



**...and INSTALL BEAUMONT
ANTI-FRICTION GATES**

● Many utilities are replacing their present gates with Beaumont Improved anti-friction type gates. Since the first order from one utility in 1942, many repeat orders have been received for installation in this company's other power plants.

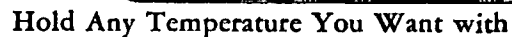
In all cases, these gates have given very satisfactory service. According to one user, "No trouble whatever has been experienced opening and closing these gates—and no maintenance has been necessary other than periodic greasing".

Many leading plants throughout the country are finding it economical and time-saving to install Beaumont trouble-free type gates such as those pictured at left. Follow the leaders and do the same. These gates are made in sizes from 14" to 30". Request complete information.

One contract—one responsibility

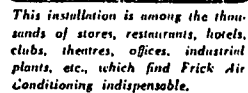
BEAUMONT BIRCH *Company*

Testing a crystal frequency calibrator at 76° below zero in the Frick Refrigerated Laboratory of Bendix Radio, Tolson, Minn.



Refrigeration

"Cold" down to 130 degrees below zero F. is now common in research and test work. Penicillin is dried at minus 75. Foods are quick-frozen at minus 30 to minus 60; are stored at zero to minus 20. Ice is frozen commercially in brine at 16. Fresh foods are held at 34 to 36. Drinking water is cooled to 45. Air conditioning, at 70 to 85, tops the scale of refrigerating loads. • Whatever the temperature wanted, you can hold it most dependably with Frick Refrigeration. Sixty-five years' experience says so.



General Electric Co introduces *Heatmex* alloy of tungsten, copper and nickel to line metallurgical production alloy processes. A density of 50% (than lead and is applicable to design construction of moving parts possessing maximum inertle and minimum weight. Originally developed in response to demands for a material of high density to use on a gamma-ray screen, *Heatmex* is adaptable to construction of bearings, crankshafts, modern air screws, clutches and other rotating parts. Combining great tensile strength with machinability, *Heatmex* is highly resistant to atmospheric salt-water corrosion and easily plated with cadmium, chromium or nickel. It may be silver soldered or brazed by standard methods.

Public Service Commission has authorized Central New York Power Corp. to award contracts for new installations totaling an estimated \$1,661,933 at its Oriskany generating station. The equipment, including a hydrogen-cooled turbine generator and a power transformer, is necessary to meet postwar power-load requirements and to provide an adequate power supply.

Carolina Power & Light plans construction of a new steam-electric generating plant three miles south of Lumberton, N. C., on Lumberton River. The plant, a part of a \$25,000,000 construction program, will have two 60,000-hp units that are expected to go into operation in 1950. The plant will be of outdoor construction, the first of its kind in that section of the country. Generating units will operate at 1250° F. and 950 F. The plant will burn about 280,000 lb of coal per day. Carolina Power & Light now has eleven generating plants, nine of which are hydro.

James Slayter, vice-president in charge of research and development of Owens Corning Fiberglas Corp., has been chosen to receive the 1948 Industrial Research Institute medal presented for outstanding contribution to field of industrial research.

Richard P. Brown, chairman of board of Brown Instrument Co., Philadelphia, has been made a fellow of American Society of Mechanical Engineers. Brown was awarded recently an honorary degree doctor of engineering by Drexel Institute of Technology.

Installation of first of three 1500-hp Baldwin diesel units, to provide supplemental power for hydroelectric plant owned by Paul Smith's Electric Light and Power Co. and Railroad Co. of Saranac Lake, N.Y., has been completed at Piercefield in the vicinity of the Adirondack region. The unit is an 8-cylinder supercharged engine with a generating capacity of 500 kw. built by Baldwin Locomotive Works at Eddyville, Pa., was rushed to completion this year because of fear of a drought that might materialize. The other two units, also 1500-hp supercharged that will generate 1000 kw each, are scheduled to be installed by next April, before the summer season opens.

How Timken bearings boost booster precision

In the new Hydro-Power® oil hydraulic booster (used to convert low pressure to high pressure), clearance between the central and main body is essential to guard the pressure differential between the high and low pressure sides. How to maintain such precision? Timken tapered roller bearings on the central valve shaft.

Timken roller bearings assure precision because they are precision themselves. They are

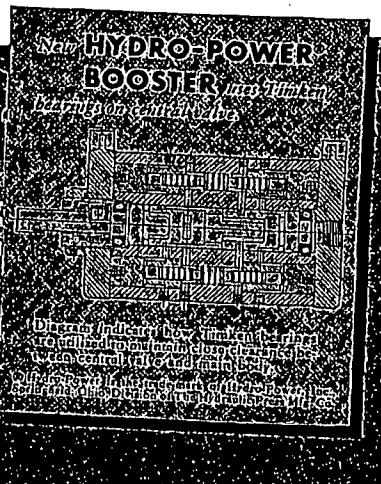
manufactured to exactly close tolerances—finished to incredible smoothness. And they retain their precision because of the Timken fine alloy steel of which they are made.

Maximum support for shafts is provided by the line contact between rolls and races. The tapered construction of Timken bearings permits accurate preloading and close adjustment to retain precision indefinitely.

If you're looking for a way to maintain positive clearances between moving parts, make sure the trade-mark "Timken" is on every bearing you use. Only Timken bearings can give you *all* their advantages. The Timken Roller Bearing Company, Canton 6, Ohio.



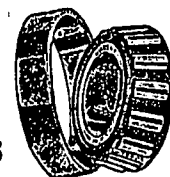
*This symbol on a product means
its bearings are the best.*



WITHIN ONE HALF A THOUSANDTH OF AN INCH
... that's an example of the accuracy demanded in the outside diameter of Timken bearing cups in order to pass inspection.

The Timken Company is the acknowledged leader in: 1. advanced design; 2. precision manufacture; 3. rigid quality control; 4. special analysis. Timken steels.

TIMKEN
MADE IN THE U.S.A.
TAPERED
ROLLER BEARINGS.



NOT JUST A BALL NOT JUST A ROLLER THE TIMKEN TAPERED ROLLER BEARING TAKES RADIAL AND THRUST LOADS OR ANY COMBINATION