available as standard models from 1/2" ID up to 10" ID in standard lengths. Double braided sleeve available for higher working pressures. End fittings are standard IP. Ask for Catalog 539.

PUMP CONNECTORS

Absorb vibration and movement—takes up shocks and sudden impacts resulting from changes in pressures or temperatures. Manufactured of bronze with bronze braided wire sleeve and iron pipe fittings including most flanges. Available from 3/4" ID to 1 1/2" ID. Working pressure ranges from 75 to 1000 PSI. Recommended working temperature is 250°F. Ask for bronze pump connector Catalog PC-77. Available in stainless or carbon steel for higher pressures and temperatures. Ask for Catalog 539.

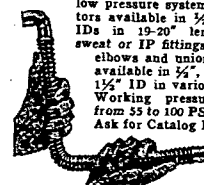


BRONZE HYDRONIC FLEX COUPLER

Solves problem of expansion and contraction—makes installation of all types of hydronic systems faster and easier. The blue line is your assurance of connectors designed for hydronic heating. Manufactured of bronze braided tubing. A wire sleeve gives added pressure resistance. Cataloged with 1 PSI hex steel nipples, they are available in the following IDs and lengths: 3/4" x 8", 3/4" x 10", 3/4" x 12", 3/4" x 18", 3/4" x 20", 3/4" x 22", 1" x 12", 1" x 24", 1 1/4" x 12" and 1 1/4" x 26". Recommended working pressures range from 275 to 500 PSI. Recommended working temp. is 250°F.

NEW IN COPPER, COBRA FORM-A-LINER HYDRONIC CONNECTORS AND NIPPLES

Flexible, they can be formed by hand for risers, drop lines, to by-pass obstructions or compensate for misalignments. Can be used on all hot water and steam systems. Compensate for pipe movement—eliminate noise. Designed for low pressure systems. Connectors available in 1/2", and 3/4" IDs in 10-20" lengths with sweat or IP fittings, including elbows and unions. Nipples available in 1/2", 3/4", 1" and 1 1/4" ID in various lengths. Working pressures range from 55 to 100 PSI at 250°F. Ask for Catalog HC 88.



For specifications that require bronze bellows type construction: Bellows are hydrostatically formed. Heavy bronze seamless sleeve acts as a guide for expansion and contraction. Fitted with male tube ends. Working pressure: 75 PSI. Temperature range: 40°F to +300°F. Factory tested at 100 PSI. Maximum movement: 1/2". Ask for Catalog KE 99.

Nominal Tube or Pipe Size	O/A Length	O.D. of Tube End
1/2"	7"	.872 to .878
3/4"	7 1/2"	1.123 to 1.127
1"	8"	1.372 to 1.378
1 1/4"	9 1/2"	1.622 to 1.628
1 1/2"	10"	2.122 to 2.128

SPECIAL METAL HOSE ASSEMBLIES

In addition to the connectors shown here Cobra has over 4,000 other models on file and is available for answering unusual application problems. Chances are your requirements can be met more economically when you deal with Cobra. Send us your specifications for recommendations.



ENGINEERING ASSISTANCE

For those applications that cannot be met by a conventional connector, Cobra maintains an extensive and experienced engineering staff. This service is yours to command. The many "firsts" to their credit, both in commercial and government areas attest to their qualifications. Our laboratory and manufacturing facilities are among the most modern in the world.

When you have an unusual problem, or if you just want a little help, our engineers will be glad to oblige.