



ROD SIZE		BODY OD		PIN SHOULDER OD		WRENCH FLATS				BEAD OD		COUPLING DIMENSIONS						LENGTH		WEIGHT		WEIGHT/ROD	
						WIDTH		LENGTH				REGULAR		SLIM HOLE		LENGTH				PER FT	PER M		
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	ft.	m	lb.	kg	lb.	kg

API STEEL SUCKER RODS

5/8"	15.875	0.625	15.875	1.250	31.800	0.875	22.225	1.250	31.800	1.219	31.800	1.500	38.100	1.250	31.800	4.000	101.60	25.000	7.620	1.135	1.630	28.38	12.87
3/4"	19.050	0.750	19.050	1.500	38.100	1.000	25.400	1.250	31.800	1.406	35.700	1.625	41.300	1.500	38.100	4.000	101.60	25.000	7.620	1.634	2.430	40.85	18.53
7/8"	22.225	0.875	22.225	1.625	41.300	1.000	25.400	1.250	31.800	1.500	38.100	1.812	46.000	1.625	41.300	4.000	101.60	25.000	7.620	2.224	3.310	55.60	25.22
1"	25.400	1.000	25.400	2.000	50.800	1.313	33.300	1.500	38.100	1.906	48.400	2.187	55.600	2.000	50.800	4.000	101.60	25.000	7.620	2.904	4.320	72.60	32.93
1-1/8"	28.575	1.125	28.575	2.250	57.200	1.500	38.100	1.625	41.300	2.189	55.600	2.375	60.300	2.188	55.600	4.500	114.30	25.000	7.620	3.676	5.470	91.90	41.69

API FIBERGLASS SUCKER RODS

ROD SIZE		BODY OD		END FITTING DIAMETER		API PIN SIZE		WRENCH FLATS				COUPLING DIMENSIONS						LENGTH		WEIGHT		WEIGHT/ROD	
								WIDTH		LENGTH		REGULAR		SLIM HOLE		LENGTH				PER FT	PER M		
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	ft.	m	lb.	kg	lb.	kg
3/4"	19.050	0.735	18.700	1.500	38.100	0.750	19.050	1.000	25.400	1.250	31.800	1.625	41.300	1.500	38.100	4.000	101.60	37.500	11.430	0.484	0.220	18.15	8.23
7/8"	22.225	0.858	21.800	1.500	38.100	0.750	19.050	1.000	25.400	1.250	31.800	1.625	41.300	1.500	38.100	4.000	101.60	37.500	11.430	0.611	0.277	22.91	10.39
1"	25.400	0.980	24.900	1.625	41.300	0.875	22.225	1.000	25.400	1.250	31.800	1.812	46.000	1.625	41.300	4.000	101.60	37.500	11.430	0.819	0.371	30.71	13.93
1-1/4"	31.370	1.225	31.100	2.000	50.800	1.000	25.400	1.313	33.300	1.500	38.100	2.187	55.600	2.000	50.800	4.000	101.60	37.500	11.430	1.288	0.584	48.30	21.91

API SINKER BARS

ROD SIZE		BODY OD		ELEVATOR NECK DIAMETER		API PIN SIZE		WRENCH FLATS				COUPLING DIMENSIONS						LENGTH		WEIGHT		WEIGHT/ROD	
								WIDTH		LENGTH		REGULAR		SLIM HOLE		LENGTH				PER FT	PER M		
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	ft.	m	lb.	kg	lb.	kg
1-1/4"	31.750	1.250	31.750	0.875	22.225	0.750	19.050	1.000	25.400	1.250	31.800	1.625	41.300	1.500	38.100	4.000	101.60	25.000	7.620	4.170	6.206	104.25	47.29
1-3/8"	34.925	1.375	34.925	1.000	25.400	0.750	19.050	1.000	25.400	1.250	31.800	1.625	41.300	1.500	38.100	4.000	101.60	25.000	7.620	5.050	7.515	126.25	57.27
1-1/2"	38.100	1.500	38.100	1.000	25.400	0.750	19.050	1.000	25.400	1.250	31.800	1.625	41.300	1.500	38.100	4.000	101.60	25.000	7.620	6.010	8.943	150.25	68.15
1-5/8"	41.275	1.625	41.275	1.000	25.400	0.875	22.225	1.000	25.400	1.250	31.800	1.812	46.000	1.625	41.300	4.000	101.60	25.000	7.620	7.050	10.492	176.25	79.95
1-3/4"	44.450	1.750	44.450	1.000	25.400	0.875	22.225	1.000	25.400	1.250	31.800	1.812	46.000	1.625	41.300	4.000	101.60	25.000	7.620	8.180	12.173	204.50	92.76

FLUID LOAD = F.L.C. X NET LIFT (IN FEET) X SPECIFIC GRAVITY
PRODUCTION (BPD) = P.C. X SPM X DOWNHOLE PUMP STROKE

PUMP SIZE	PUMP CONSTANT	FLUID LOAD CONSTANT
1-1/16" (27mm)	0.132	0.384
1-1/4" (31.8mm)	0.182	0.531
1-1/2" (38.1mm)	0.262	0.765
1-3/4" (44.5mm)	0.357	1.041
2" (50.8mm)	0.466	1.360
2-1/4" (57.2mm)	0.590	1.721
2-1/2" (63.5mm)	0.729	2.125
2-3/4" (69.9mm)	0.881	2.571
3-1/4" (82.6mm)	1.231	3.590
3-3/4" (95.6mm)	1.639	4.780
4-3/4" (120.7mm)	2.630	7.670

CALCULATING MINIMUM PUMP LENGTH WITH FG RODS

Pump length should be calculated with the highest anticipated Pump Intake Pressure

9 X Footage of glass rods X 1.75=	_____ inches
1,000	_____ inches
Maximum anticipated downhole pump stroke	_____ inches
or surface stroke whichever is greater	_____ inches
Plunger length	_____ inches
2 X Pump Seating Nipple Depth =	_____ inches
1,000	_____ inches
Total Pump Length	_____ inches

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MAXIMUM PULL LOAD CAPACITY

ROD SIZE	TYPE C		TYPE D		HIGH STRENGTH	
	MINIMUM YIELD 65,000 PSI	MINIMUM YIELD 100,000 PSI	MINIMUM YIELD 100,000 PSI	MINIMUM YIELD 110,000 PSI	MINIMUM YIELD 110,000 PSI	MINIMUM YIELD 110,000 PSI
	Lbs.	daN	Lbs.	daN	Lbs.	daN
5/8" (15.875mm)	17,000	7,560	24,600	10,900		
3/4" (19.05mm)	24,000	10,800	35,400	15,800	44,700	19,900
7/8" (22.225mm)	33,200	14,760	48,000	21,350	62,700	27,900
1" (25.4mm)	43,400	19,300	62,800	27,900	82,000	36,500
1-1/8" (28.58mm)			80,500	35,800	102,800	45,700

1 Lb. = 0.4448 daN 1 daN = 2.248 lb.

Special Notes:

- A) The above table gives the maximum pull load that may be applied to the smallest rod in the string. This assumes a steady slow pull with no jarring or pulling into the load.
- B) CAUTION: These load figures are based on the capacity of a new rod. Sucker rods that have been in service for a long period of time may break under these loads.
- C) For older rods or rods that have been subjected to heavy loading during their life cycle the pull loads should be de-rated to 70% of the above values.
- D) If two or more different grades are combined in the rod string, then pull to the lesser value.

Pump Spacing with Fiberglass Rods

9 X Footage of glass rods	+	2 X Pump Seating Nipple Depth
1,000		1,000
Total Distance off Tap= _____ inches		