

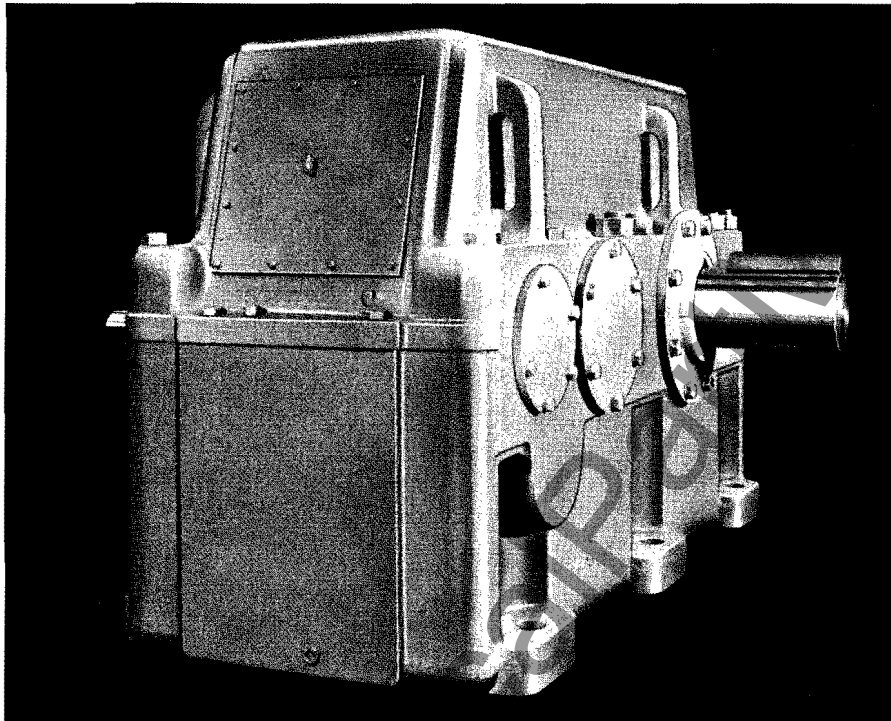


February, 1978
 Supersedes Descriptive Bulletin 2980-1,
 pages 1-4, dated March, 1973

Type TDS Single Helical
 Single, Double and Triple Reduction

Parallel Shaft Speed Reducers

Mailed to: E, D, C/1731/DB



For over 55 years, Westinghouse TDS speed reducers have been used throughout industry — to provide precise speed for blowers, conveyors, elevators, rotary mills, and other types of industrial machinery.

To the basic standards established by the American Gear Manufacturers Association (AGMA), Westinghouse research and experience has added a number of advanced concepts to increase efficiency, facilitate handling, and simplify adaptation to many special uses.

User Benefits

Single Helical Gearing

A Westinghouse development, single helical gearing distributes the load over the full tooth face for smoother operation and elimination of any end loading.

Housing Design

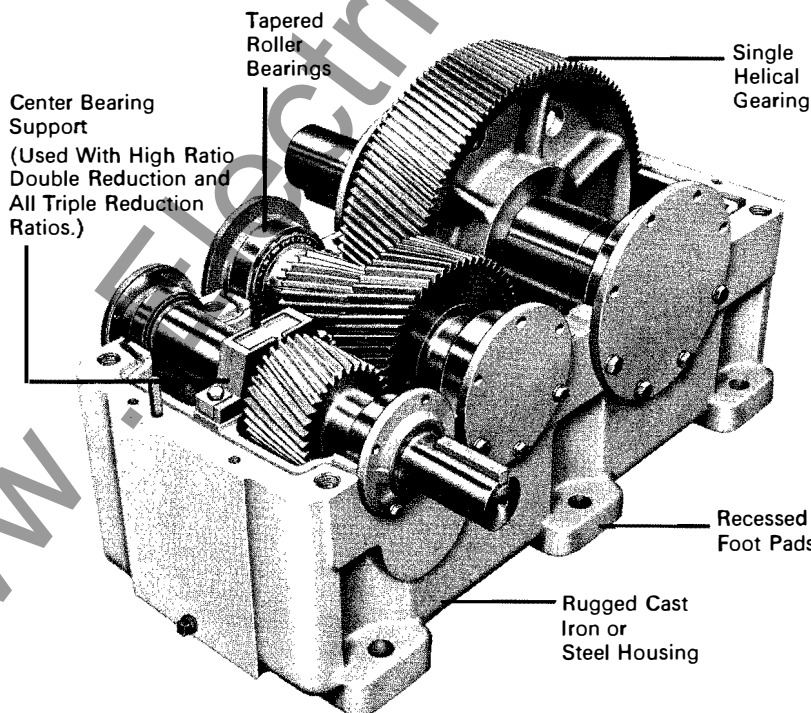
Uncluttered, compact housing facilitates the mounting of brakes, clutches, back-stops, tachometers and motor mounting brackets. It is available in single, double and triple reductions ranging from 1.84:1 to 292:1, in ratings from 1 through 5000 horsepower.

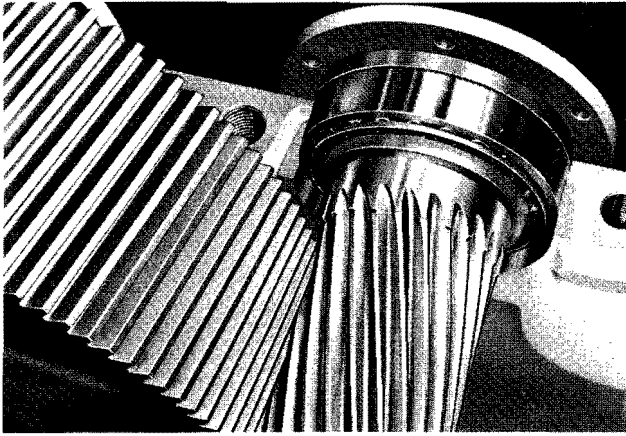
Two housings are available, one for type S, and one for type D and T. The specially designed type S unit for single reduction (one gear mesh) service occupies only the floor space required to support a substantially designed, one mesh housing. Both cast iron and steel housings are available.

Shorter Centers

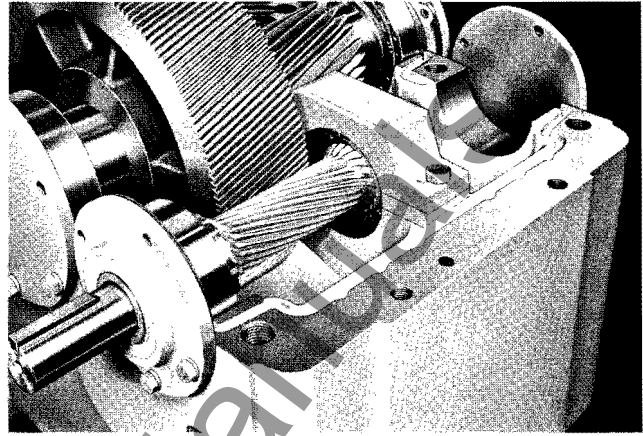
Utilizing the shorter centers-wider face approach in the TDS line results in lower velocity of tooth engagement and smaller dynamic forces.

Lower "pitch line velocities" reduce losses in the oil reservoir since power loss caused by the churning of oil by the dipping gear is proportional to the square of the velocity.

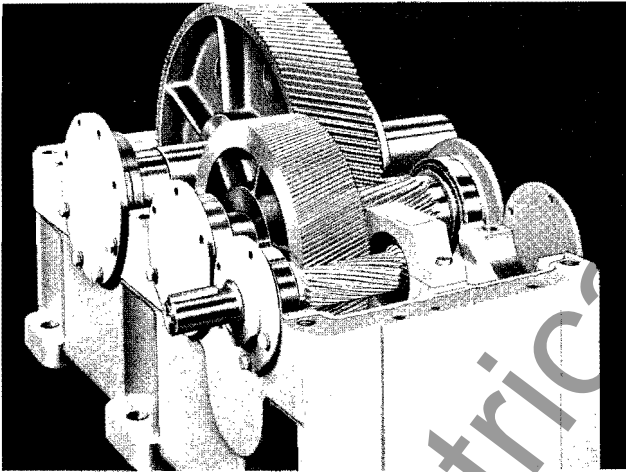




Single Helical Gearing pioneered by Westinghouse is hobbled on Pfauter-designed hobbers for extreme accuracy. Crown-hobbed pinions assure full tooth face load distribution, eliminating end loading and providing long, trouble-free life.



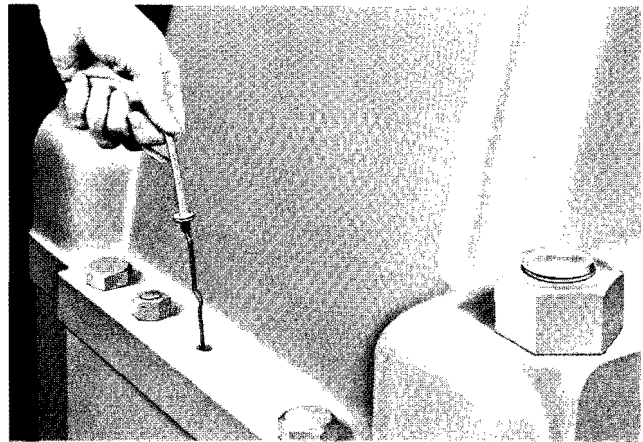
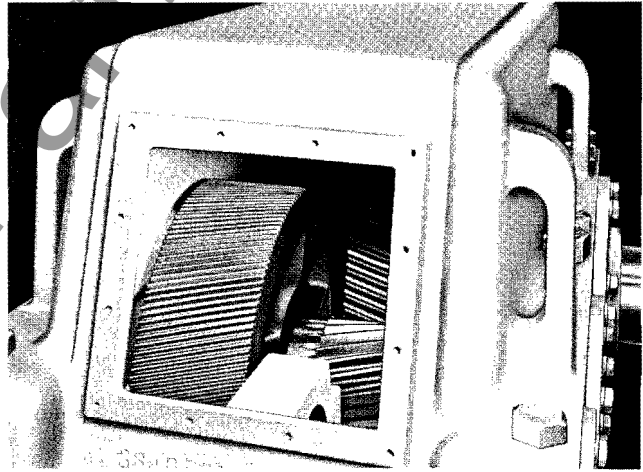
Center Bearing Support reduces the span of the high-speed shaft, appreciably reducing shaft deflection. This exclusive Westinghouse design feature assures good tooth contact and prolongs gear life.



Extra Wide Bearing Span of low-speed gear train provides superior overhung load capacity, eliminating in many instances the need for costly oversize bearings.

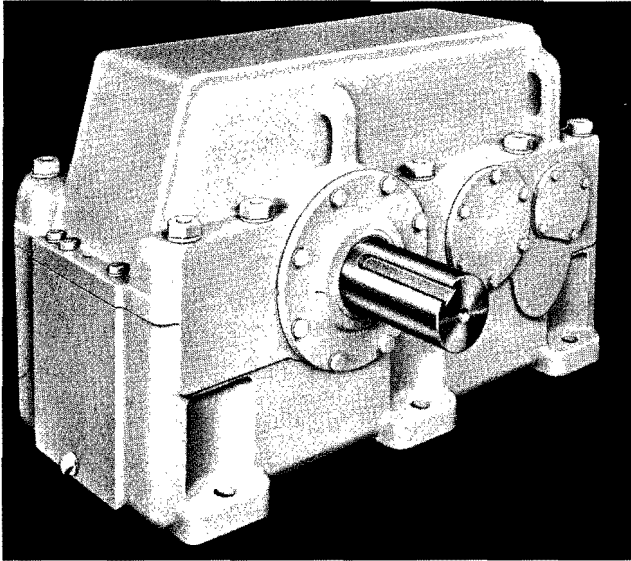
End Inspection Opening with attached breather permits easy inspection with reduced maintenance. Reduced over-all height permits mounting in restricted locations.

Oil Dip Stick – foolproof and timesaving method of accurately checking the oil level – permits substantial reduction in maintenance costs.

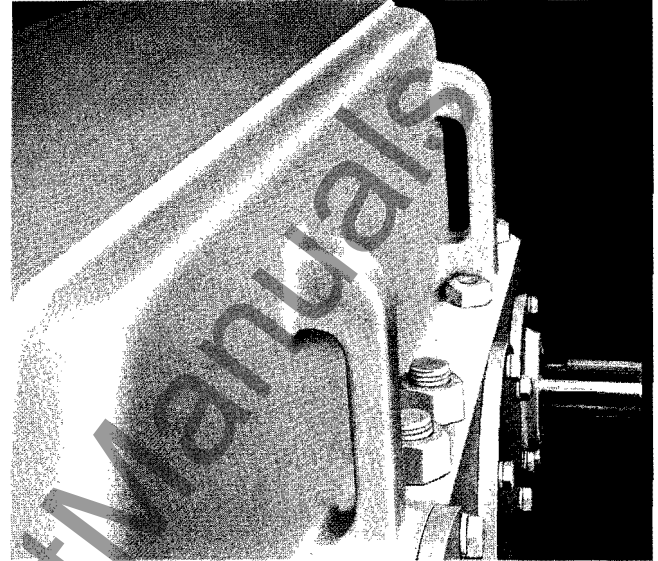




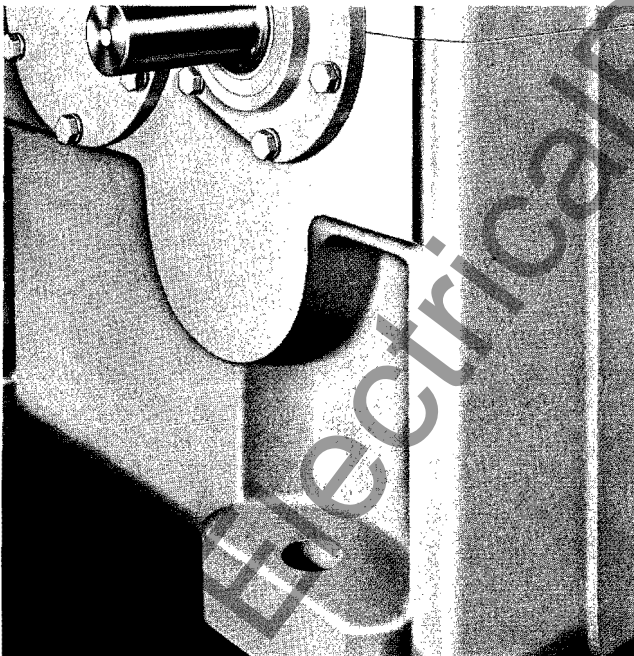
com



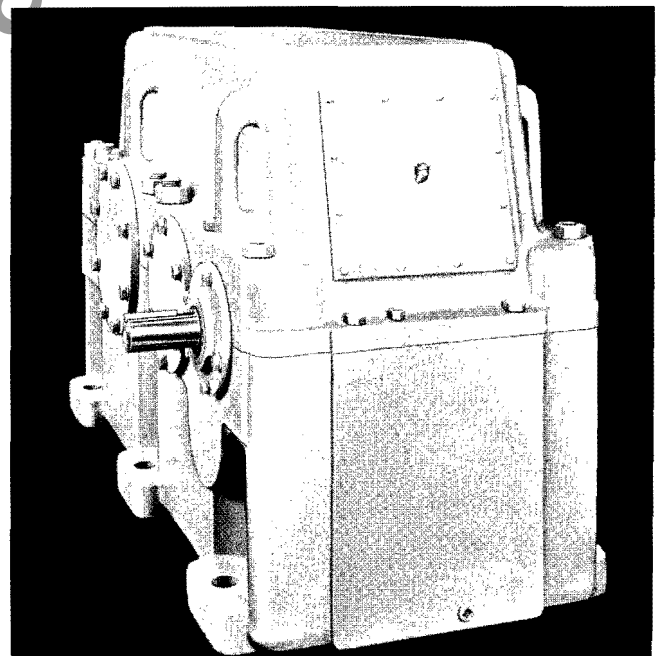
Cast-Iron Housing is corrosion resistant and provides rigid alignment of internal components. Note the flat top for mounting of motors and auxiliaries. Also available with steel housing.



Sturdy Lifting Lugs can be used to lift the entire gear reducer, for safe, easy handling without necessity for time-consuming slings.



Recessed Foot Pads reduce floor space requirements. Adequate clearance is provided in the housing recess for standard tools.



Flat Machined Sidewalls permit the reducer to be modified with minimum effort. Mounting of accessories such as brakes, scoop type motor mounts, tachometers, fans, etc., is greatly simplified.

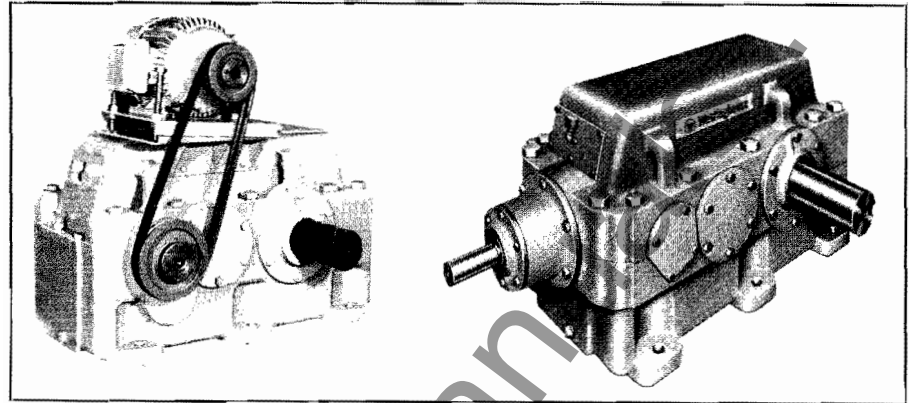
www



Westinghouse Motor and Gearing

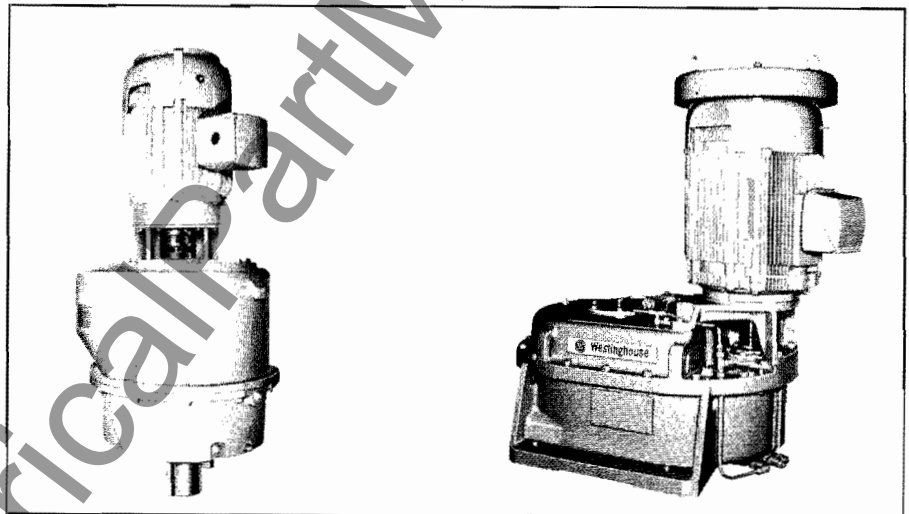
- Motors
- Enclosed gear drives
- Complete package assembly of electrical and mechanical components

For over 50 years, Westinghouse has been a reliable source for electrical and mechanical drives. Consult with your local Westinghouse representative for your drive requirements.



TDS Parallel Shaft Speed Reducers with "piggy-back" motor mount.

TR Spiral Bevel Helical Speed Reducers Ratings 60,000 thru 850,000 inch Lbs.



Veri-Dri Vertical Gearmotors Ratings 1-125 hp; 420-5 rpm

Veri-Dri Vertical Speed Reducers Ratings 100,000 thru 600,000 inch Lbs. Ratios 9.3:1 to 194.6:1

Further Information

Discounts and Multipliers:

Selling Policy 2900, page 2.

Parallel Shaft Speed Reducers, Type TDS:

Application Data 2980-2, pages 1-24.

Price List 2980-3, pages 1-4.

Dimension Sheet 2980-4, pages 1-10.

Right Angle Speed Reducers, Type TR:

Application Data 2982-2, pages 1-12

Price List 2982-3, pages 1-2

Dimension Sheet 2982-4, pages 1-10

Moduline® Integral and All-Motor Gearmotors:

Application Data 2984-2, pages 1-12

Price List 2984-3, pages 1-12

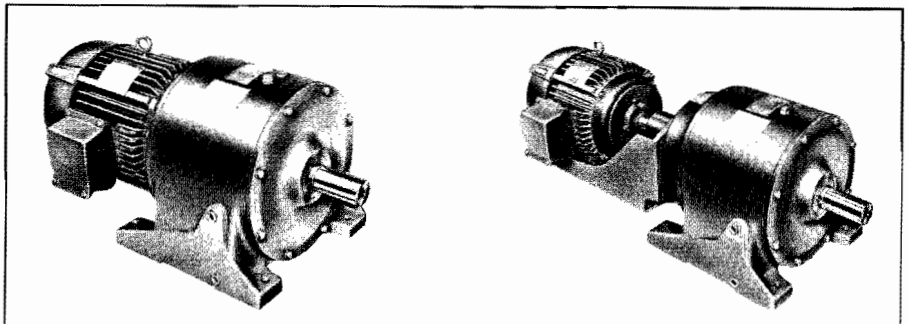
Dimension Sheet 2984-4, pages 1-9

Moduline Speed Reducers

Application Data 2986-2, pages 1-20

Price List 2986-3, page 1

Dimension Sheet 2986-4, pages 1-6



Moduline® Integral Gearmotors Ratings 1-125 hp; 780-1.5 rpm

Moduline® All-Motor Gearmotors Ratings 1-150 hp; 420-1.5 rpm