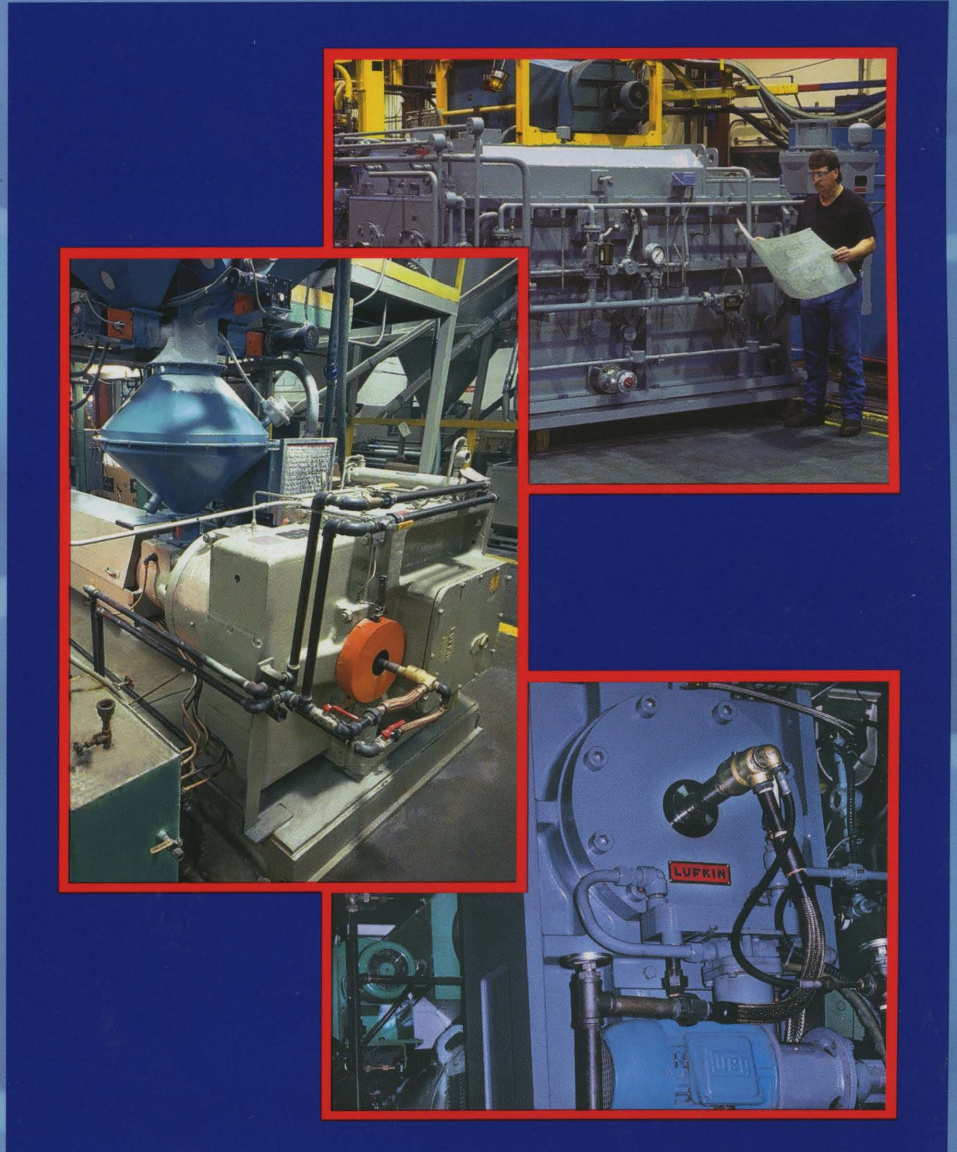
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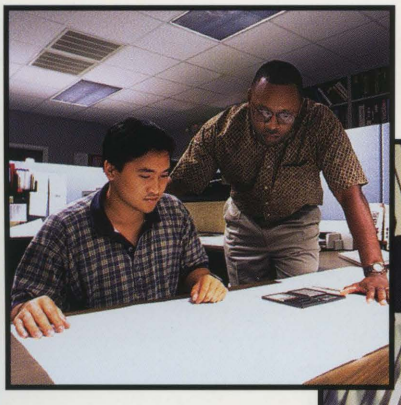
GEARS

Reliable Performance in Extrusion Applications

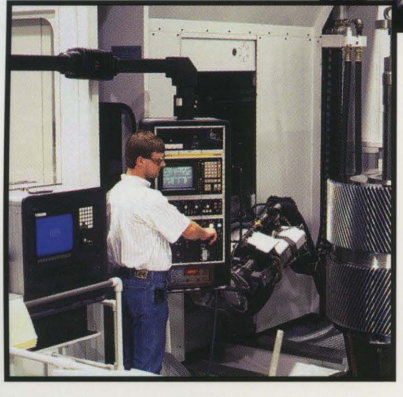


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Customers worldwide depend on Lufkin Industries' more than 50 years of experience supplying high performance, precision gear drives. A global market leader, Lufkin maintains a continuous commitment to technological innovation and engineering expertise. By doing so, Lufkin is able to deliver products that provide quality, performance and reliability.





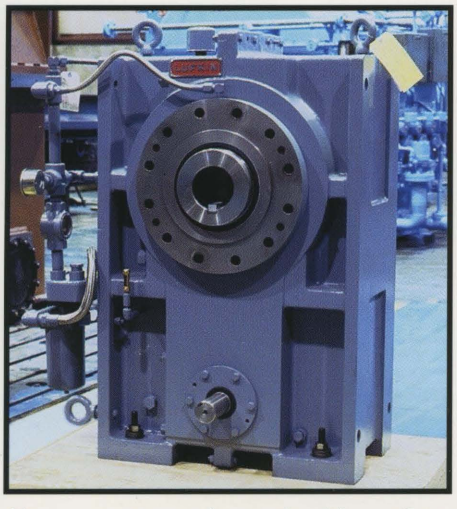


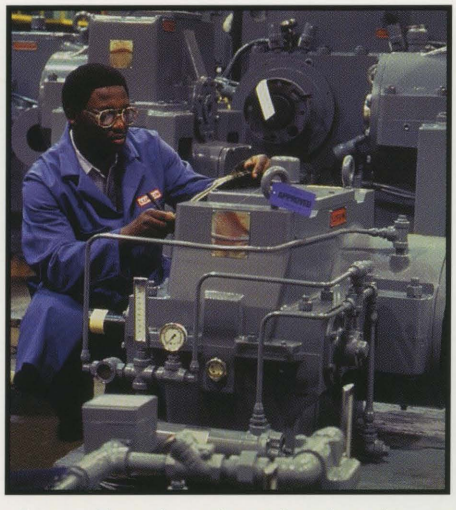
Lufkin is committed to maintaining the highest level of engineering expertise possible and utilizing the most advanced technology available.

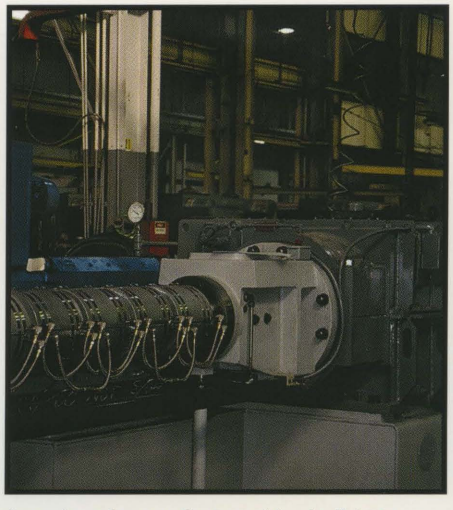
With vertically-integrated manufacturing, Lufkin consistently monitors each phase of product development from state-of-the-art 3-D design through the entire production process to ensure that each unit adheres to the highest quality standards. The ability to perform all facets of production in-house is one means of assuring that each product and its components meet or exceed customer and industry specifications. As an ISO 9001 company, Lufkin maintains a steadfast commitment to excellence.

Reliable service and outstanding performance are essential in extrusion and mixing applications. Lufkin's integral thrust bearing gear units are used in a variety of applications in the plastics and rubber industries. Lufkin specializes in customizing units for peak performance under the most rigorous operating conditions. Offering a broad range of unit configurations and thrust bearing sizes, Lufkin can meet the requirements of any specific application.

Every Lufkin component is manufactured from the highest quality materials available and is tested to meet customer specifications and the operating demands of the particular application. Whether a fixed ratio gear unit, a change gear drive or a large fixed ratio unit is required, Lufkin designs and manufactures the product which will provide optimum performance and durability coupled with easy maintenance resulting in maximum "uptime".

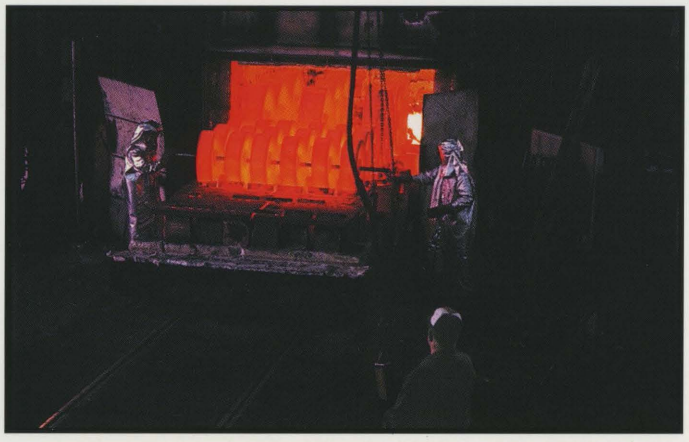






Numerous types of extruder drive unit configurations with various thrust bearing sizes are designed and manufactured by Lufkin to meet a variety of application demands and customer specifications.

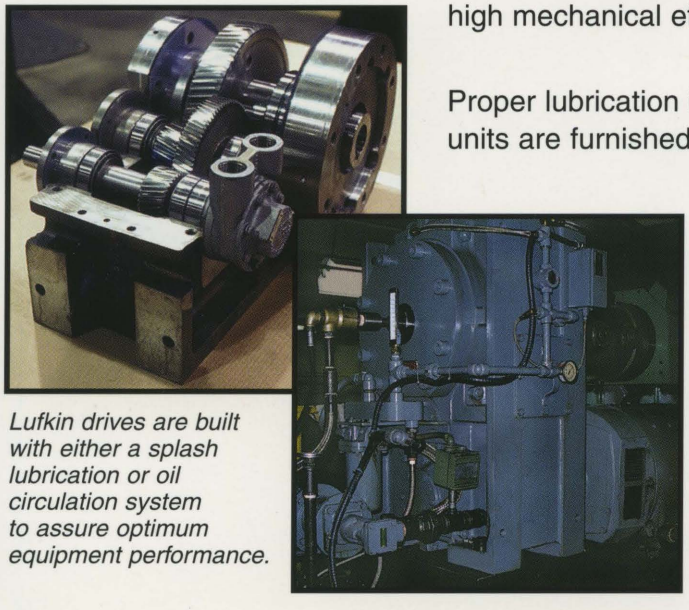
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From project inception through final product testing, Lufkin's ability to handle all facets of design and production assures that each component and all finished units meet or exceed the most rigorous industry standards.

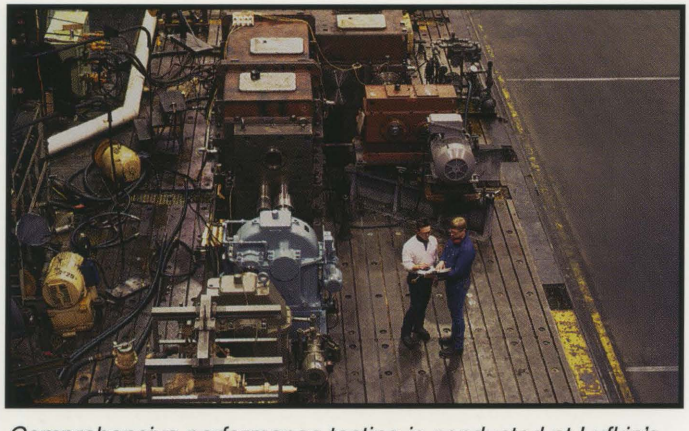
Gear casings are poured in Lufkin's Foundry from high tensile, heavy-section cast iron to guarantee maximum strength and rigidity under all loading conditions. Lufkin uses the latest manufacturing technology to provide quiet, smooth operation even at high torque loads. Each Lufkin extruder gear drive has precision heavy-duty anti-friction bearings to ensure accurate alignment, maximum performance, high mechanical efficiency and long equipment life.



Lufkin drives are built with either a splash lubrication or oil circulation system to assure optimum equipment performance.

Proper lubrication is essential in any gear unit. Lufkin's extruder drive units are furnished in both splash-lubricated and oil circulation versions. The horizontal units have bearings, pinions, gears and shafts running in a bath of oil. Vertical units feature an oil pump that delivers oil directly to the upper bearings. Larger extruder drives are typically furnished with an oil circulation system. Circulating systems feature positive displacement oil pumps and compact heat exchangers. Pumps, filters and coolers are available for all units if required.

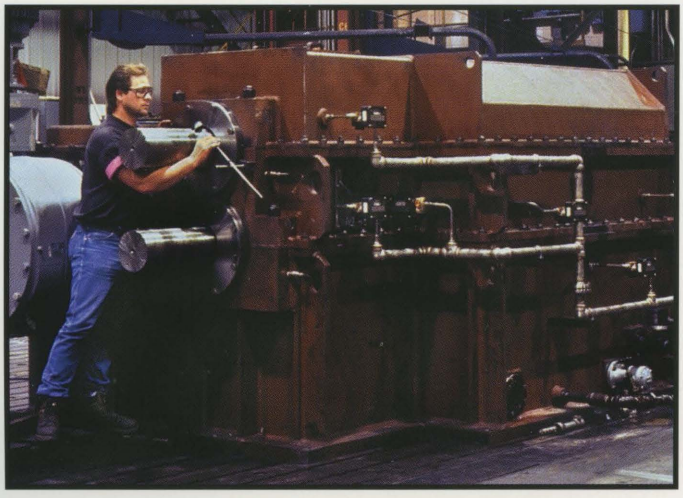
All Lufkin drive units and their components, including housings, bearings and gears, undergo thorough inspection throughout the manufacturing process. Upon completion, each unit receives full performance testing. Extrusion and mixing applications require dependable operating efficiency from a gear drive. By assuring quality and proven performance prior to shipment, Lufkin provides customers with smooth initial start-up and installation on site, followed by years of trouble-free operation. Should a need arise for technical or service support, Lufkin engineers will respond to any location at any time to provide assistance.



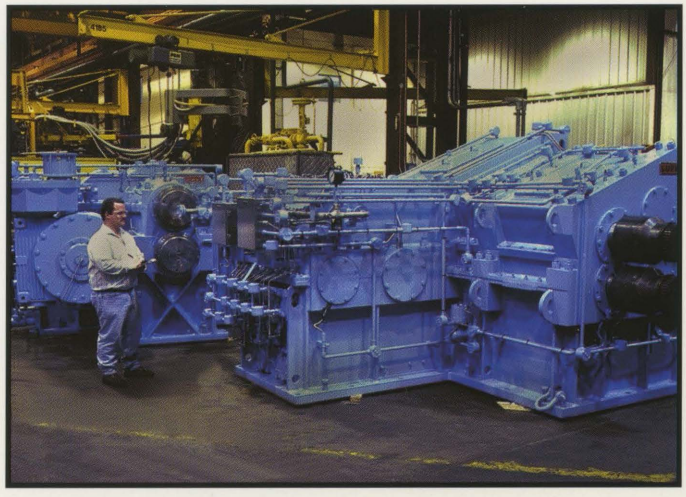
Comprehensive performance testing is conducted at Lufkin's world-renowned test facility prior to final product approval.

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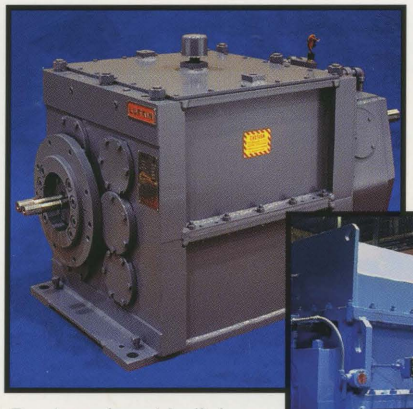
Specialty Gear Units for Extrusion and Mixing Applications



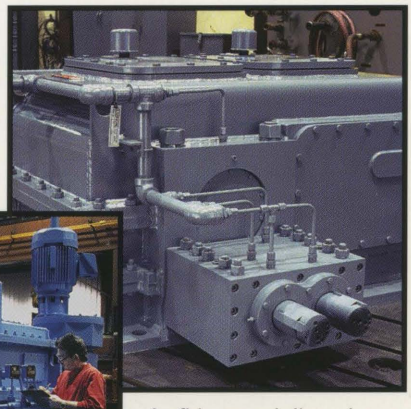
A Lufkin technician makes a final adjustment to this Model SF3824-19-2 mixer drive prior to shipment.



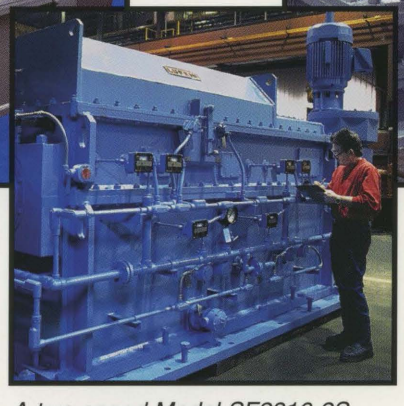
Inspection of Lufkin's Model DF640-1S-2 melt pump drive and Model S3824-19-2 mixer drive with integral turning gear.



Designed and built by Lufkin, this Model 79TS unit is used to power a twin screw extruder having a 79 mm shaft center distance.



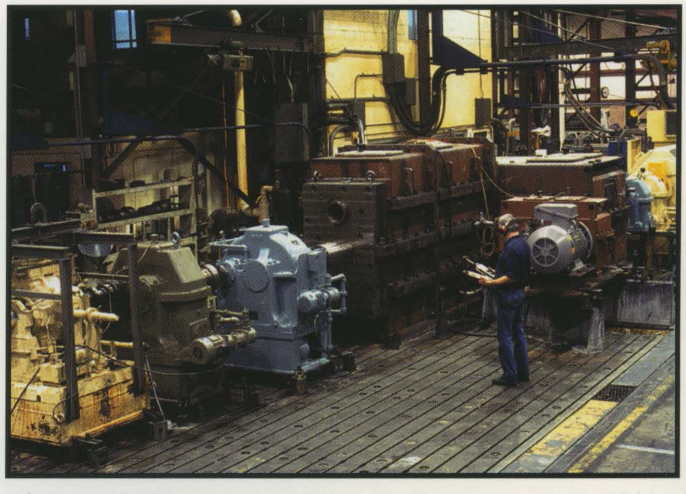
Lufkin specializes in manufacturing customized units like this twin screw extruder drive for a plastics application.



A two-speed Model SF2816-2S-16.142-2 mixer drive.

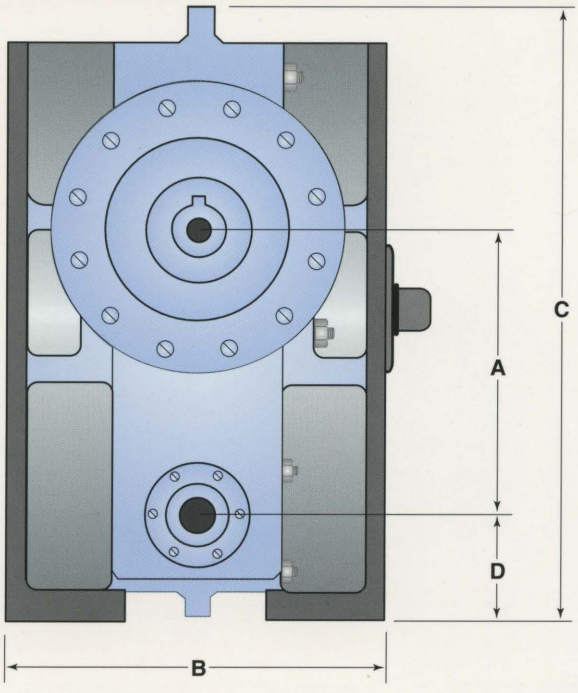


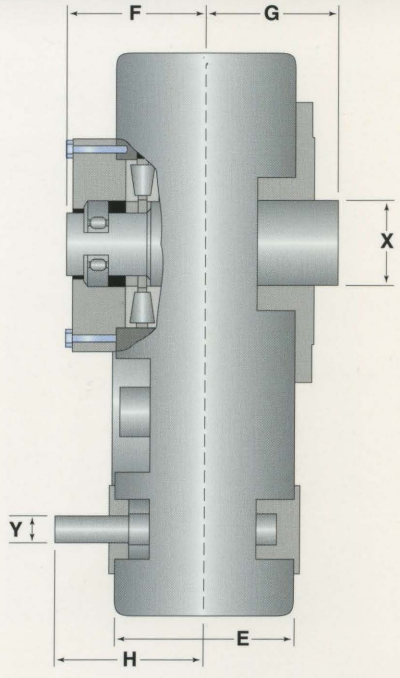
Lufkin's Model DF560-14-2 gear drive provides maximum performance for an 800kW mixer.



A Model 253TS two-speed drive which powers a 6000 HP, 253 mm twin screw extruder undergoes performance testing.

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E-Line Model

Unit	A	B	C	D	E	F	G	H	X	Y	Weight
DH121E	12.1 307.3	15.8 401.3	25.5 647.7	4.5 114.3	9.8 248.9	6.9 175.3	9.1 231.1	8.0 203.2	4.1 104.1	1.3 33.0	1000 454
DH156E	15.6 396.2	22.0 558.8	33.0 838.2	6.0 152.4	13.0 330.2	9.1 231.1	10.3 261.6	10.3 261.6	5.0 127.0	1.5 38.1	1800 817
DH191E	19.1 485.1	25.0 635.0	40.0 1016.0	7.3 185.4	14.5 368.3	10.8 274.3	11.0 279.4	12.0 304.8	6.8 172.7	2.0 50.8	2600 1179
DH235E	23.5 596.9	29.5 749.3	48.0 1219.2	8.0 203.2	17.0 431.8	11.6 294.6	12.2 309.9	13.8 350.5	8.0 203.2	2.8 71.1	4100 1860
DH300E	30.0 762.0	40.0 1016.0	60.6 1539.2	10.7 271.8	19.6 497.8	14.8 375.9	14.8 375.9	15.5 393.7	9.3 236.2	3.4 86.4	8500 3856

Black dimensions/weights are in inches/pounds. Red dimensions/weights are in millimeters/kilograms.
NOTE: Above dimensions are not to be used for unit installation. Use only a certified installation print.

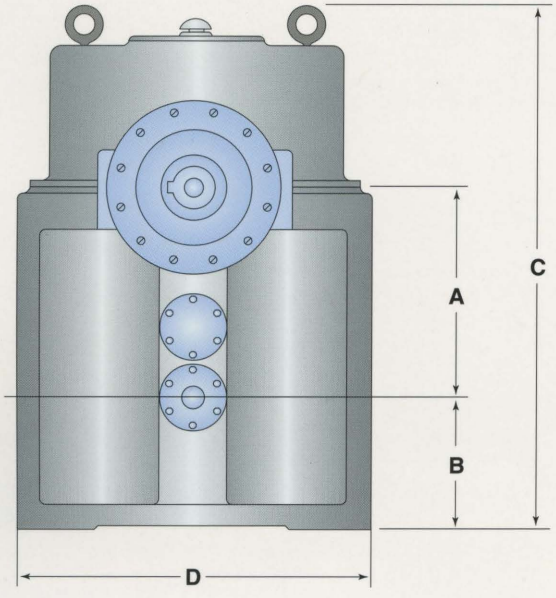
Lufkin's E-Line Series of fixed ratio extruder drives is designed to reduce maintenance time during servicing of the thrust bearing. A special feature makes it unnecessary to move the extruder screw or the gear unit. The thrust bearing, located on the shaft end opposite the extruder screw, can be easily accessed for inspection or removal by simply unbolting the outside cover plate.

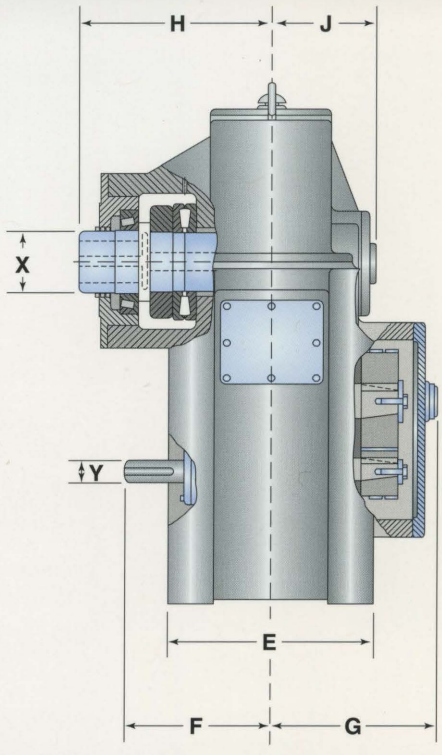
Units are available in vertical or horizontal (RH or LH offset), "Z" or "C" shaft configuration mounting arrangements.

Thrust bearing options for E-Line units:

- DH121E: T 311
- DH156E: T 411 and T 511
- DH191E: T 511 and T 611
- DH235E: T 611 and T 811
- DH300E: T 911

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Change Gear Model

Unit	A	B	C	D	E	F	G	H	J	X	Y	Weight
D55	19.5 495.3	9.5 241.3	47.0 1193.8	31.5 800.1	15.8 401.3	10.8 274.3	11.5 292.1	15.0 381.0	7.9 200.7	4.3 109.2	1.4 35.6	2200 998
D104	21.0 533.4	12.0 304.8	51.5 1308.1	34.5 876.3	18.0 457.2	13.3 337.8	14.5 368.3	16.9 429.3	8.6 218.4	6.8 172.7	1.6 40.6	3200 1452
D165	22.5 571.5	14.0 355.6	56.0 1422.4	38.0 965.2	22.0 558.8	15.3 388.6	17.3 439.4	20.4 518.2	10.6 269.2	8.0 203.2	2.5 63.5	5000 2268
D200	22.5 571.5	14.0 355.6	56.0 1422.4	38.0 965.2	22.0 558.8	15.3 388.6	17.3 439.4	20.4 518.2	10.6 269.2	8.0 203.2	2.5 63.5	5000 2268
D262	30.0 762.0	9.0 228.6	64.8 1645.9	47.0 1193.8	23.0 584.2	20.5 520.7	17.8 452.1	27.8 706.1	11.1 281.9	8.8 223.5	3.0 76.2	7000 3175
D315	30.0 762.0	9.0 228.6	64.8 1645.9	47.0 1193.8	23.0 584.2	20.5 520.7	17.8 452.1	27.8 706.1	11.1 281.9	8.8 223.5	3.0 76.2	7100 3221
D475	30.0 762.0	9.0 228.6	64.8 1645.9	47.0 1193.8	23.0 584.2	20.5 520.7	17.8 452.1	27.8 706.1	11.1 281.9	8.8 223.5	3.0 76.2	7100 3221

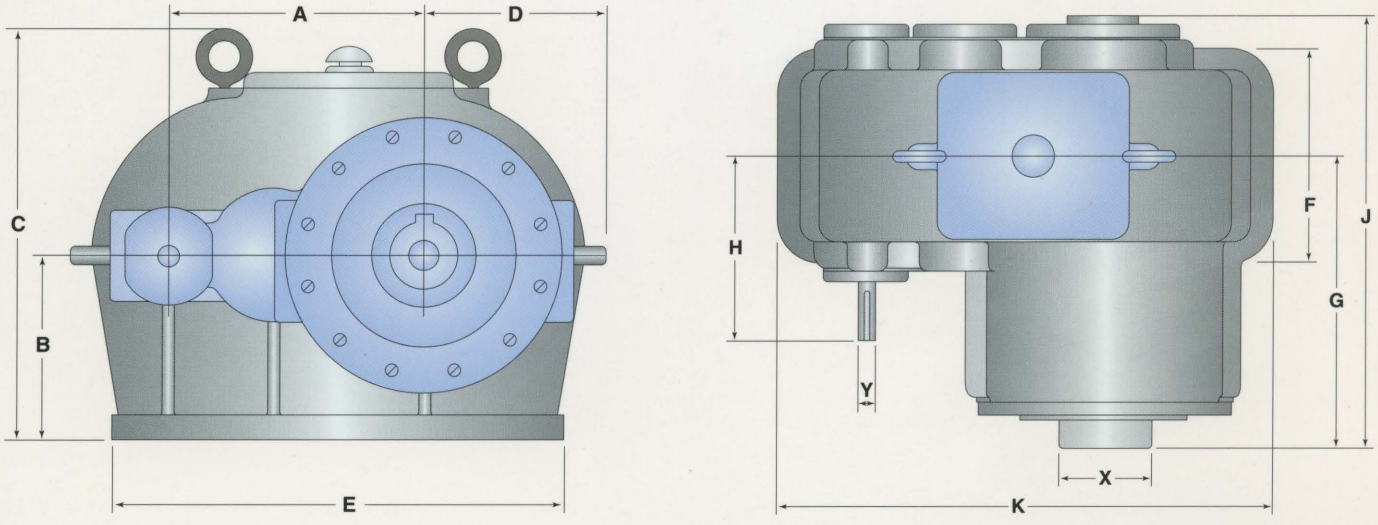
Black dimensions/weights are in inches/pounds. Red dimensions/weights are in millimeters/kilograms.
NOTE: Above dimensions are not to be used for unit installation. Use only a certified installation print.

Units are available in vertical or horizontal (RH or LH offset) mounting arrangements.

Thrust bearing options for change gear units:

- D55: T 411
- D104: T 511 and T 611
- D165: T 611, T 691 and T 811
- D200: T 811
- D262, D315 and D475: T 911 and T 921

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Large Horizontal Fixed Ratio Model

Unit	A	B	C	D	E	F	G	H	J	K	X	Y	Weight
DH16	10.0 254.0	8.0 203.2	17.4 442.0	7.3 185.4	19.5 495.3	12.0 304.8	12.3 312.4	11.3 287.0	20.0 508.0	21.0 533.4	3.5 88.9	1.3 33.0	600 272
DH290	29.0 736.6	20.0 508.0	44.5 1130.3	19.0 482.6	50.0 1270.0	27.0 685.8	32.5 825.5	20.0 508.0	46.8 1188.7	57.0 1447.8	11.0 279.4	3.0 76.2	8900 4037
DH440	34.0 863.6	23.0 584.2	51.8 1315.7	21.5 546.1	57.0 1447.8	43.8 1112.5	33.8 858.5	22.5 571.5	50.4 1280.2	65.5 1663.7	11.0 279.4	3.5 88.9	11000 4990
DH660	39.0 990.6	27.0 685.8	55.8 1417.3	26.5 673.1	67.0 1701.8	34.0 863.6	35.3 896.6	23.0 584.2	52.9 1343.7	76.0 1930.4	11.0 279.4	3.8 96.5	13400 6078
DH880	44.0 1117.6	30.0 762.0	63.8 1620.5	29.0 736.6	74.0 1879.6	50.4 1280.2	38.3 972.8	26.5 673.1	58.0 1473.2	85.0 2159.0	11.0 279.4	4.5 114.3	15800 7167
DFH1200	50.0 1270.0	32.0 812.8	66.1 1678.9	31.5 800.1	92.5 2349.5	40.0 1016.0	41.8 1061.7	31.0 787.4	64.6 1640.8	95.5 2425.7	11.0 279.4	5.5 139.7	26000 11793

Black dimensions/weights are in inches/pounds. Red dimensions/weights are in millimeters/kilograms.
NOTE: Above dimensions are not to be used for unit installation. Use only a certified installation print.

Units are available in horizontal mounting arrangements only.

Thrust bearing options for fixed ratio units:

- DH16: T 311
- DH290: T 811, T 911 and T 921
- DH440, DH660 and DH880: T 911, T 921 and T 1120
- DFH1200: T 921 and T 1120

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Lufkin Industries, Inc.

Corporate Headquarters

407 Kiln Street
P.O. Box 849
Lufkin, Texas, U.S.A. 75902-0849
Tel: 409-637-5612
Fax: 409-633-3916

International Offices

Houston, Texas, U.S.A.
Tel: 713-468-7804
Fax: 713-468-7737

Kobe, Japan
Tel: 81-78-265-6830
Fax: 81-78-265-6831

euroLufkin, b.v.
Amsterdam, The Netherlands
Tel: 31-20-691-8400
Fax: 31-20-691-8500

Strasbourg, France
Tel: 33-388-76-4243
Fax: 33-388-76-4244

Erwitte, Germany
Tel: 49-2943-3103
Fax: 49-2943-6580

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