United States Steel Corporation Subsidiaries

AMERICAN STEEL & WIRE COMPANY, GENERAL OFFICES: CLEVELAND, OHIO
CARNEGIE-ILLINOIS STEEL CORPORATION, PITTSBURGH & CHICAGO
COLUMBIA STEEL COMPANY, SAN FRANCISCO
NATIONAL TUBE COMPANY, PITTSBURGH
TENNESSEE COAL, IRON & RAILROAD COMPANY, BIRMINGHAM
UNITED STATES STEEL SUPPLY COMPANY, WAREHOUSE DISTRIBUTORS, COAST-TO-COAST
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

U.S.S STAINLESS STEEL

for maximum resistance to severely corrosive and high temperature conditions

In chemical plants and laboratories, ductwork is put to its severest test. Here, under conditions that spell early failure for less efficient materials, fume hoods and ventilating ducts fabricated of U.S.S Stainless Steel give highly satisfactory service. Even when handling the fumes of very corrosive acids, U.S.S Stainless construction pays for itself by insuring high resistance to corrosive attack.



Its greater ease of cleaning, its structural strength with minimum weight, its freedom from danger of product contamination, and its high resistance to extremes of temperature are further money-saving advantages.

U.S.S Stainless Steel is produced in a wide variety of analyses, finishes, sizes and forms to meet practically every condition of use and fabrication. Our engineers are specialists in its use and will gladly assist you in its application.

Other U.S.S Steels famous for superior service

U.S.S GALVANIZED STEEL—for ductwork carrying humidified air and for ducts in damp locations.

U.S.S COPPER STEEL—coated or uncoated, insures increased resistance to corrosion, and increases life under all conditions of atmospheric exposure.

U.S.S GALVANIZED PAINTBOND STEEL—for ductwork requiring immediate painting without preliminary treatment or weathering. Paint will not flake. Bonderized surface prevents deteriorating action between paint and galvanized coating. A similar sheet, **U.S.S DULKOTE**, is available in the South and the West.

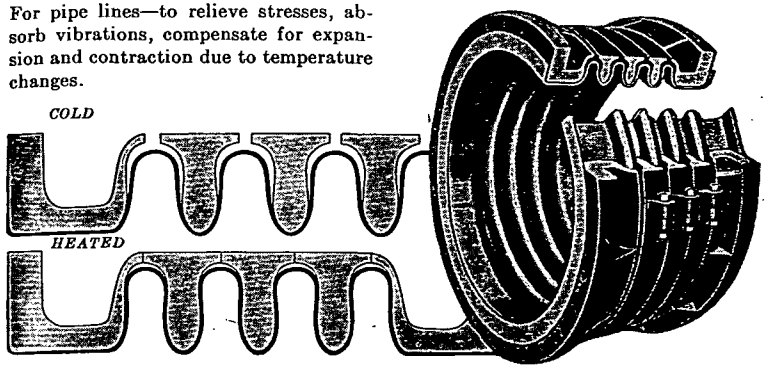
Badger Manufacturing Company

230–260 Bent St., Cambridge 41, Mass. • 500 Fifth Ave., New York

Representatives in principal cities

Badger "PACKLESS" Corrugated Expansion Joint

For pipe lines—to relieve stresses, absorb vibrations, compensate for expansion and contraction due to temperature changes.



EXCLUSIVE *all-curve* corrugations equalize stresses

Directed Flexing Self-Equalizing Rings on Badger Joints assure even distribution of stresses whether caused by *temperature*, *pressure* or *movement* . . . no excessive strains.

INSTALLATION, OPERATING, MAINTENANCE ECONOMIES

"Packless"—Made from a *single tube*. . . no packing . . . no servicing so no manholes or tunnels are required.

Flexible—Fast response to movement reduces to minimum the thrust on adjacent equipment.

Wide range of traverses—By varying the number of corrugations, traverses from a fraction of an inch up to any practical limit are possible.

Wide range of pressures—Standard joints for normal pressures . . . special joints for higher pressures.

Compact, easy to install—Outside diameter is about the same as regular pipe flange—nothing clumsy or hard to install.

Directed flexing, all-curve corrugations plus all-curve self-equalizing rings—Exclusive features on Badger Joints prevent stresses from *localizing*—assure long life, greater dependability. Rings *limit* and *progressively control* flexing movement.

Heat treatment—Scientific heat-treatment during manufacture removes forming stresses . . . lengthens life of the joint.

Available in copper, stainless steel and other metals—To overcome temperature, pressure and corrosion condition.