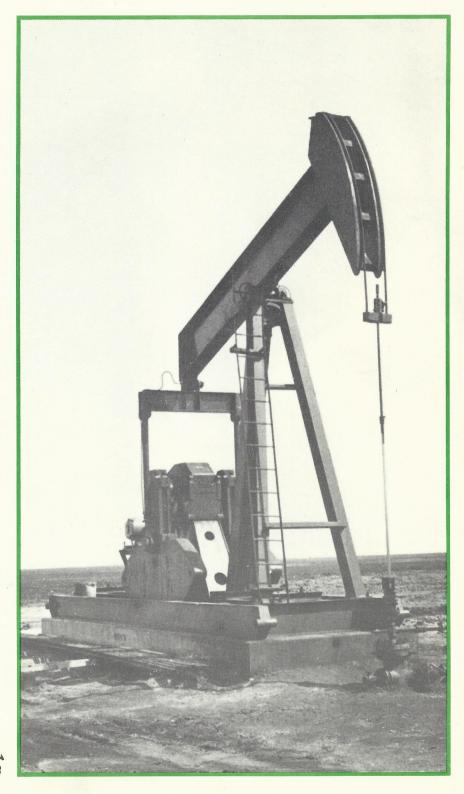
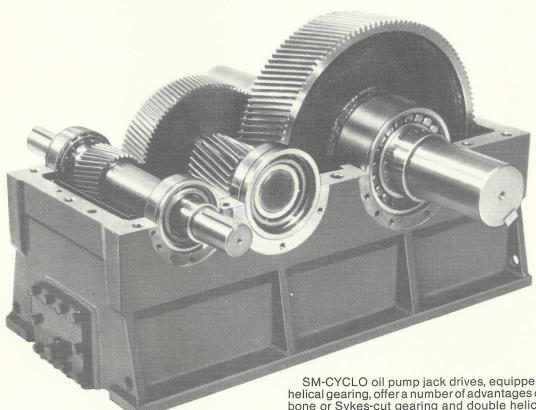


## Oil Field Pump Jack Drives



## SM-CYCLO® Tough • Proven Dependable •





SM-CYCLO has been adapting tomorrow's speed reducer technology to today's industrial markets for more than 45 years. To meet the design criteria of today's oil pump jack drive requirements, SM-CYCLO has standardized its pump jack drive design with the following features:

- Single Helical Gearing
- High Capacity Bearings
- Oversized Shafts
- Wide Bearing Spans
- Dual Lip Seals
- Splash Lubrication

Gears have and will continue to be one of the most important factors to consider when designing an oil well pump jack drive.

In the early development of pump jack drives, gear design was limited to Herringbone or Sykes-cut gearing and double helical gearing. The reason: the inability of bearings to accommodate axial or thrust loads.

Advances in this area have made it possible for the single helical gear to enter the oil pump jack market. SM-CYCLO, one of the few gear manufacturers capable of manufacturing all types of gearing, has standardized on single helical gearing for our oil pump jack drives.

SM-CYCLO oil pump jack drives, equipped with single helical gearing, offer a number of advantages over Herringbone or Sykes-cut gearing and double helical gearing:

FIRST, SM-CYCLO gear blanks are cut from a harder material. The harder material from which we cut our gear teeth allows us to provide higher torque and durability ratings. SM-CYCLO gears are heat treated, then machined, improving gear accuracy. This means better contact and the resultant higher strength and durability ratings.

SECOND, unlike double helical gears, no repositioning is necessary when cutting the gear teeth. For this reason, a more precise gear set is attainable. What this means is less noise and vibration, thus providing longer gear life. THIRD, unlike double helical gears, SM-CYCLO gears

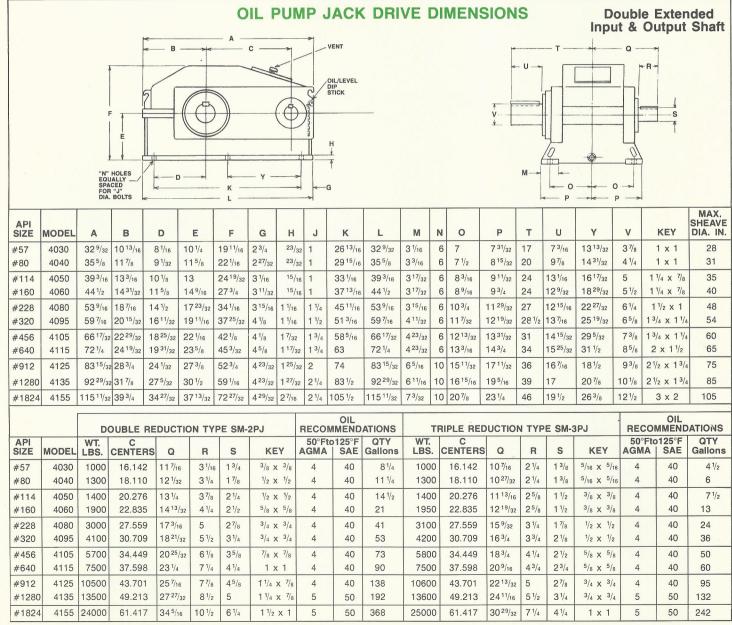
do not require any gaps between helices for tool clearance when hobbed. As a result, more active tooth face width and load bearing surface can be provided. Since SM-CYCLO gears do not require such gaps, they are stronger than double helical gears with the same overall width.

Taking these advantages into consideration, SM-CYCLO, using single helical gearing, provides a more durable power

transmitting gear set.
SM-CYCLO believes each application should be analyzed completely, keeping reliability and simplicity in mind. But at the same time, today's technologies should be utilized to meet the demands for higher speeds and power. By designing our pump jack units to take advantage of all improvements in manufacturing and design, SM-CYCLO can provide a better oil pump drive. Call or write your SM-CYCLO Representative for all details of design.

## OIL PUMP JACK DRIVE SELECTION CHART

		AMERICAN PETROLEUM INSTITUTE (API) REDUCER SIZES											
		#10 thru 40	#57	#80	#114	#160	#228	#320	#456	#640	#912	#1280	#1824
DOUBLE REDUCTION 20 OUTPUT RPM	SM-CYCLO REDUCER MODEL	UNITS	SM2PJ 4030	SM2PJ 4040	SM2PJ 4050	SM2PJ 4060	SM2PJ 4080	SM2PJ 4095	SM2PJ 4105	SM2PJ 4115	SM2PJ 4125	SM2PJ 4135	SM2PJ 4155
	EXACT RATIO		28.17	30.38	28.76	28.80	28.17	31.04	31.09	30.84	30.85	32.25	31.32
	API PEAK TORQUE RATING†	AVAILABLE	57,000	80,000	114,000	160,000	228,000	320,000	456,000	640,000	912,000	1,280,000	1,824,000
REDUCTION TPUT RPM	SM-CYCLO REDUCER MODEL	CONSULT	SM3PJ 4030	SM3PJ 4040	SM3PJ 4050	SM3PJ 4060	SM3PJ 4080	SM3PJ 4095	SM3PJ 4105	SM3PJ 4115	SM3PJ 4125	SM3PJ 4135	SM3PJ 4155
	EXACT RATIO	Çe	44.58	44.28	43.85	44.40	44.28	44.69	46.58	44.91	44.76	45.45	43.63
TRIPLE REDU	API PEAK TORQUE RATING†	FACTORY	57,000	80,000	114,000	160,000	228,000	320,000	456,000	640,000	912,000	1,280,000	1,824,000



NOTES:

a. Input and output shaft tolerance +.000"-.001"

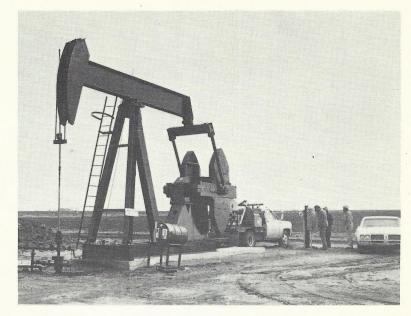
Data and dimensions shown are for reference only and are subject to change without notice.

<sup>†</sup>All API ratings are in inch-pounds.

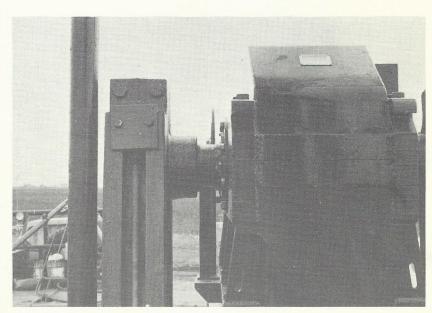
Units are for floor mounted horizontal operation only, for other mounting arrangements, consult factory.

## Helical Parallel Shaft OIL PUMP JACK APPLICATIONS











SM-CYCLO

Power Transmission Products

SUMITOMO MACHINERY CORP. OF AMERICA

Seven Malcolm Ave., Teterboro, NJ 07608 (201) <del>288-3355</del> Telex:133370

804 485 - 3355