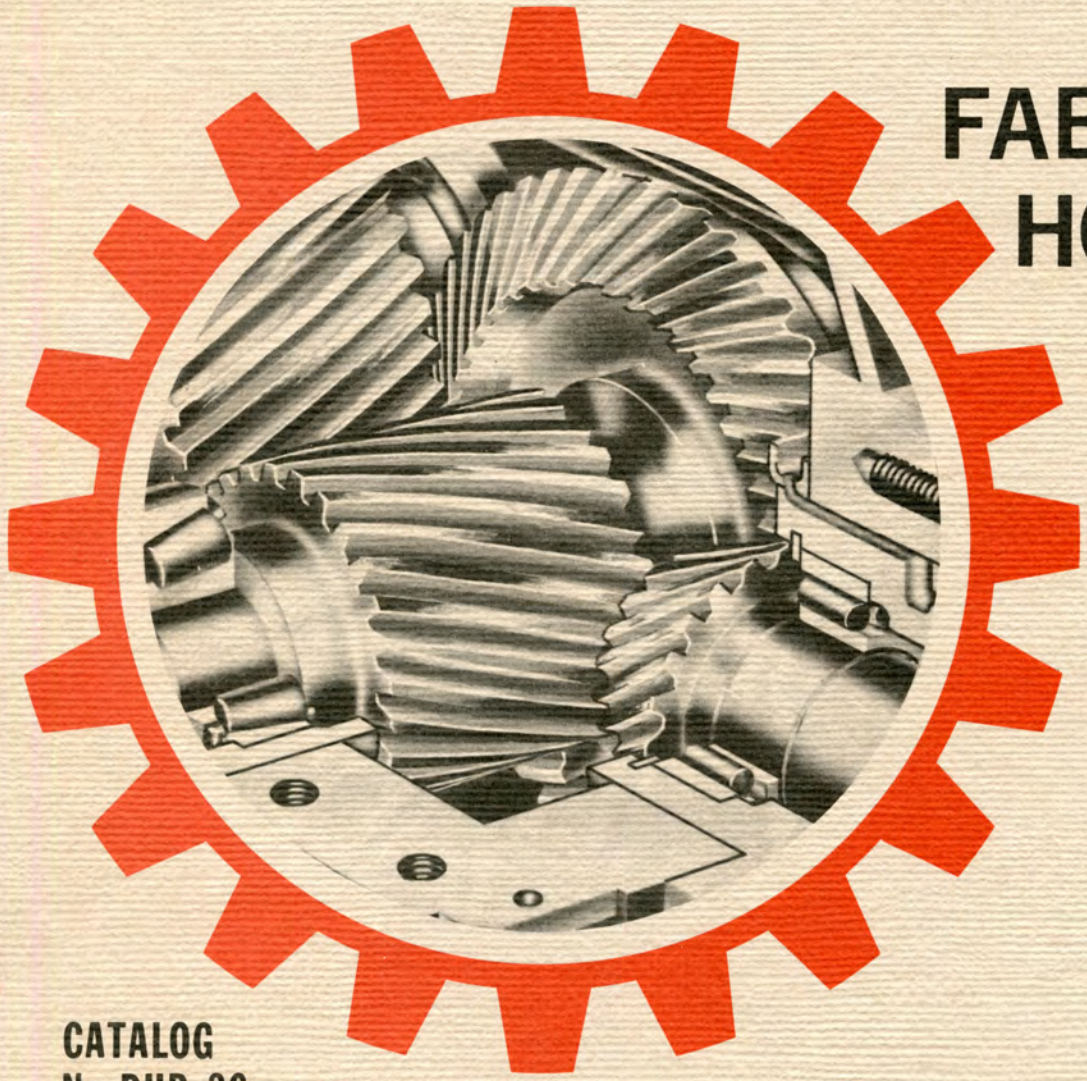
Copied from an original at The History Center, Diboll, Texas. www.TheHistoryCenterOnline.com 2013:023

LUFKIN GEARS

type DHB

FABRICATED HOUSING



CATALOG
No. DHB-36

LUFKIN INDUSTRIES, INC.
LUFKIN, TEXAS

MEMBER OF AGMA

Copied from an original at The History Center, Diboll, Texas. www.TheHistoryCenterOnline.com 2013:023

Copied from an original at The History Center, Diboll, Texas. www.TheHistoryCenterOnline.com 2013:023

GENERAL SPECIFICATIONS

The Horsepower, Torque and Overhung-Load capacities of all Lufkin Gears are based on the latest Standard Practices of the American Gear Manufacturers Association of which Lufkin has been a member for many years.

GEARS

The high speed gears are spiral bevel gears designed for clockwise input rotation. The slow speed gears are single helical hobbed gears, with final finish of teeth done in a lapping machine.

MECHANICAL RATINGS

The Mechanical Horsepower Ratings listed in the Rating Tables are for a Service Factor of 1 which would be the proper factor for a gear unit being driven by an electric motor up to 10 hours per day and driving a machine classed as a Uniform Load. For any other type of prime mover or driven machine or for any other duration of service the horsepower load would have to be modified by an appropriate Service Factor.

The load carrying capacity of a set of gears for a given size housing varies with ratio and speed. Therefore, the Rating Tables show the horsepower ratings for each size reducer at the several standard ratios and motor speeds. The gears will stand 175% overload, or 275% of the mechanical ratings tabulated at starting or momentarily during operation.

SERVICE FACTORS

The selection of a gear unit for a certain job depends upon (1) the type of prime mover, (2) the character of the driven machine and (3) the number of hours per day the unit will operate. These variables enter into the selection of Reducers through the use of Service Factors.

A tabulation of the Character of Load for various types of machinery generally driven by gear units is shown in Table 1. Table 2, shows the Service Factors based on the three variables listed above.

In selecting a gear reducer the actual horsepower load to be transmitted is multiplied by the appropriate Service Factor to determine the Equivalent Horsepower. A reducer is then selected from the Rating Tables which has a tabulated rating equal to or greater than the Equivalent Horsepower.

BEARINGS

H. S. pinion bearings are steep angle taper roller to carry the pinion thrust with a straight roller bearing to carry the pinion radial load. All other bearings are taper roller. All bearings are mounted in carriers.

HOUSINGS

Housings are of fabricated heavy steel plate and are fully stress relieved before machining. Housings are two piece construction with joint between housing and cover accurately machined. Interior surfaces are thoroughly shotblasted, cleaned, and painted to insure absolute freedom from foreign particles. Housings are designed for heavy duty service to provide maximum rigidity to assure precision gear alignment. Housings are precision bored and bore alignment is certified before assembly.

LUBRICATION

The slow speed and high speed gears run in a bath of oil in the bottom of the housing and provides constant lubrication to the gear-mesh. This splash also furnishes a generous amount of oil to the troughs on the inside of the cover and from these troughs all bearings are lubricated by gravity flow. Oil seals eliminate oil leakage and the entrance of dirt. The lubrication system is simple, positive and fool-proof so long as the housing is filled to the correct lubricant level.

THERMAL RATINGS

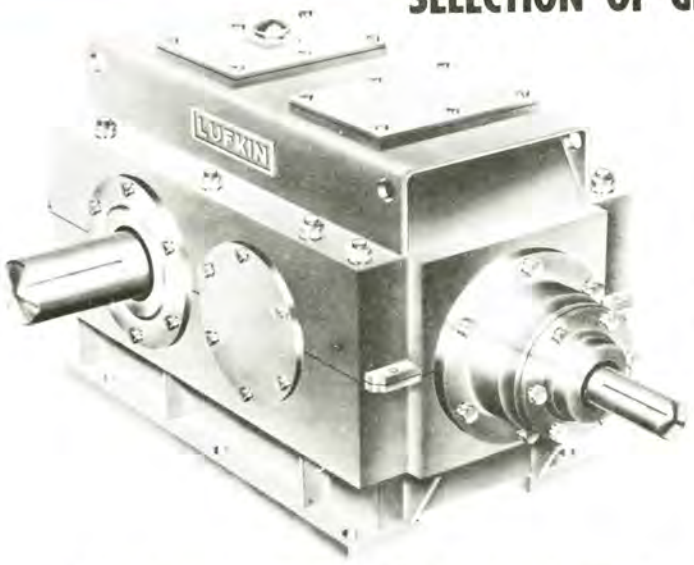
The Thermal Horsepower rating tables are shown immediately following the Output Torque Ratings. These ratings vary with unit speed and ratio. The Thermal Horsepower rating is the average load the unit will deliver continuously without overheating. The actual horsepower transmitted by the gear unit may not be greater than the Thermal Horsepower rating unless the unit is equipped with an oil pump and cooler.

RATIOS

The gear ratios listed in the Rating Tables are standard AGMA ratios. The exact ratio required or a very close approximation can be furnished, however. The approximate horsepower rating for intermediate ratios not shown in the tables may be determined by interpolation.

Copied from an original at The History Center, Diboll, Texas. www.TheHistoryCenterOnline.com 2013:023

SELECTION OF GEAR REDUCERS



In order to accurately select the proper gear reducer it is necessary to know:

(1) Horsepower load to be transmitted;
(2) Speed of both input and output shafts, or the speed of one shaft and the gear ratio;
(3) Type of prime mover;
(4) Type of driven machine; and
(5) Hours per day continuous operation.

Knowing the type of driven machine, determine from Table 1, whether the character of the load is Uniform, Moderate Shock or Heavy Shock. With this information and knowing the type of prime mover and hours of operation, select the proper Service Factor from Table 2.

Multiply the actual horsepower load to be transmitted by the Service Factor just selected to arrive at the Equivalent Horsepower. This Equivalent Horsepower is the tabulated or catalog rating as listed in the Rating Tables. If the starting load is high, it should also be used as a check to determine Equivalent Horsepower. To do this, divide starting load by 2.75 and if the result is higher than the Equivalent Horsepower just calculated, it should be used as the Equivalent Horsepower in making the selection.

Divide the motor speed by the output speed of the reducer to determine ratio.

Refer to the Horsepower Rating Table as specified above. In the column showing a ratio nearest to that required and on a horizontal line with the proper input speed, find a listed horsepower which is equal to or greater than the Equivalent Horsepower required. The size of the reducer is shown at the top of the table in which this horsepower rating is found. For intermediate ratios and speeds between those listed, the approximate horsepower rating may be found by interpolation.

Refer to the Thermal Horsepower Rating Table. The actual horsepower transmitted by the gear unit may not be greater than the Thermal Horsepower rating unless the unit is equipped with an oil pump and cooler.

OUTPUT TORQUE SELECTION

Reducer selection based on Output Torque is the same as the selection based on mechanical horsepower ratings. The same Service Factors must be used to arrive at the Equivalent Torque load to be transmitted.

The Thermal Horsepower rating of the unit must be checked by converting the transmitted torque to horsepower and refering to the Thermal Horsepower rating tables.

OVERHUNG LOAD

In the event the output shaft of the reducer drives through a pulley, sprocket or gear, the overhung load capacity of the slow speed shaft should be checked. Although standard reducers are designed primarily for straight line torque drive through a flexible coupling, they will stand moverate overhung loads without difficulty.

The following formula will give the actual overhung load imposed on the shaft:

$$OL = K \times \frac{126{,}000 \times HP}{D \times RPM}$$

Where O L = Overhung load, lbs.
K = Constant for type of external drive
= 1.0 for Sprocket
= 1.25 for pinion
= 1.5 for V-belts
= 2.5 for flat belt
H P = Actual horsepower load
D = Diameter of sprocket, pinion or pulley, inches
R P M = Revolutions per minute of shaft being checked.

If the result of the above calculation shows the overhung load to be higher than the standard reducer will permit as shown in the Overhung Load rating tables, consult Lufkin for recommendations.

Copied from an original at The History Center, Diboll, Texas. www.TheHistoryCenterOnline.com 2013:023

SERVICE FACTORS FOR SPEED REDUCER SELECTION

Table 1 below is to be used as a guide for determining the Character of Load imposed on a gear reducer by a representative group of machines generally driven by Gear Reducers. It would be impractical, of course, to list here every machine that might conceivably be driven by a Gear Reducer. It is believed, however, that the list is sufficiently complete so that if a particular machine is not listed it can be determined, by comparison, the character of the load to be imposed on that drive.

For an explanation of the use of these tables in connection with the selection of a Gear Reducer, see page 2.

Guide for Selecting Character of Load—Table 1

UNIFORM LOAD

Agitators
- Pure Liquids

Blowers
- Centrifugal
- Vane

Clarifiers

Compressors
- Centrifugal

Conveyors
- (Uniformly Loaded or Fed)
- Apron
- Assembly
- Belt
- Bucket
- Chain
- Flight
- Oven
- Screw

Cranes
- Main Hoists

Elevators
- Bucket—Uniform Load
- Bucket—Continuous
- Centrifugal Discharge
- Escalators
- Gravity Discharge

Extruder
- Light Duty

Fans
- Centrifugal
- Light

Feeders
- Disc

Generators

Line Shafts
- Light

Machine Tools
- Auxiliary Drives

Mixers
- Constant Density

Paper Mills
- Bleacher
- Conveyors
- Presses
- Suction Roll
- Winders

Pumps
- Centrifugal
- Rotary

Rubber and Plastics Industries
- Rubber Mill (3 on line)

Sewage Disposal Equipment
- Bar Screens
- Chemical Feeders
- Collectors

Screens
- Air Washing
- Traveling Water Intake

Stokers

MODERATE SHOCK LOAD

Agitators
- Liquids and Solids
- Liquids—Variable Density

Blowers
- Lobe

Cane Knives

Classifiers

Compressors
- Lobe
- Reciprocating, Multi-Cylinder

Conveyors—(Heavy Duty Not Uniformly Fed)
- Apron
- Assembly
- Belt
- Bucket
- Chain
- Flight
- Oven
- Screw

Crusher
- Sugar

Dredges
- Cable Reels
- Conveyors
- Maneuvering Winches
- Pumps
- Stackers
- Utility Winches

Elevators
- Bucket—Heavy Load Freight

Extruder
- Constant Duty

Fans
- Cooling Tower
- Induced Draft Large

Feeders
- Apron
- Belt
- Screw

Hoists
- Medium Duty
- Skip

Line Shafts
- Processing Equipment

Lumber Industry
- Barkers—Spindle Feed
- Conveyors—Burner
- Merry-go-Round
- Transfer
- Chains—Green
- Cut-Off Saws
- Feeds-Edger, Trimmer
- Planer Feed
- Sorting Table
- Tipple Hoist
- Transfers, Chain, Craneway
- Tray Drives

Machine Tools
- Bending Roll
- Main Drives

Metal Mills
- Draw Bench, Carriage and Main Drive
- Slitters
- Wire Drawing and Flattening Machine
- Wire Winding Machine

Mills, Rotary Type
- Ball
- Cement Kilns
- Dryers and Coolers
- Kilns
- Pebble
- Rod, Plain and Wedge Bar
- Rubber

Mixers
- Concrete
- Variable Density

Paper Mills
- Agitators
- Barker

Paper Mills (Cont'd)
- Beater and Pulper
- Calenders
- Converting Machine except Cutters, Platers
- Couch
- Cylinders
- Dryers
- Felt Stretchers
- Pulp Machine Reel
- Stock Chests
- Washers and Thickeners

Pumps
- Proportioning
- Reciprocating (3 or more cylinders)

Rubber & Plastics Industries
- Laboratory Equipment
- Refiners
- Rubber Calenders
- Rubber Mill (2 on line)
- Sheeter
- Tubers and Strainers
- Warming Mills

Sand Muller

Sewage Disposal Equipment
- Dewatering Screws
- Scum Breakers
- Slow or Rapid Mixers
- Thickeners
- Vacuum Filters

Screens
- Rotary-Stone or Gravel

Slab Pushers

Sugar Industry
- Cane Knives
- Crushers
- Mills

Textile Machinery

HEAVY SHOCK LOAD

Compressors
- Reciprocating, Single-Cylinder

Conveyors—Heavy Duty
- Shaker

Crushers
- Ore
- Stone

Dredges
- Cutter Head Drives
- Jig Drives
- Screen Drives

Feeders
- Reciprocating

Hammer Mills

Hoists
- Heavy Duty

Lumber Industry
- Barkers—Main Drive
- Conveyors—Main Log
- Conveyors—Slab
- Debarking Drums
- Feeds—Gang
- Log Deck
- Log Hauls—Incline-Well Type
- Log Turning Devices
- Rolls-Live-Off Brg.-Roll Cases

Machine Tools
- Punch Press
- Plate Planers
- Tapping Machine

Metal Mills
- Table Conveyors non-reversing, Individual drives

Mills, Rotary Type
- Tumbling Barrels

Paper Mills
- Barking Drum
- Calenders—Super
- Cutters—Platers
- Felt Whippers
- Jordans
- Log Hauls

Pullers
- Barge Haul

Rubber and Plastics Industries
- Crackers
- Mixing Mills

Service Factors—Table 2

Prime Mover	DURATION OF SERVICE	Character of Load on Driven Machine		
		Uniform	Moderate Shock	Heavy Shock
Electric Motor or Turbine	*Occasional ½ Hour per Day	0.50	0.80	1.25
	*Intermittent 3 Hours per Day	0.80	1.00	1.50
	Up to 10 Hours per Day	1.00	1.25	1.75
	24 Hours per Day	1.25	1.50	2.00
Multi-Cylinder Internal Combustion Engine	*Occasional ½ Hour per Day	0.80	1.00	1.50
	*Intermittent 3 Hours per Day	1.00	1.25	1.75
	Up to 10 Hours per Day	1.25	1.50	2.00
	24 Hours per Day	1.50	1.75	2.25
Single Cylinder Internal Combustion Engine	*Occasional ½ Hour per Day	1.00	1.25	1.75
	*Intermittent 3 Hours per Day	1.25	1.50	2.00
	Up to 10 Hours per Day	1.50	1.75	2.25
	24 Hours per Day	1.75	2.00	2.50

* Maximum momentary or starting load must not exceed 275 percent of gear reducer rating (rating meaning Service Factor of 1).

Copied from an original at The History Center, Diboll, Texas. www.TheHistoryCenterOnline.com 2013:023

HORSEPOWER RATING TABLES

The Horsepower Ratings listed in the tables below are mechanical ratings calculated by the A.G.M.A. formula using a Service Factor of 1. See the section on selecting reducers.

DHB 12

HIGH SPEED SHAFT RPM	STANDARD RATIOS								
	5.06	6.2	7.59	9.3	11.39	13.95	17.09	20.93	25.63
1750	471	471	471	393	298	250	208	163	127
1430	392	392	392	330	250	207	174	135	105
1170	327	327	327	277	209	173	144	112	88
870	249	249	249	213	160	132	111	87	67
720	210	210	210	180	135	109	92	72	56
580	172	172	172	148	111	90	76	59	46

DHB 14

HIGH SPEED SHAFT RPM	STANDARD RATIOS								
	5.06	6.2	7.59	9.3	11.39	13.95	17.09	20.93	25.63
1750	647	647	647	587	454	362	309	245	185
1430	540	540	540	494	381	300	257	205	154
1170	450	450	450	415	320	255	214	168	128
870	344	344	344	320	246	192	163	130	98
720	289	289	289	270	208	160	137	108	82
580	237	237	237	223	171	130	110	87	67

DHB 16

HIGH SPEED SHAFT RPM	STANDARD RATIOS								
	5.06	6.2	7.59	9.3	11.39	13.95	17.09	20.93	25.63
1750	820	820	820	820	633	488	420	340	263
1430	685	685	685	685	532	412	353	285	220
1170	571	571	571	571	447	343	292	235	183
870	436	436	436	436	345	265	225	183	140
720	367	367	367	367	291	220	190	153	118
580	301	301	301	301	240	180	155	125	96

DHB 18

HIGH SPEED SHAFT RPM	STANDARD RATIOS								
	5.06	6.2	7.59	9.3	11.39	13.95	17.09	20.93	25.63
1750	1017	1017	1017	1017	917	695	570	480	384
1430	850	850	850	850	770	584	474	400	321
1170	710	710	710	710	650	490	400	333	268
870	543	543	543	543	495	377	305	260	205
720	457	457	457	457	415	318	253	217	172
580	375	375	375	375	335	262	208	180	141

DHB 20

HIGH SPEED SHAFT RPM	STANDARD RATIOS								
	5.06	6.2	7.59	9.3	11.39	13.95	17.09	20.93	25.63
1750	1575	1575	1575	1505	1146	930	805	640	475
1430	1318	1318	1318	1269	966	777	670	530	397
1170	1102	1102	1102	1070	814	645	558	440	332
870	845	845	845	829	629	492	420	333	254
720	712	712	712	703	532	420	355	278	214
580	585	585	585	581	439	340	290	225	175

Ratios listed are standard but intermediate ratios are available.

Ratings for intermediate ratios and speeds may be found by direct interpolation.

All units may be operated at speeds lower than the minimum shown. The selection of a reducer for a lower speed may be accomplished by multiplying the desired horsepower by 580 and dividing by the desired speed. The result will be the equivalent horsepower at 580 RPM which can be found in the above tables.

Copied from an original at The History Center, Diboll, Texas. www.TheHistoryCenterOnline.com 2013:023

OUTPUT TORQUE RATING TABLES

1000 INCH POUNDS

The Output Torque Ratings listed in the tables below are calculated using a Service Factor of 1. See section on selecting reducers.

D H B 12

HIGH SPEED SHAFT	STANDARD RATIOS								
R P M	5.06	6.2	7.59	9.3	11.39	13.95	17.09	20.93	25.63
1750	85	105	128	131	122	126	128	123	114
1430	87	107	131	135	125	127	131	124	115
1170	89	109	133	138	128	130	133	126	118
870	91	112	136	143	132	133	137	132	121
720	92	114	138	146	135	133	138	132	122
580	94	116	141	149	138	136	141	134	124

D H B 14

HIGH SPEED SHAFT	STANDARD RATIOS								
R P M	5.06	6.2	7.59	9.3	11.39	13.95	17.09	20.93	25.63
1750	118	147	177	196	184	182	190	185	171
1430	120	150	180	202	189	184	194	189	174
1170	122	153	184	208	194	192	197	189	177
870	126	157	189	215	200	194	202	197	182
720	128	159	192	220	204	195	205	198	186
580	130	162	195	225	233	197	204	198	186

D H B 16

HIGH SPEED SHAFT	STANDARD RATIOS								
R P M	5.06	6.2	7.59	9.3	11.39	13.95	17.09	20.93	25.63
1750	149	183	224	275	260	245	258	256	243
1430	153	187	229	281	267	253	266	263	248
1170	156	191	233	286	274	258	269	265	253
870	160	196	240	294	285	268	278	277	260
720	162	199	244	299	290	269	284	280	265
580	165	203	248	304	297	273	288	284	267

D H B 18

HIGH SPEED SHAFT	STANDARD RATIOS								
R P M	5.06	6.2	7.59	9.3	11.39	13.95	17.09	20.93	25.63
1750	185	227	278	340	376	349	351	362	354
1430	189	232	284	348	386	359	357	369	362
1170	194	237	290	356	399	368	368	375	370
870	199	244	298	366	402	381	377	394	380
720	202	248	304	372	413	388	378	397	386
580	206	253	309	379	414	397	386	409	393

D H B 20

HIGH SPEED SHAFT	STANDARD RATIOS								
R P M	5.06	6.2	7.59	9.3	11.39	13.95	17.09	20.93	25.63
1750	287	352	430	503	469	467	495	482	438
1430	294	360	441	520	485	478	504	489	448
1170	300	368	450	536	499	484	513	496	458
870	310	379	464	558	519	497	520	505	471
720	315	386	473	572	530	513	531	508	480
580	322	394	482	587	543	515	538	512	487

Ratings shown are in thousands of in. lbs. at low speed shaft.
Ratings for intermediate ratios and speeds may be found by direct interpolation.
For input speeds lower than speeds shown, use torque rating for minimum speed shown in table.

Copied from an original at The History Center, Diboll, Texas. www.TheHistoryCenterOnline.com 2013:023

THERMAL HORSEPOWER RATINGS

The Thermal Horsepower Rating listed here for a particular unit at a given ratio and speed must be equal to or higher than the ACTUAL HORSEPOWER DELIVERED.
The Table below must be used to check the selection of a gear unit after the selection has been made on the basis of mechanical rating.

SIZE	HIGH SPEED SHAFT RPM	RATIO								
		5.06	6.2	7.59	9.3	11.39	13.95	17.09	20.93	25.63
DHB 12	1750	106	112	116	121	126	131	135	139	------
	1430	123	128	132	136	139	144	147	------	------
	1170	137	140	143	147	150	153	------	------	------
	870	152	154	157	159	------	------	------	------	------
	720	160	162	165	166	------	------	------	------	------
	580	168	169	171	------	------	------	------	------	------
DHB 14	1750	146	155	161	168	175	181	186	192	------
	1430	171	177	182	188	193	198	203	------	------
	1170	190	195	198	203	207	211	------	------	------
	870	211	213	216	220	224	------	------	------	------
	720	221	224	226	230	------	------	------	------	------
	580	232	234	236	------	------	------	------	------	------
DHB 16	1750	178	182	189	197	205	212	218	225	231
	1430	204	208	214	220	226	233	238	244	------
	1170	225	228	233	239	243	248	254	------	------
	870	248	250	254	260	264	------	------	------	------
	720	261	263	266	270	273	------	------	------	------
	580	273	275	277	281	------	------	------	------	------
DHB 18	1750	209	214	223	232	242	250	257	265	272
	1430	241	245	252	259	267	274	281	288	294
	1170	266	269	274	281	287	292	299	305	------
	870	293	295	299	306	311	315	------	------	------
	720	307	309	313	318	322	------	------	------	------
	580	322	324	326	330	333	------	------	------	------
DHB 20	1750	242	247	257	268	279	289	296	307	314
	1430	278	283	291	299	308	317	325	333	341
	1170	307	311	317	325	332	338	346	352	------
	870	338	341	346	354	359	364	369	------	------
	720	355	358	361	368	372	377	------	------	------
	580	372	374	377	382	385	------	------	------	------

NOTE: Where Thermal Horsepower Ratings are not shown, the Thermal Horsepower Rating is higher than the Mechanical Rating of the Reducer for that ratio and speed.

OVERHUNG LOAD CAPACITIES

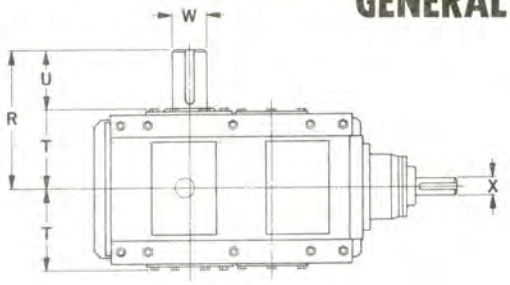
SLOW SPEED SHAFTS

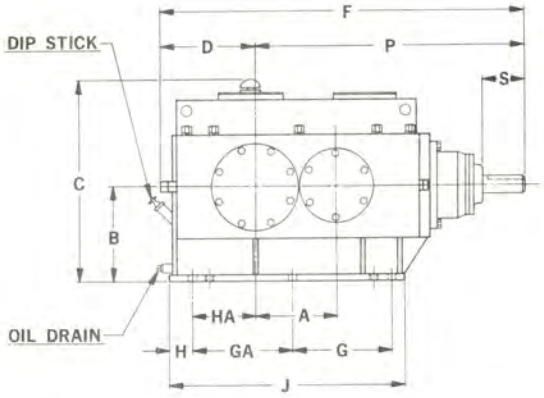
The table below shows overhung load capacities for standard Type DHB Reducers. It is assumed that the external load is acting one shaft diameter out from the seal. If actual loading exceeds the tabulated values. Consult us for recommendations.
The table below does not apply for double extended slow speed shafts. Present your application to us for recommendations.
The actual load imposed on a shaft for a given condition of service may be determined by the formula in the selection of gear reducer section.
For unusual conditions or in case of doubt present your problems to us for recommendations.
Overhung load capacities are figured at the highest speed shown in horsepower rating tables for each size reducer.

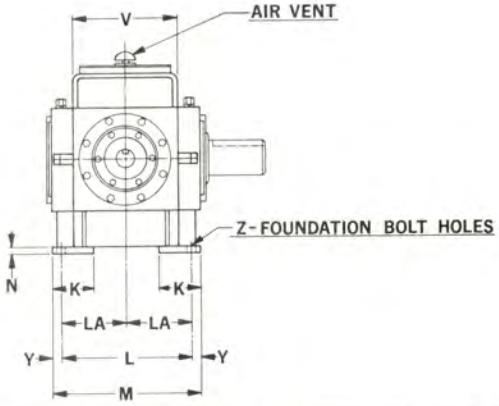
SIZE	RATIO								
	5.06	6.2	7.59	9.3	11.39	13.95	17.09	20.93	25.63
DHB 12	11,730	12,090	12,335	13,640	15,545	16,510	18,075	19,200	19,200
DHB 14	11,940	12,185	12,310	13,075	15,050	15,670	17,500	19,540	20,345
DHB 16	16,060	16,385	16,720	16,890	19,440	21,280	23,060	25,500	28,195
DHB 18	15,070	15,375	15,690	15,530	16,665	19,570	20,790	22,985	25,670
DHB 20	10,625	10,410	10,000	9,900	12,990	13,935	15,410	17,915	21,470

Copied from an original at The History Center, Diboll, Texas. www.TheHistoryCenterOnline.com 2013:023

GENERAL DIMENSIONS

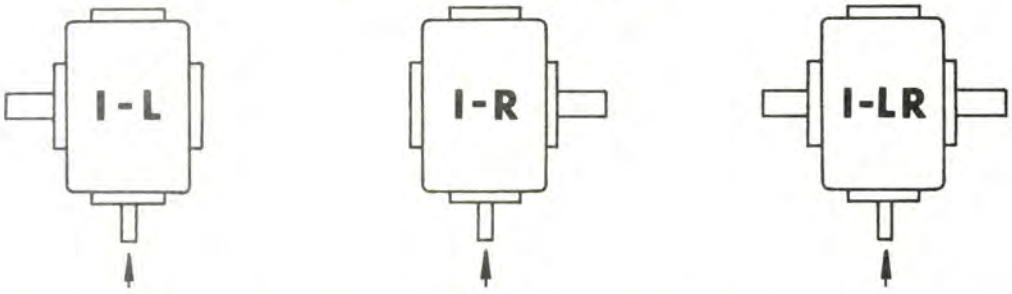






SIZE NO.	A	B	C	D	F	G	GA	H	HA	J	K	L	LA	M	N	P	R	S	T	U	V	W	"W" Keyway	X	"X" Keyway	Y	"Z" Bolt Holes	App. Weight
DHB 12	12	14	29½	14½	54½	15	15	3½	9½	35¼	6	20	10	22½	1¼	40	21½	5⅝	12⅜	9⅛	15¾	5	1¼x 7/16	2½	⅝x5/16	1¼	6 - 1⅛	1700
DHB 14	14	16	33¼	16½	62½	17¼	17¼	4	11	40½	7	23½	11¾	26½	1¼	46	24½	7	14⅛	10⅜	18	5½	1¼x7/16	3	¾ x⅜	1½	6 - 1⅜	2200
DHB 16	16	18	37½	18½	68¾	19¾	19¾	4½	12½	46	8	25	12½	28	1¾	50¼	26	7	14¾	11¼	19	6	1½x½	3	¾ x⅜	1½	6 - 1⅜	3000
DHB 18	18	20	41½	20½	75½	22¾	22¾	4½	14½	52	8	26	13	29	1¾	55	27	7½	15½	11½	20½	6¾	1¾x⅝	3½	⅞x7/16	1½	6 - 1⅜	4400
DHB 20	20	22	43	22½	85½	25½	25½	5	16	58	8	29	14½	32½	1¾	63	30	8¾	17½	12½	23	7½	1¾x⅝	4	1x½	1¾	6 - 1⅜	6400

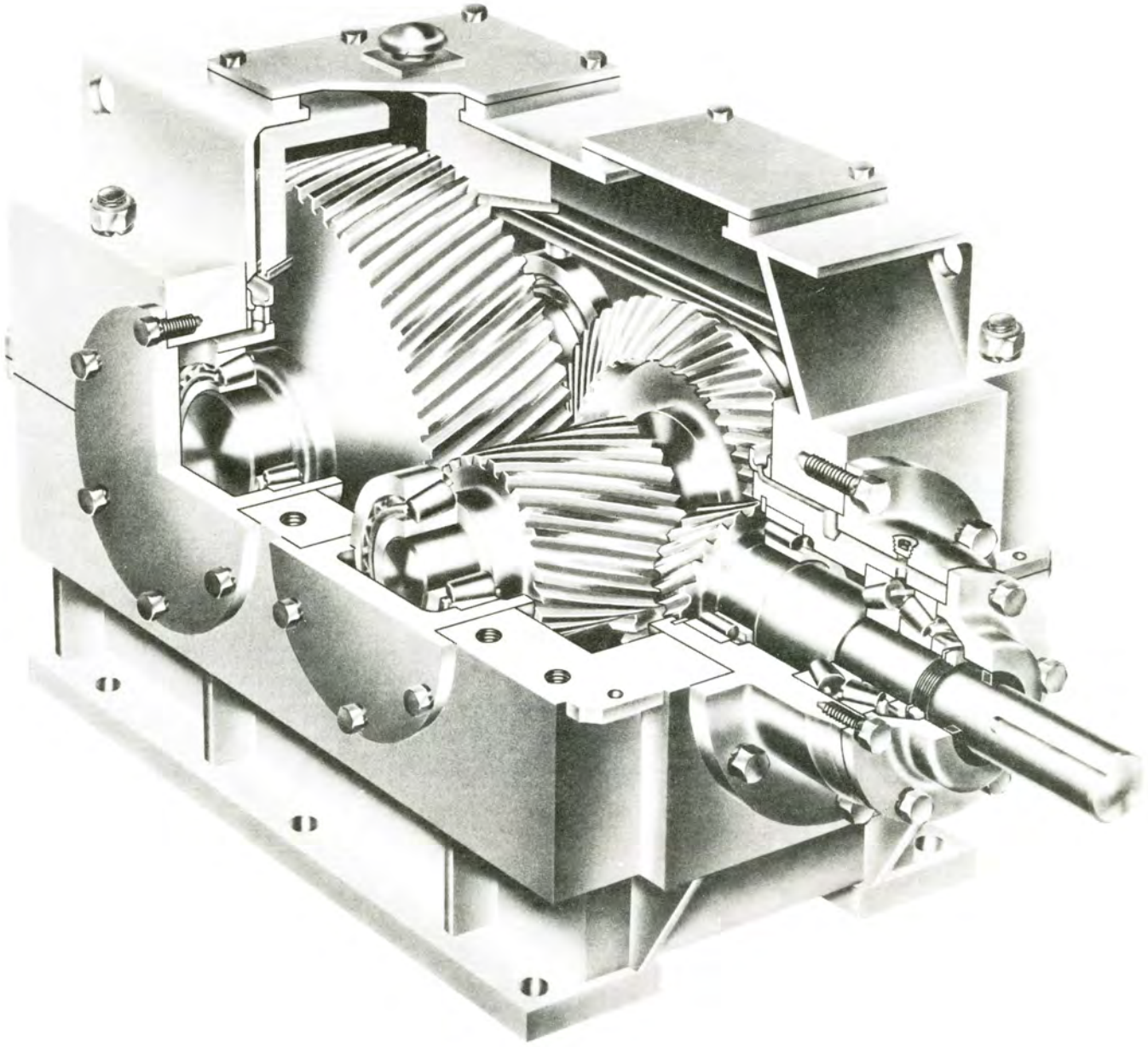
SHAFT ARRANGEMENT



Clockwise rotation for input shaft is standard. If counter clockwise rotation for the input shaft is required, consult LUFKIN concerning the specific application.
Rotation for the output shaft, facing the end of the shaft, must be specified.

NOTES: 1. Code: L = Left; R = Right.
2. Arrows indicate line of sight to determine direction of shaft extensions.
3. Numerals preceding the hyphen refer to number of high-speed shaft extensions.
4. Letters following the hyphen refer to number and direction of low-speed shaft extensions.

Copied from an original at The History Center, Diboll, Texas. www.TheHistoryCenterOnline.com 2013:023



Typical Section...DHB GEAR REDUCER

Copied from an original at The History Center, Diboll, Texas. www.TheHistoryCenterOnline.com 2013:023

Copied from an original at The History Center, Diboll, Texas. www.TheHistoryCenterOnline.com 2013:023

LUFKIN INDUSTRIES, INC.

LUFKIN, TEXAS

Telephone: 713/4-2211

December 1973