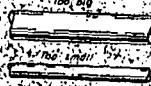
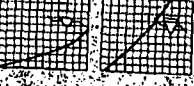
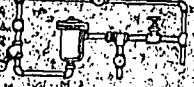


Fluid Services

Process steam, water, compressed air and other fluids convey energy to many parts of the modern industrial plant. Here are sure-fire tips on modernizing these services for your plant

Renovation Roundup CONTINUED

Practical Tips on Plant Piping

PIPE SIZE		High first cost, larger head loss with big pipe. Excessive pressure loss, no reserve capacity here.
INSULATION THICKNESS		Choose most economical thickness for fuel cost and fluid temperature.
VALVES		Know field-handled, its comp. pressure, type of fitting, needed, pipe, insulation, before pick, install, type, rating.
CONTROL VALVES		Analyze flow needs to pick, job size, body, position, material, control, detector, general, before pick.
TRAPS		Trap lines needing condensate removal, return and recovery, and all steam-heated units. For best results, use trap for each unit served.
CONDENSATE RETURN		Don't waste clean, hot condensate. Recover heat in flash steam, hot water return system, fit, plant, hot balance.
ABSORBING EXPANSION		Joint, take less space, too heads, but head, need, little, maintenance. Some joints may be packed, periodically.
PIPING LAYOUT		Keep valves within easy reach of operator, but close, to vehicles, and, other, sources, of, damage.
CONTROLS		Get help from a control specialist when picking your units. Balance the cost of controls with the labor, material and time that will be saved.

Process Steam

Economical transmission and application of process steam is the industrial power engineer's most important job. Some of the greatest savings possible through modernization come under the heading of process-steam application.

Process Conditions. More than ever before, production in America requires finer control of process variables. For process steam this means accurate control of pressure and quality. Once this is achieved, waste of steam and condensate in either the transmission or process hookups must be carefully guarded against.

Chart at left points out important facts relating to pipe size, insulation, support, valves and expansion. Recommendations apply to a large number of plants, but there are times when alternatives may be better. For instance, under-sized pipes are usually objectionable because pressure loss may be excessive. Sometimes you can make a net saving by raising boiler pressure slightly to allow using smaller and less costly process-steam piping. But don't fail to provide for load growth.

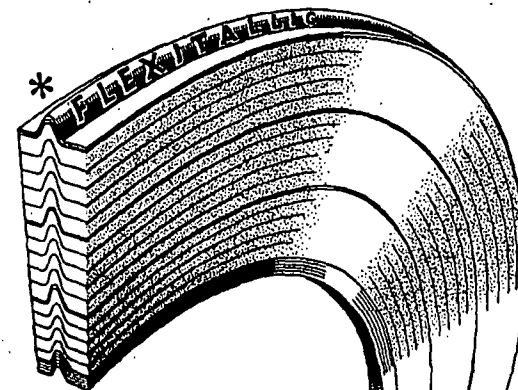
Poor planning of future process-piping needs wastes many dollars in American industry today. Stopgap lines, run hither and yon with no eye to the future, are chronic money wasters.

Study your process-steam needs for as many years ahead as you can make safe predictions. Draw up transmission and application plans that will serve your plant's needs. Simply providing a blanked tee or other fitting in a line you install may save hundreds of dollars a few years from now.

Meter and bill every department using process steam. This is the surest way of tracing wasteful users and penalizing them. If one or more departments return condensate to boiler, meter the returns, using this as a credit against steam consumption.

Track down waste in transmission and distribution. You cannot fairly penalize departmental users unless you too conserve every pound of steam. Start today toward that better plant.

(Continued on page 95)



SAVED: 24 HOURS OF "DOWN-TIME"

The operating department of a large Texas company saved one complete day in putting their plant back on the line after a maintenance shut-down. They saved an estimated \$45,000 and gave all the credit to Flexitallic Spiral-Wound Gaskets. It's the amazing spring-action of Flexitallic Gaskets that simplifies the making and breaking of flanged joints. Only 1/16-inch breakaway is required—and that's important at valves or where there is close manifolding of the piping... Each Flexitallic Gasket is engineered to meet specific conditions of thermal and physical shock, corrosion, vibration, weaving and unpredictable joint stresses. Spirally wound V-cripped plies of required metal with alternating plies of proper filler results in a resilient gasket having characteristics of a calibrated spring. Flexitallic Gaskets are at highest efficiency when bolted up cold at a predetermined load. For all pressure/temperature ranges from vacuum to 10,000 lbs., from extreme sub-zero to 2000° F. For all standard joint assemblies. In four thicknesses for special requirements: .125", .175", .250", .285". With Teflon filler for corrosive chemical conditions. Write us your requirements... Flexitallic Gasket Company, 8th & Bailey Streets, Camden 2, New Jersey. Representatives in principal cities. Consult classified telephone directory.

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