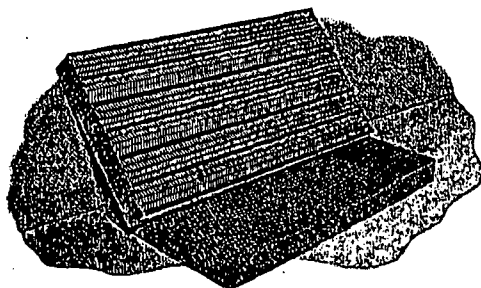


Copr-fibre

LAMINATED Long-fibre BLANKETS



Vastly Improve Insulation APPLICATION... EFFICIENCY... PERFORMANCE!

Here's Why: Copr-fibre Blankets are made by laminating long, mineral wool fibres together to form a tough, resilient blanket before wire mesh is attached.

As a result this exclusive Copr-fibre two-stage manufacture gives you these advantages:

- **FASTER APPLICATION**, because laminated blankets cannot loosen or fall apart under the abuse of handling. And because Copr-fibre blankets come in convenient large sizes, are light in weight, clean, shot-free.
- **MORE INSULATING EFFICIENCY**, because laminated, longer fibres guarantee lower thermal conductivity. Two-stage manufacture is your insurance of uniformity of density and of consistency in all dimensions.
- **BETTER PERFORMANCE**, because resilient long-fibre Copr-fibre blankets maintain integrity, both of insulation and weatherproofing, throughout expansion and contraction cycles of heated and cooled equipment.

SEND FOR THIS BULLETIN. Copr-fibre Bulletin 311 gives you all the facts on what we believe is the only modern blanket insulation. Your copy will be sent free upon request. Write today.



FORTY-EIGHT INSULATIONS, Inc.

Telephone: Aurora 9207

AURORA, ILLINOIS

More PLANT PROBLEMS

leads to vibration. Though BP can say anything about pump condition, I've seen impellers where they've developed from one stage to the next through the keyway.

Be sure to check coupling alignment. It must be accurate and adjusted to compensate for pump expansion.

C W BELL, Sr.

Hastings

NEGLECT TO USE bypass valves on loads may be causing this trouble. Orifice-type bypasses are used for openings for clogging. Or BP may have a condition like one I ran into recently. The operator "couldn't stop the racket" so he closed the bypass.

HOWARD HOLCOMBE

Los Alamos, N.M.

REBALANCE pump rotor if it only runs at 2150-2200 rpm. Only a pump manufacturer's engineers, or those specializing in this type of work, can do a job like this well.

Be sure all clearances in pump are within design limits and entire unit is securely bolted to its foundation.

JOHN CEIST

Brooklyn, N.Y.

BE SURE pump operating temperature does not exceed design limit of 300°F. Otherwise, there may be flashing at pump suction. Use torque wrench to draw up casing nuts. This prevents uneven tightening.

Check original drawings of the installation to see that piping to pump has not been changed. Rerouting of piping may put excessive strains on pump casing, causing misalignment.

Log the pumps to keep temperature even throughout the casing.

Though BP can attempt to balance rotor, and may obtain satisfactory results, he should also check coupling halves and bearings. Replace worn bearings in turbine and pump.

HENRY RASMUSSEN

Crystal Lake, Ill.

IN OUR PLANT we "smooth out" a pump by tearing it down and stripping the shaft of all impellers, interstage and spacer bushings, and balance piston pump has one.

Our next step is to check shaft run-out on lathe centers. If shaft is bent, we straighten it. After checking shaft we closely inspect all impellers for wear and cavitation. If they are worn or cavitated, use them again.

Then we place each impeller on arbor and face both sides square at setting. We do the same for spacer.



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In this record! A well known utility company has operated a turbine for almost 12 years without an oil change or cleaning. At a rate of less than 10% "make-up" per year, Tycol Aturbrio has served the plant without malfunction - for years on end. And Tycol Aturbrio performance records show turbine after turbine running well over 100,000 hours without a change! That's proven stability... further substantiated by the regular use of Aturbrio as an outstanding turbine oil. Full data on Aturbrio performance is available from your local Tide Water Associated office.



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