THE VANISHING POINT OF FRICION is the vanishing point of wear. And because New Departure Ball Bearings do reduce friction to the vanishing point, they never need adjustment to take up wear. After long years of severe service, New Departures retain their original efficiency because they are built of finest bearing steel to the most exacting standards of workmanship and finish—and their design is based on the scientific principle that nothing rolls like a ball.
OXWELDING—PROVED BY TEST

Oxwelded pressure vessels constitute an outstanding example of the results which can be obtained through intelligent application of the oxy-acetylene process. Introduction of oxy-acetylene welding into the production of large pressure vessels has resulted in increased dependability, and noteworthy contributions to the knowledge of the best methods of design.

Never before has it been possible to test full size pressure vessels actually to destruction. With oxwelded construction, however, it has been possible to test each design until the plate itself failed and to correct any weaknesses discovered in design or materials. Test pressures of three times the working pressure are standard for oxwelded pressure vessels.

From time to time the oxy-acetylene industry is in the market for technically trained men. It offers splendid opportunities for advancement.

The Linde Air Products Company — The Prest-O-Lite Company, Inc. — Oxweld Acetylene Company — Union Carbide Sales Company — Manufacturers of supplies and equipment for oxy-acetylene welding and cutting — Units of

UNION CARBIDE AND CARBON CORPORATION
30 East 42nd Street

New York, N. Y.

APRIL, 1930

Each one of these companies has been a pioneer and a leader in its field—each one is a familiar name wherever construction work is in progress the world over. Their products of quality have exemplified the integrity of each organization and brought confidence over a long period of years.

Now they are united in National Equipment to give still greater service in manufacturing construction machinery of super-quality. In this greater organization cooperative engineering and research become a realization — N. E. C. is an operating unit with greater facilities to develop and perfect construction equipment. It is a pioneering step for increasing achievement.
Spain, which has housed many of her hydroelectric installations in veritable architectural castles, has invested 2,500,000,000 pesetas (about $500,000,000) in the development of this, her foremost industry.

By closing a circuit breaker in a switching station at Central de Camarasa, 12 miles away from the source, one man will add 10,000 kv-a. to the capacity of that particular power castle—when two waterwheel generators, switchgear, and transformers built and tested this year by General Electric are put in operation. This installation will be the only automatic supervisory control installation outside North America and Japan.

Waterwheel-generator testing and study are among the assignments of recruit Test men—recent engineering college graduates. Under the supervision of an experienced "Head of Test," they carefully adjust for, and note responses to, such tests as core losses, friction losses, windage, heat runs, and high-speed runs. A valuable foundation is thus laid for industrial, sales, research, general, or miscellaneous engineering work.