

Maximum Recommended Weight Indicator Pull

The following table calculates the maximum rig weight indicator pull on a stuck rod string. The calculations are based on 90% of the minimum yield strength for a steel rod string in “like new” condition. The maximum load should be reached by a straight, steady pull and not a shock load.

For a tapered rod string, calculate the total weight in pounds of all rods above the bottom section. Add to this weight the values in the table below for the rod type and size of the bottom section. This is the maximum load that should be pulled on a steel rod string. For a straight steel rod string, the table values are the maximum pull.

Additional Weight Indicator for Steel Sucker Rod String

Types C30 and K40 sucker rods	SIZE		LOAD	
	inches	(mm)	lbf.	(daN)
	5/8	(15,88)	16,560	(7 366)
3/4	(19,05)	23,850	(10 608)	
7/8	(22,23)	32,475	(14 445)	
1	(25,40)	42,400	(18 860)	
1-1/8	(28,58)	53,675	(23 875)	

Types D54 sucker rods	SIZE		LOAD	
	inches	(mm)	lbf.	(daN)
	5/8	(15,88)	23,450	(10 430)
3/4	(19,05)	33,750	(15 012)	
7/8	(22,23)	46,000	(20 461)	
1	(25,40)	60,000	(26 689)	

Types D75, D78 and D90 sucker rods	SIZE		LOAD	
	inches	(mm)	lbf.	(daN)
	5/8	(15,88)	24,850	(11 053)
3/4	(19,05)	35,780	(15 915)	
7/8	(22,23)	48,700	(21 662)	
1	(25,40)	63,625	(28 300)	
1-1/8	(28,58)	80,500	(35 806)	

Types 96 and 97 sucker rods	SIZE		LOAD	
	inches	(mm)	lbf.	(daN)
	5/8	(15,88)	31,750	(14 123)
3/4	(19,05)	45,725	(20 350)	
7/8	(22,23)	62,200	(27 667)	
1	(25,40)	81,250	(36 140)	
1-1/8	(28,58)	102,880	(45 761)	
1-1/4	(31,75)	127,000	(56 490)	

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Weight of Steel Sucker Rods

SIZE		WEIGHT		SIZE		WEIGHT	
inches	(mm)	lbs./ft.	(kg/m)	inches	(mm)	lbs./ft.	(kg/m)
5/8	(15,88)	1.14	(1,58)	1	(25,40)	2.89	(4,00)
3/4	(19,05)	1.62	(2,24)	1-1/8	(28,58)	3.68	(5,09)
7/8	(22,23)	2.19	(3,03)	1-1/4	(31,75)	4.47	(6,18)

Additional Weight Indicator for Steel Drive® Rod String

Types 75, 78 & 90 drive rods	SIZE		LOAD	
	inches	(mm)	lbf.	(daN)
	1	(25,40)	63,625	(28 300)
1-1/4	(31,75)	99,400	(44 213)	
1-1/2	(38,10)	143,000	(63 612)	

Types 96 & 97 drive rods	SIZE		LOAD	
	inches	(mm)	lbf.	(daN)
	1	(25,40)	81,250	(36 140)
1-1/4	(31,75)	127,000	(56 490)	
1-1/2	(38,10)	182,000	(80 957)	

Weight of Drive Rod®

SIZE		WEIGHT	
inches	(mm)	lbs./ft.	(kg/m)
1	(25,40)	2.77	(3,83)
1-1/4	(31,75)	4.34	(6,00)
1-1/2	(38,10)	6.23	(8,61)



WARNING TO AVOID SERIOUS INJURY, DO NOT EXCEED EQUIPMENT LOAD RATINGS WHEN USING PRODUCTION HOISTING EQUIPMENT.

