



830 Winters Ave.
Grand Junction, CO 81501
(970) 424-5225

Warrior 700 – 6:7 Lobe
6.5 Stage HR – 7.00" OD

General Data

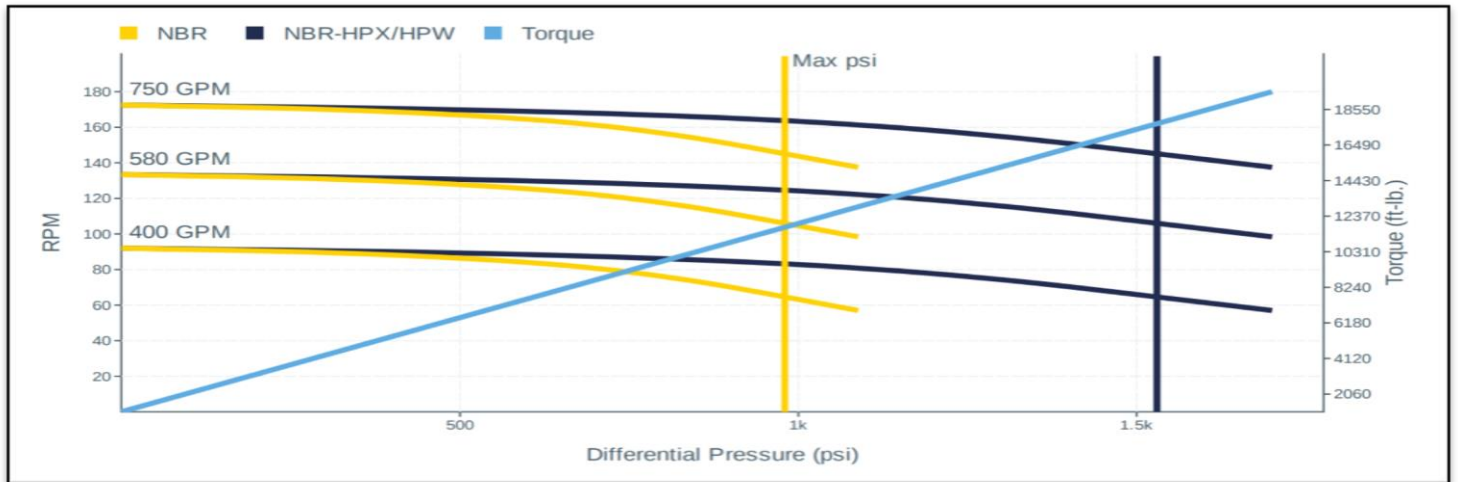
Bit Sizes	8 1/2" – 9 7/8"	Max WOB (w/flow)	90,000 lbs.
Bit Connection	4 1/2 Reg	Optimum WOB (w/flow)	45,000 lbs.
Top Connection	4 1/2 XH	Max WOB (w/o flow)	250,000 lbs.
Torque – Connections	28,500 ft-lb	Max Bit Pull (w/damage)	400,000 lbs.
Torque – ABH	31,500 ft-lb	Max Body Pull (w/damage)	975,000 lbs.

Physical Properties

Bit to Bend Length (ABH)	66.44 in.
Bit to Bend Length (Fixed)	48.13 in.
Nominal Length	410.67 in.
Weight	3300 lbs.

Performance Data

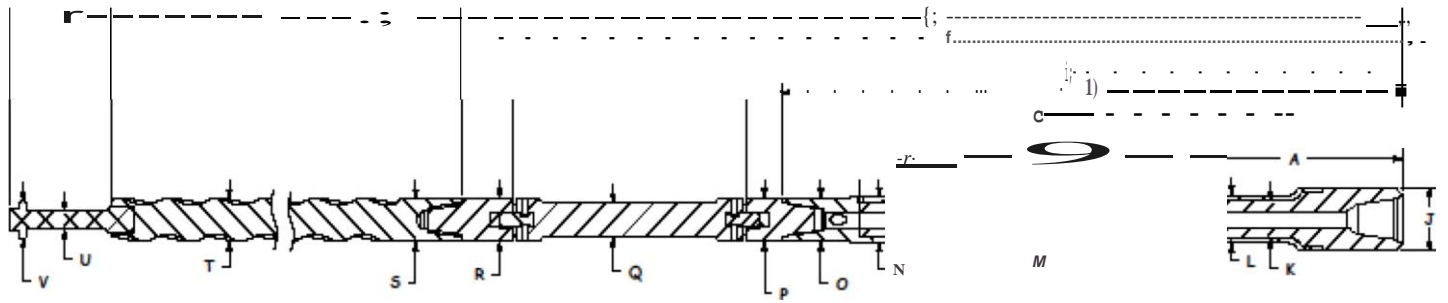
Flow Range	400-750 gpm
Speed Range	90-170 rpm
Speed Ratio	.23 rev/gal
Max. Differential Pressure	1530 psi
Torque Ratio	10.92 ft-lb/psi
Torque at Max Differential	16,690 ft-lb
Stall Torque	26,280 ft-lb



Calculated Build Up Rates – Degrees / 100 ft. (FIXED)

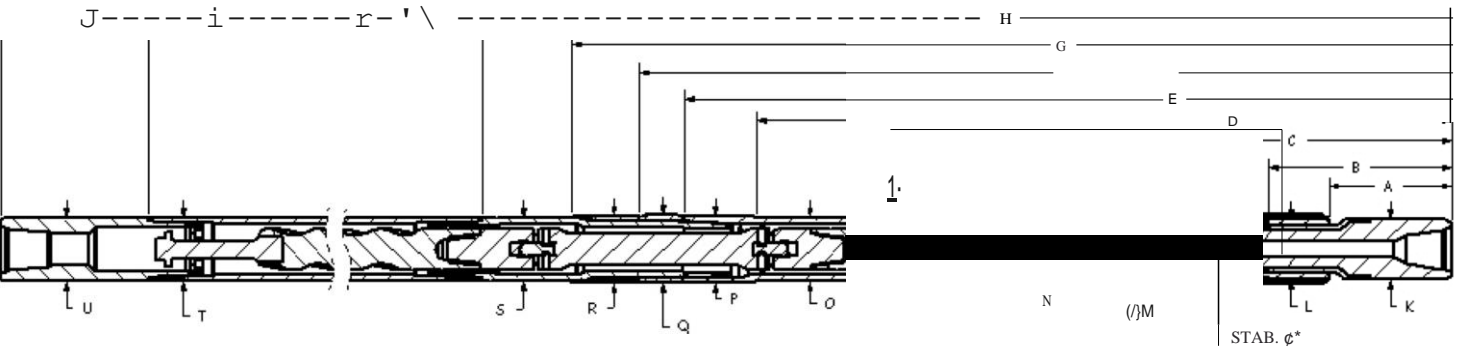
Calculated Build Up Rates – Degrees / 100 ft. (ABH)

Angle (Deg)	Hole Size (in) – Slick Sleeve				Hole Size (in) – Stabilized				Angle (Deg)	Hole Size (in) Slick Sleeve				Hole Size (in) Stabilized			
	7 7/8	8 1/2	8 3/4	9 7/8	7 7/8	8 1/2	8 3/4	9 7/8		7 7/8	8 1/2	8 3/4	9 7/8	7 7/8	8 1/2	8 3/4	9 7/8
0.25	0.8				1.1	1.3	1.4	1.9	0.25	1.0	0.4	0.2		1.0	1.3	1.4	1.9
0.50	1.9	1.0	0.7		2.4	2.7	2.8	3.3	0.50	2.1	1.6	1.4		2.3	2.5	2.6	3.1
0.75	3.0	2.2	1.8	0.3	3.7	4.0	4.1	4.6	0.75	3.2	2.7	2.5	1.5	3.5	3.8	3.9	4.4
1.00	4.1	3.3	2.9	1.4	5.1	5.3	5.4	5.9	1.00	4.3	3.8	3.6	2.6	4.8	5.1	5.2	5.6
1.25	5.3	4.4	4.1	2.5	6.4	6.7	6.8	7.2	1.25	5.5	4.9	4.7	3.7	6.1	6.3	6.4	6.9
1.50	6.4	5.5	5.2	3.6	7.7	8.0	8.1	8.6	1.50	6.6	6.0	5.8	4.9	7.3	7.6	7.7	8.2
1.75	7.5	6.6	6.3	4.8	9.1	9.3	9.4	9.9	1.75	7.7	7.2	6.9	6.0	8.6	8.9	9.0	9.4
2.00	8.6	7.8	7.4	5.9	10.4	10.7	10.8	11.2	2.00	8.8	8.3	8.1	7.1	9.9	10.1	10.2	10.7
2.25	9.7	8.9	8.5	7.0	11.7	12.0	12.1	12.6	2.25	9.9	9.4	9.2	8.2	11.1	11.4	11.5	12.0
2.50	10.9	10.0	9.7	8.1	13.1	13.3	13.4	13.9	2.50	11.0	10.5	10.3	9.3	12.4	12.7	12.8	13.2
2.75	12.0	11.1	10.8	9.2	14.4	14.7	14.8	15.2	2.75	12.2	11.6	11.4	10.4	13.7	13.9	14.0	14.5
3.00	13.1	12.2	11.9	10.4	15.7	16.0	16.1	16.6	3.00	13.3	12.7	12.5	11.6	14.9	15.2	15.3	15.8



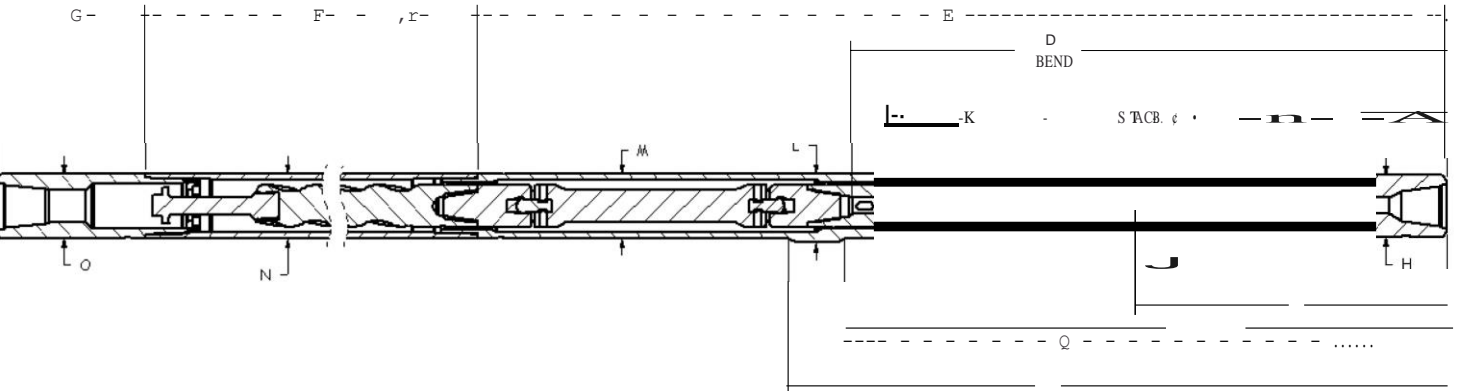
INNER FISHING DIMENSIONS

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
22.53	39.96	44.32	55.90	56.84	82.61	88.34	291	10.9	6.80	4.11	5.069	3.74	5.0	4.665	5.0	4.0	5.0	4.38	4.669	1.88	3.8



OUTER FISHING DIMENSIONS (ABH)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
13.03	18.17	44.32	58.65	66.70	71.26	78.51	88.28	300	22.38	6.80	6.80	7.76	7.00	7.00	7.38	7.75	7.38	7.38	7.38	7.38



OUTER FISHING DIMENSIONS (FIXED)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
13.03	18.17	44.32	48.13	88.28	300	22.38	6.80	6.80	7.76	7.00	7.188	7.00	7.00	7.00	33.53	46.92	52.04

* IF RUNNING SLICK SLEEVE THEN SAME AS BEARING HOUSING UPSET DIMENSION
 * IF RUNNING SLICK HOUSING THEN SAME AS BEARING HOUSING DIMENSION