310-5-120 Capacity Chart

Base Capacity 0.06 **Top roll diameter** 5 **Working Length** 120

Solving for Material Width in Inches
One Pass Rolling!

Plate Thickness →		20ga	18ga	16ga	14ga	12ga	10ga	8ga	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"
Yield Strength PSI ↓	ID (in)↓	0.0359	0.0478	0.0598	0.0747	0.1046	0.1345	0.1644	0.1875	0.25	0.3125	0.375	0.4375	0.5
30,000	5.5	120.00	90.75	57.99	18.58	9.48	5.73	3.84	2.95	1.66	1.06	0.74	0.54	
	6	120.00	106.51	68.05	43.61	11.12	6.73	4.50	3.46	1.95	1.25	0.87	0.64	
	6.25	120.00	120.00	78.93	50.58	12.90	7.80	5.22	4.01	2.26	1.45	1.00	0.74	0.56
	7.5	120.00	120.00	103.09	66.06	16.85	10.19	6.82	5.24	2.95	1.89	1.31	0.96	0.74
	8.75	120.00	120.00	103.09	66.06	16.85	10.19	6.82	5.24	2.95	1.89	1.31	0.96	0.74
	10	120.00	120.00	120.00	83.61	42.64	12.90	8.63	6.64	3.73	2.39	1.66	1.22	0.93
	12.5	120.00	120.00	120.00	89.28	45.53	13.77	9.22	7.09	3.99	2.55	1.77	1.30	1.00
	15	120.00	120.00	120.00	93.16	47.51	14.37	9.62	7.39	4.16	2.66	1.85	1.36	1.04
	17.5	120.00	120.00	120.00	99.14	50.56	15.29	10.23	7.87	4.43	2.83	1.97	1.45	1.11
	20	120.00	120.00	120.00	103.22	52.65	15.92	10.66	8.19	4.61	2.95	2.05	1.50	1.15
	25	120.00	120.00	120.00	115.98	59.15	17.89	11.97	9.20	5.18	3.31	2.30	1.69	1.29
	30	120.00	120.00	120.00	120.00	61.41	18.57	12.43	9.56	5.37	3.44	2.39	1.76	1.34
	40	120.00	120.00	120.00	120.00	64.86	19.62	13.13	10.09	5.68	3.63	2.52	1.85	1.42
	50	120.00	120.00	120.00	120.00	69.62	42.11	14.09	10.83	6.09	3.90	2.71	1.99	1.52
40,000	5.5	120.00	68.07	43.49	13.94	7.11	4.30	2.88	2.21	1.24	0.80	0.55		
	6	120.00	79.88	51.04	16.35	8.34	5.04	3.38	2.60	1.46	0.93	0.65	0.48	
	6.25	120.00	92.65	59.19	18.97	9.67	5.85	3.92	3.01	1.69	1.08	0.75	0.55	
	7.5	120.00	120.00	77.31	49.55	12.63	7.64	5.11	3.93	2.21	1.42	0.98	0.72	0.55
	8.75	120.00	120.00	77.31	49.55	12.63	7.64	5.11	3.93	2.21	1.42	0.98	0.72	0.55
	10	120.00	120.00	97.85	62.71	15.99	9.67	6.47	4.98	2.80	1.79	1.24	0.91	0.70
	12.5	120.00	120.00	104.48	66.96	17.07	10.33	6.91	5.31	2.99	1.91	1.33	0.98	0.75
	15	120.00	120.00	109.03	69.87	17.82	10.78	7.21	5.54	3.12	2.00	1.39	1.02	0.78
	17.5	120.00	120.00	116.02	74.35	18.96	11.47	7.68	5.90	3.32	2.12	1.48	1.08	0.83
	20	120.00	120.00	120.00	77.42	19.74	11.94	7.99	6.14	3.46	2.21	1.54	1.13	0.86
	25	120.00	120.00	120.00	86.99	44.36	13.42	8.98	6.90	3.88	2.49	1.73	1.27	0.97
	30	120.00	120.00	120.00	90.30	46.05	13.93	9.32	7.17	4.03	2.58	1.79	1.32	1.01
	40	120.00	120.00	120.00	95.39	48.65	14.71	9.85	7.57	4.26	2.73	1.89	1.39	1.06
	50	120.00	120.00	120.00	102.39	52.22	15.79	10.57	8.13	4.57	2.93	2.03	1.49	1.14
50,000	5.5	96.54	54.45	17.40	11.15	5.69	3.44	2.30	1.77	1.00	0.64	0.44		
	6	113.30	63.91	40.83	13.08	6.67	4.04	2.70	2.08	1.17	0.75	0.52		
	6.25	120.00	74.12	47.36	15.17	7.74	4.68	3.13	2.41	1.35	0.87	0.60	0.44	
	7.5	120.00	96.81	61.85	19.82	10.11	6.11	4.09	3.15	1.77	1.13	0.79	0.58	
	8.75	120.00	96.81	61.85	19.82	10.11	6.11	4.09	3.15	1.77	1.13	0.79	0.58	
	10	120.00	120.00	78.28	50.17	12.79	7.74	5.18	3.98	2.24	1.43	1.00	0.73	0.56
	12.5	120.00	120.00	83.59	53.57	13.66	8.26	5.53	4.25	2.39	1.53	1.06	0.78	0.60
	15	120.00	120.00	87.22	55.90	14.25	8.62	5.77	4.44	2.50	1.60	1.11	0.81	0.62
	17.5	120.00	120.00	92.82	59.48	15.17	9.17	6.14	4.72	2.66	1.70	1.18	0.87	0.66
	20	120.00	120.00	96.64	61.93	15.79	9.55	6.39	4.92	2.76	1.77	1.23	0.90	0.69
	25	120.00	120.00	108.59	69.59	17.75	10.73	7.18	5.52	3.11	1.99	1.38	1.01	0.78
	30	120.00	120.00	112.72	72.24	18.42	11.14	7.46	5.73	3.22	2.06	1.43	1.05	0.81
	40	120.00	120.00	119.07	76.31	19.46	11.77	7.88	6.06	3.41	2.18	1.51	1.11	0.85
	50	120.00	120.00	120.00	81.91	41.77	12.63	8.46	6.50	3.66	2.34	1.63	1.19	0.91
60,000	5.5	80.45	45.38	14.50	9.29	4.74	2.87	1.92	1.47	0.83	0.53			
	6	94.41	53.26	17.01	10.90	5.56	3.36	2.25	1.73	0.97	0.62	0.43		
	6.25	109.50	61.76	19.73	12.64	6.45	3.90	2.61	2.01	1.13	0.72	0.50		
	7.5	120.00	80.67	51.54	16.52	8.42	5.09	3.41	2.62	1.47	0.94	0.66	0.48	
	8.75	120.00	80.67	51.54	16.52	8.42	5.09	3.41	2.62	1.47	0.94	0.66	0.48	
	10	120.00	102.10	65.23	41.81	10.66	6.45	4.32	3.32	1.87	1.19	0.83	0.61	
	12.5	120.00	109.02	69.66	44.64	11.38	6.88	4.61	3.54	1.99	1.28	0.89	0.65	
	15	120.00	113.76	72.68	46.58	11.88	7.18	4.81	3.70	2.08	1.33	0.92	0.68	0.52
	17.5	120.00	120.00	77.35	49.57	12.64	7.64	5.12	3.93	2.21	1.42	0.98	0.72	0.55
	20	120.00	120.00	80.54	51.61	13.16	7.96	5.33	4.10	2.30	1.47	1.02	0.75	0.58
	25	120.00	120.00	90.49	57.99	14.79	8.94	5.99	4.60	2.59	1.66	1.15	0.85	0.65
	30	120.00	120.00	93.94	60.20	15.35	9.28	6.21	4.78	2.69	1.72	1.19	0.88	0.67
	40	120.00	120.00	99.23	63.59	16.22	9.81	6.56	5.05	2.84	1.82	1.26	0.93	0.71
	50	120.00	120.00	106.51	68.26	17.41	10.53	7.05	5.42	3.05	1.95	1.35	0.99	0.76
100,000	5.5	48.27	13.61	8.70	5.57	2.84	1.72	1.15	0.88	0.50	0.32			
	6	56.65	15.98	10.21	6.54	3.34	2.02	1.35	1.04	0.58	0.37			
	6.25	65.70	18.53	11.84	7.59	3.87	2.34	1.57	1.20	0.68	0.43			
	7.5	85.81	48.40	15.46	9.91	5.05	3.06	2.05	1.57	0.88	0.57	0.39		
	8.75	85.81	48.40	15.46	9.91	5.05	3.06	2.05	1.57	0.88	0.57	0.39		
	10	108.60	61.26	19.57	12.54	6.40	3.87	2.59	1.99	1.12	0.72	0.50		
	12.5	115.96	65.41	41.79	13.39	6.83	4.13	2.76	2.13	1.20	0.77	0.53		
	15	120.00	68.26	43.61	13.97	7.13	4.31	2.89	2.22	1.25	0.80	0.55		
	17.5	120.00	72.63	46.41	14.87	7.58	4.59	3.07	2.36	1.33	0.85	0.59		
	20	120.00	75.63	48.32	15.48	7.90	4.78	3.20	2.46	1.38	0.88	0.61	0.45	
	25	120.00	84.98	54.29	17.40	8.87	5.37	3.59	2.76	1.55	0.99	0.69	0.51	
	30	120.00	88.21	56.36	18.06	9.21	5.57	3.73	2.87	1.61	1.03	0.72	0.53	
	40	120.00	93.18	59.54	19.08	9.73	5.88	3.94	3.03	1.70	1.09	0.76	0.56	
	50	120.00	100.02	63.91	40.95	10.44	6.32	4.23	3.25	1.83	1.17	0.81	0.60	

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 Galvinized, Half Hard Copper, SS -ID	7.50
AR Plate, T-1, Other Super Alloys - ID	10.00