



101-5-4 Prebend Capacity Chart

Base Capacity		0.25	Top roll diameter		5	Working Length			48	Solving for Material Width in Inches				
										One Pass Rolling!				
Plate Thickness →	Yield Strength PSI ↓	ID (in) ↓	12ga	1/8"	10ga	8ga	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"
			0.1046	0.125	0.1345	0.1644	0.1875	0.25	0.3125	0.375	0.4375	0.5	0.5625	0.625
30,000		5.5	48.00	48.00	48.00	48.00	40.96	23.04	7.37	5.12	3.76	2.88	2.28	1.84
		6	48.00	48.00	48.00	48.00	48.00	27.04	17.31	6.01	4.41	3.38	2.67	2.16
		6.25	48.00	48.00	48.00	48.00	48.00	31.36	20.07	6.97	5.12	3.92	3.10	2.51
		7.5	48.00	48.00	48.00	48.00	48.00	40.96	26.21	18.20	6.69	5.12	4.05	3.28
		8.75	48.00	48.00	48.00	48.00	48.00	40.96	26.21	18.20	6.69	5.12	4.05	3.28
		10	48.00	48.00	48.00	48.00	48.00	48.00	33.18	23.04	16.93	6.48	5.12	4.15
		12.5	48.00	48.00	48.00	48.00	48.00	48.00	35.43	24.60	18.07	6.92	5.47	4.43
		15	48.00	48.00	48.00	48.00	48.00	48.00	36.97	25.67	18.86	7.22	5.70	4.62
		17.5	48.00	48.00	48.00	48.00	48.00	48.00	39.34	27.32	20.07	7.68	6.07	4.92
		20	48.00	48.00	48.00	48.00	48.00	48.00	40.96	28.44	20.90	16.00	6.32	5.12
		25	48.00	48.00	48.00	48.00	48.00	48.00	46.02	31.96	23.48	17.98	7.10	5.75
		30	48.00	48.00	48.00	48.00	48.00	48.00	47.78	33.18	24.38	18.66	7.37	5.97
		40	48.00	48.00	48.00	48.00	48.00	48.00	48.00	35.05	25.75	19.71	7.79	6.31
		50	48.00	48.00	48.00	48.00	48.00	48.00	48.00	37.62	27.64	21.16	16.72	6.77
40,000		5.5	48.00	48.00	48.00	39.96	30.72	17.28	5.53	3.84	2.82	2.16	1.71	1.38
		6	48.00	48.00	48.00	46.90	36.05	20.28	6.49	4.51	3.31	2.54	2.00	1.62
		6.25	48.00	48.00	48.00	48.00	41.81	23.52	7.53	5.23	3.84	2.94	2.32	1.88
		7.5	48.00	48.00	48.00	48.00	48.00	30.72	19.66	6.83	5.02	3.84	3.03	2.46
		8.75	48.00	48.00	48.00	48.00	48.00	30.72	19.66	6.83	5.02	3.84	3.03	2.46
		10	48.00	48.00	48.00	48.00	48.00	38.88	24.88	17.28	6.35	4.86	3.84	3.11
		12.5	48.00	48.00	48.00	48.00	48.00	41.52	26.57	18.45	6.78	5.19	4.10	3.32
		15	48.00	48.00	48.00	48.00	48.00	43.32	27.72	19.25	7.07	5.42	4.28	3.47
		17.5	48.00	48.00	48.00	48.00	48.00	46.10	29.50	20.49	7.53	5.76	4.55	3.69
		20	48.00	48.00	48.00	48.00	48.00	48.00	30.72	21.33	7.84	6.00	4.74	3.84
		25	48.00	48.00	48.00	48.00	48.00	48.00	34.52	23.97	17.61	6.74	5.33	4.31
		30	48.00	48.00	48.00	48.00	48.00	48.00	35.83	24.88	18.28	7.00	5.53	4.48
		40	48.00	48.00	48.00	48.00	48.00	48.00	37.85	26.28	19.31	7.39	5.84	4.73
		50	48.00	48.00	48.00	48.00	48.00	48.00	40.63	28.21	20.73	7.94	6.27	5.08
50,000		5.5	48.00	48.00	47.76	31.97	24.58	6.91	4.42	3.07	2.26	1.73	1.37	1.11
		6	48.00	48.00	48.00	37.52	28.84	16.22	5.19	3.61	2.65	2.03	1.60	1.30
		6.25	48.00	48.00	48.00	43.51	33.45	18.82	6.02	4.18	3.07	2.35	1.86	1.51
		7.5	48.00	48.00	48.00	48.00	43.69	24.58	7.86	5.46	4.01	3.07	2.43	1.97
		8.75	48.00	48.00	48.00	48.00	43.69	24.58	7.86	5.46	4.01	3.07	2.43	1.97
		10	48.00	48.00	48.00	48.00	48.00	31.10	19.91	6.91	5.08	3.89	3.07	2.49
		12.5	48.00	48.00	48.00	48.00	48.00	33.21	21.26	7.38	5.42	4.15	3.28	2.66
		15	48.00	48.00	48.00	48.00	48.00	34.66	22.18	7.70	5.66	4.33	3.42	2.77
		17.5	48.00	48.00	48.00	48.00	48.00	36.88	23.60	16.39	6.02	4.61	3.64	2.95
		20	48.00	48.00	48.00	48.00	48.00	38.40	24.58	17.07	6.27	4.80	3.79	3.07
		25	48.00	48.00	48.00	48.00	48.00	43.15	27.61	19.18	7.04	5.39	4.26	3.45
		30	48.00	48.00	48.00	48.00	48.00	44.79	28.67	19.91	7.31	5.60	4.42	3.58
		40	48.00	48.00	48.00	48.00	48.00	47.31	30.28	21.03	7.72	5.91	4.67	3.79
		50	48.00	48.00	48.00	48.00	48.00	48.00	32.50	22.57	16.58	6.35	5.02	4.06
60,000		5.5	48.00	46.08	39.80	26.64	20.48	5.76	3.69	2.56	1.88	1.44	1.14	0.92
		6	48.00	48.00	46.71	31.26	24.04	6.76	4.33	3.00	2.21	1.69	1.34	1.08
		6.25	48.00	48.00	48.00	36.26	27.88	7.84	5.02	3.48	2.56	1.96	1.55	1.25
		7.5	48.00	48.00	48.00	47.36	36.41	20.48	6.55	4.55	3.34	2.56	2.02	1.64
		8.75	48.00	48.00	48.00	47.36	36.41	20.48	6.55	4.55	3.34	2.56	2.02	1.64
		10	48.00	48.00	48.00	48.00	46.08	25.92	16.59	5.76	4.23	3.24	2.56	2.07
		12.5	48.00	48.00	48.00	48.00	48.00	27.68	17.71	6.15	4.52	3.46	2.73	2.21
		15	48.00	48.00	48.00	48.00	48.00	28.88	18.48	6.42	4.72	3.61	2.85	2.31
		17.5	48.00	48.00	48.00	48.00	48.00	30.73	19.67	6.83	5.02	3.84	3.04	2.46
		20	48.00	48.00	48.00	48.00	48.00	32.00	20.48	7.11	5.22	4.00	3.16	2.56
		25	48.00	48.00	48.00	48.00	48.00	35.96	23.01	7.99	5.87	4.49	3.55	2.88
		30	48.00	48.00	48.00	48.00	48.00	37.32	23.89	16.59	6.09	4.67	3.69	2.99
		40	48.00	48.00	48.00	48.00	48.00	39.43	25.23	17.52	6.44	4.93	3.89	3.15
		50	48.00	48.00	48.00	48.00	48.00	42.32	27.08	18.81	6.91	5.29	4.18	3.39
100,000		5.5	39.48	27.65	23.88	7.99	6.14	3.46	2.21	1.54	1.13	0.86		
		6	46.34	32.45	28.03	18.76	7.21	4.06	2.60	1.80	1.32	1.01	0.80	0.65
		6.25	48.00	37.63	32.50	21.76	16.73	4.70	3.01	2.09	1.54	1.18	0.93	0.75
		7.5	48.00	48.00	42.45	28.42	21.85	6.14	3.93	2.73	2.01	1.54	1.21	0.98
		8.75	48.00	48.00	42.45	28.42	21.85	6.14	3.93	2.73	2.01	1.54	1.21	0.98
		10	48.00	48.00	48.00	35.96	27.65	7.78	4.98	3.46	2.54	1.94	1.54	1.24
		12.5	48.00	48.00	48.00	38.40	29.52	16.61	5.31	3.69	2.71	2.08	1.64	1.33
		15	48.00	48.00	48.00	40.07	30.81	17.33	5.54	3.85	2.83	2.17	1.71	1.39
		17.5	48.00	48.00	48.00	42.64	32.78	18.44	5.90	4.10	3.01	2.30	1.82	1.48
		20	48.00	48.00	48.00	44.40	34.13	19.20	6.14	4.27	3.13	2.40	1.90	1.54
		25	48.00	48.00	48.00	48.00	38.35	21.57	6.90	4.79	3.52	2.70	2.13	1.73
		30	48.00	48.00	48.00	48.00	39.81	22.39	7.17	4.98	3.66	2.80	2.21	1.79
		40	48.00	48.00	48.00	48.00	42.06	23.66	7.57	5.26	3.86	2.96	2.34	1.89
		50	48.00	48.00	48.00	48.00	45.14	25.39	16.25	5.64	4.15	3.17	2.51	2.03
Info found here is to be used as a guideline. Please contact sales@wdmrolls.com for questions. These capacities are based on the tonnage capacity of the machine. Because of the spring back of some of the materials, the minimum diameter may not be attainable. See the following chart for approximate minimum diameter. →						Wrought Iron/1010 MS, Soft Aluminium and Copper - ID						5.50		
						Mild Steel, i.e. M-1020, A-36 - ID						6.25		
						CR Sheet, Thin Galvanized, Half Hard Copper, SS -ID						7.50		
						AR Plate, T-1, Other Super Alloys - ID						10.00		