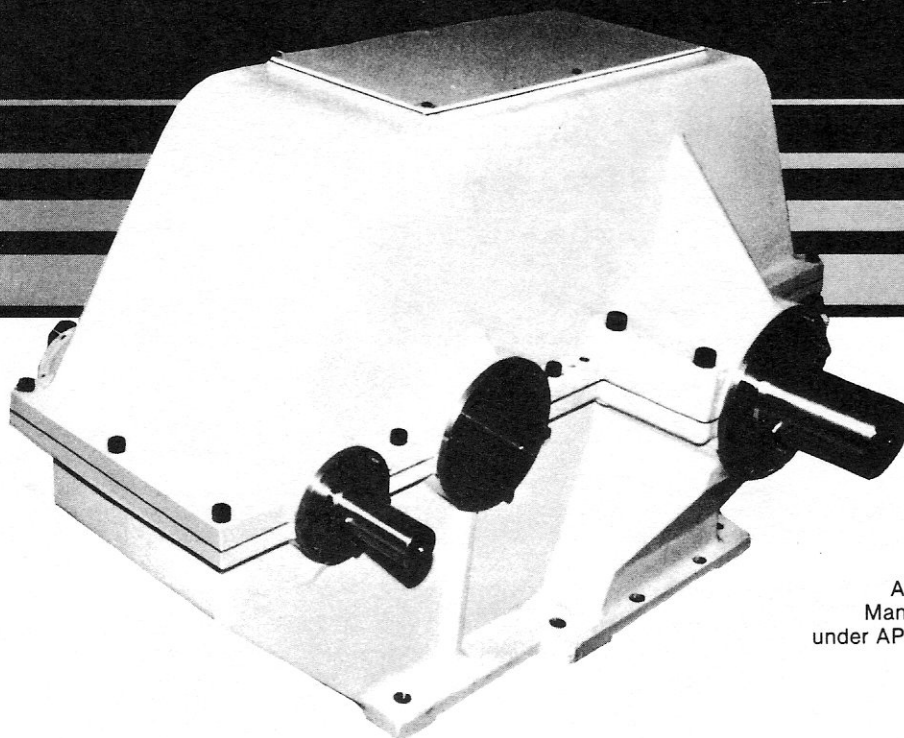


LAWTON Double Reduction Parallel Shaft Gear Reducers



Authorized
Manufacturer
under API std. 11E



Over 100 years of gear cutting experience have led to the development of the Lawton parallel shaft gear reducer.

These double reduction units, designed to meet or exceed API standards, insure trouble free operation of your pumping unit.

GEAR REDUCERS FOR OIL FIELD PUMPING UNITS DOUBLE REDUCTION

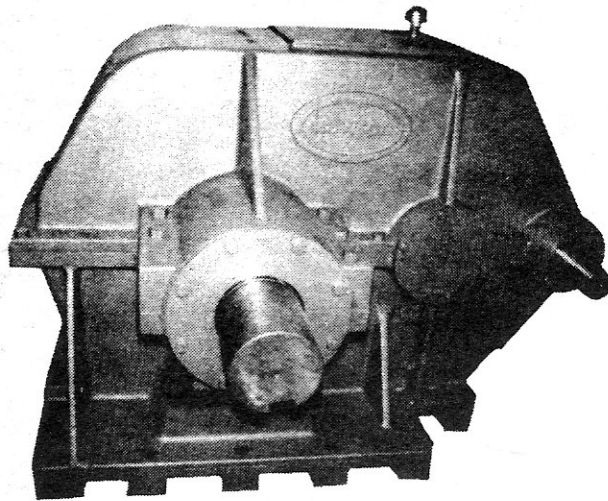
SINGLE HELICAL gear reducers are designed to provide even, vibration-free gear tooth loading. Gear capacity based on tooth bending strength is at least 50% greater than rated torque, compensating for adverse effects of thrust loads and providing substantial overload protection.....

STATIC TORQUE CAPACITY IS 720% OF RATED TORQUE

High capacity, long life tapered roller bearings on all shafts easily accommodate internal and external thrust loads while maintaining shafts concentric with the housing and proper mesh of gearing.

DOUBLE HELICAL gear reducers are designed to provide balanced gear tooth loads and eliminate internal thrust loads on gears and bearings. Both input and intermediate shafts are able to float axially in high capacity, long life straight roller bearings, maintaining equal load sharing by both sides of each gear and resulting in a smaller power loss through the unit. The 30° helix angle results in a high tooth contact ratio, providing smoother transmission of power and quieter operation. The output shaft is retained between high capacity, long life tapered roller bearings to prevent external thrust loads from causing unbalanced, cyclic gear loading and excessive gear tooth and bearing wear. Gear capacity based on tooth bending strength is at least 30% greater than rated torque and.....

STATIC TORQUE CAPACITY IS 600% OF RATED TORQUE

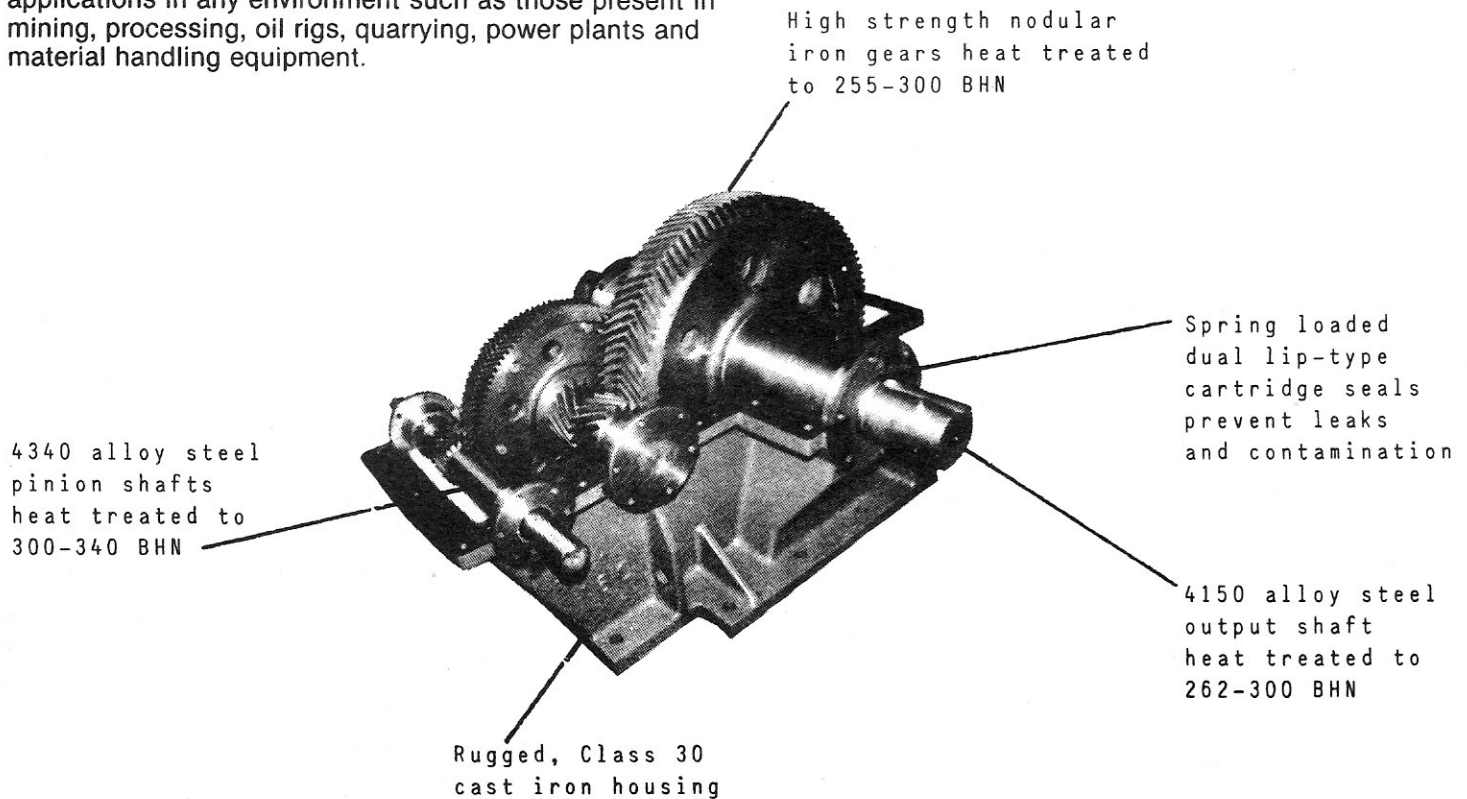


CAPACITIES						
SIZE	OUTPUT TORQUE (lbs.)	RATIO		OVERHUNG LOAD*		Oil (Gal.)
		S.H.	D.H.	INPUT	OUTPUT	
160	160,000	31.747	31.269	5048	50,685	25
228	228,000	32.074	31.336	6705	50,685	30
320	320,000	32.029	32.650	10164	59,930	38
456	456,000	32.526	32.083	10164	67,848	52

*Center of load at midpoint of shaft extension from oil seal

Custom Gear Reducers To Fit Specific Requirements

Lawton parallel shaft, all purpose Gear Reducers provide a low speed, high torque drive for heavy-duty applications in any environment such as those present in mining, processing, oil rigs, quarrying, power plants and material handling equipment.



LAWTON Double Reduction Gear Reducers are designed per API and AGMA standards and manufactured of high quality materials in the C.A. LAWTON COMPANY tradition of providing high capacity power transmission products for more than 100 years.

SINGLE AND DOUBLE HELICAL units are available and are externally interchangeable in each size.

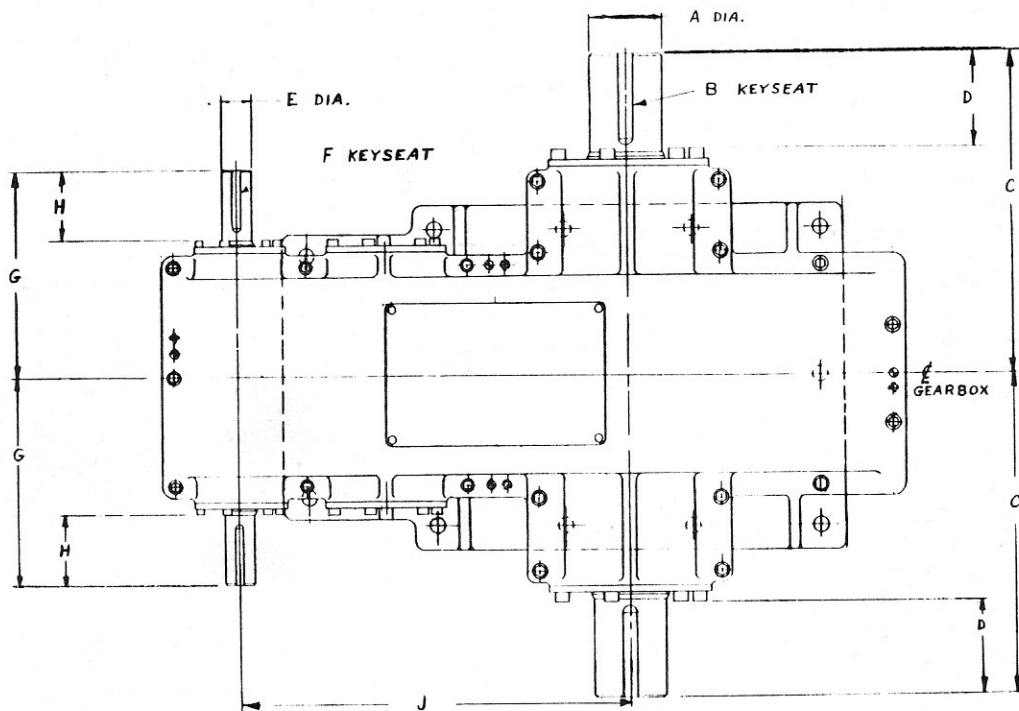
CONTINUOUS LUBRICATION is maintained by high and low speed gears dipping into oil, providing each bearing with more than adequate lubrication.

B-10 BEARING LIFE of output shaft bearings exceeds 100,000 hours. Bearings on other shafts are designed for longer than 50,000 hours B-10 life at rated torque. Actual service life of all bearings is many times the B-10 life.

FACTORY TESTED units assure effective lubrication and quiet operation with final run-in and inspection performed before shipping.

DIMENSIONS (Inches) *				
SIZE	160	228	320	456
Shaft Height	19.75	21.75	23.50	25.00
A	6.000	6.000	6.500	7.000
B	1.50 x .75	1.50 x .75	1.50 x .75	1.50 x .75
C	28.0	30.0	35.5	41.0
D	8.0	8.5	8.9	9.0
E	2.500	2.750	3.500	3.500
F	.625 x .31	.625 x .31	.875 x .44	.875 x .44
G	16.75	18.44	20.50	23.50
H	5.38	5.93	6.75	7.75
J	31.574	35.544	38.132	41.251
Weight Lbs.	4750	5100	8100	9600

*(USE CERTIFIED PRINTS FOR CONSTRUCTION PURPOSES)



Shaft extension diameters listed are standard.
Other diameters and keyseats can be supplied upon request.

Note: 320 Gear Reducer available with 7.750" output shaft diameter and 2.00" x 1.00" keyseat. Shaft height is 25".

C. A. LAWTON COMPANY

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