430-7-10 Prebend Capacity Chart

Base Capacity 0.13 **Top roll diameter** 7 **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"
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
30,000	7.7	120.00	120.00	120.00	120.00	88.97	53.81	18.01	13.84		
	8.4	120.00	120.00	120.00	120.00	104.42	63.15	42.27	16.25		
	8.75	120.00	120.00	120.00	120.00	120.00	73.24	49.02	18.84		
	10.5	120.00	120.00	120.00	120.00	120.00	95.66	64.03	49.22	13.84	
	12.25	120.00	120.00	120.00	120.00	120.00	95.66	64.03	49.22	13.84	
	14	120.00	120.00	120.00	120.00	120.00	120.00	81.04	62.30	17.52	
	17.5	120.00	120.00	120.00	120.00	120.00	120.00	86.53	66.52	18.71	
	21	120.00	120.00	120.00	120.00	120.00	120.00	90.29	69.41	19.52	12.49
	24.5	120.00	120.00	120.00	120.00	120.00	120.00	96.08	73.87	41.55	13.30
	28	120.00	120.00	120.00	120.00	120.00	120.00	100.05	76.91	43.26	13.84
	35	120.00	120.00	120.00	120.00	120.00	120.00	112.41	86.42	48.61	15.56
	42	120.00	120.00	120.00	120.00	120.00	120.00	116.69	89.71	50.46	16.15
	56	120.00	120.00	120.00	120.00	120.00	120.00	120.00	94.77	53.31	17.06
	70	120.00	120.00	120.00	120.00	120.00	120.00	120.00	101.72	57.22	18.31
40,000	7.7	120.00	120.00	120.00	120.00	66.73	40.36	13.51			
	8.4	120.00	120.00	120.00	120.00	78.31	47.36	15.85	12.19		
	8.75	120.00	120.00	120.00	120.00	90.82	54.93	18.38	14.13		
	10.5	120.00	120.00	120.00	120.00	118.63	71.75	48.02	18.46		
	12.25	120.00	120.00	120.00	120.00	118.63	71.75	48.02	18.46		
	14	120.00	120.00	120.00	120.00	120.00	90.80	60.78	46.73	13.14	
	17.5	120.00	120.00	120.00	120.00	120.00	96.96	64.90	49.89	14.03	
	21	120.00	120.00	120.00	120.00	120.00	101.17	67.72	52.06	14.64	
	24.5	120.00	120.00	120.00	120.00	120.00	107.67	72.06	55.40	15.58	
	28	120.00	120.00	120.00	120.00	120.00	112.10	75.04	57.69	16.22	
	35	120.00	120.00	120.00	120.00	120.00	120.00	84.31	64.82	18.23	
	42	120.00	120.00	120.00	120.00	120.00	120.00	87.52	67.28	18.92	12.11
	56	120.00	120.00	120.00	120.00	120.00	120.00	92.45	71.07	19.99	12.79
	70	120.00	120.00	120.00	120.00	120.00	120.00	99.23	76.29	42.91	13.73
50,000	7.7	120.00	120.00	120.00	104.67	53.38	16.14				
	8.4	120.00	120.00	120.00	120.00	62.65	18.95	12.68			
	8.75	120.00	120.00	120.00	120.00	72.66	43.94	14.71			
	10.5	120.00	120.00	120.00	120.00	94.90	57.40	19.21	14.77		
	12.25	120.00	120.00	120.00	120.00	94.90	57.40	19.21	14.77		
	14	120.00	120.00	120.00	120.00	120.00	72.64	48.62	18.69		
	17.5	120.00	120.00	120.00	120.00	120.00	77.57	51.92	19.96		
	21	120.00	120.00	120.00	120.00	120.00	80.94	54.18	41.65		
	24.5	120.00	120.00	120.00	120.00	120.00	86.13	57.65	44.32	12.47	
	28	120.00	120.00	120.00	120.00	120.00	89.68	60.03	46.15	12.98	
	35	120.00	120.00	120.00	120.00	120.00	100.77	67.45	51.85	14.58	
	42	120.00	120.00	120.00	120.00	120.00	104.61	70.02	53.83	15.14	
	56	120.00	120.00	120.00	120.00	120.00	110.50	73.96	56.86	15.99	
	70	120.00	120.00	120.00	120.00	120.00	118.61	79.39	61.03	17.16	
60,000	7.7	120.00	120.00	120.00	87.22	44.49	13.45				
	8.4	120.00	120.00	120.00	102.37	52.21	15.79				
	8.75	120.00	120.00	120.00	118.72	60.55	18.31	12.26			
	10.5	120.00	120.00	120.00	120.00	79.08	47.83	16.01	12.31		
	12.25	120.00	120.00	120.00	120.00	79.08	47.83	16.01	12.31		
	14	120.00	120.00	120.00	120.00	100.09	60.54	40.52	15.58		
	17.5	120.00	120.00	120.00	120.00	106.88	64.64	43.27	16.63		
	21	120.00	120.00	120.00	120.00	111.52	67.45	45.15	17.35		
	24.5	120.00	120.00	120.00	120.00	118.68	71.78	48.04	18.47		
	28	120.00	120.00	120.00	120.00	120.00	74.74	50.02	19.23		
	35	120.00	120.00	120.00	120.00	120.00	83.97	56.21	43.21	12.15	
	42	120.00	120.00	120.00	120.00	120.00	87.17	58.35	44.86	12.62	
	56	120.00	120.00	120.00	120.00	120.00	92.08	61.63	47.38	13.33	
	70	120.00	120.00	120.00	120.00	120.00	98.84	66.16	50.86	14.30	
100,000	7.7	120.00	120.00	81.66	52.33	13.35					
	8.4	120.00	120.00	95.84	61.42	15.66					
	8.75	120.00	120.00	111.15	71.23	18.16					
	10.5	120.00	120.00	120.00	93.04	47.45	14.35				
	12.25	120.00	120.00	120.00	93.04	47.45	14.35				
	14	120.00	120.00	120.00	117.75	60.06	18.16	12.16			
	17.5	120.00	120.00	120.00	120.00	64.13	19.39	12.98			
	21	120.00	120.00	120.00	120.00	66.91	40.47	13.54			
	24.5	120.00	120.00	120.00	120.00	71.21	43.07	14.41			
	28	120.00	120.00	120.00	120.00	74.14	44.84	15.01			
	35	120.00	120.00	120.00	120.00	83.31	50.38	16.86	12.96		
	42	120.00	120.00	120.00	120.00	86.48	52.30	17.50	13.46		
	56	120.00	120.00	120.00	120.00	91.35	55.25	18.49	14.21		
	70	120.00	120.00	120.00	120.00	98.05	59.30	19.85	15.26		

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	7.70
Mild Steel, i.e. M-1020, A-36 - ID	8.75
CR Sheet, Thin Galvinized, Half Hard Copper, SS -ID	10.50
AR Plate, T-1, Other Super Alloys - ID	14.00