430-9-10 Prebend Capacity Chart

Base Capacity 0.25 **Top roll diameter** 9 **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	9.9	120.00	120.00	120.00	120.00	120.00	120.00	120.00	102.40	57.60	18.43	12.80		
	10.8	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	67.60	43.26	15.02		
	11.25	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	78.40	50.18	17.42	12.80	
	13.5	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	102.40	65.54	45.51	16.72	12.80
	15.75	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	102.40	65.54	45.51	16.72	12.80
	18	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	82.94	57.60	42.32	16.20
	22.5	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	88.57	61.50	45.19	17.30
	27	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	92.42	64.18	47.15	18.05
	31.5	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	98.34	68.30	50.18	19.21
	36	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	102.40	71.11	52.24	40.00
	45	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	115.06	79.90	58.70	44.94
	54	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	119.44	82.94	60.94	46.66
	72	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	87.62	64.37	49.28
	90	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	94.04	69.09	52.90
40,000	9.9	120.00	120.00	120.00	120.00	120.00	120.00	99.90	76.80	43.20	13.82			
	10.8	120.00	120.00	120.00	120.00	120.00	120.00	117.24	90.13	50.70	16.22			
	11.25	120.00	120.00	120.00	120.00	120.00	120.00	120.00	104.53	58.80	18.82	13.07		
	13.5	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	76.80	49.15	17.07	12.54	
	15.75	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	76.80	49.15	17.07	12.54	
	18	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	97.20	62.21	43.20	15.87	12.15
	22.5	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	103.79	66.42	46.13	16.94	12.97
	27	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	108.30	69.31	48.13	17.68	13.54
	31.5	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	115.25	73.76	51.22	18.82	14.41
	36	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	76.80	53.33	19.59	15.00
	45	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	86.29	59.93	44.03	16.85
	54	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	89.58	62.21	45.70	17.50
	72	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	94.63	65.71	48.28	18.48
	90	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	101.57	70.53	51.82	19.84
50,000	9.9	120.00	120.00	120.00	120.00	120.00	119.40	79.92	61.44	17.28				
	10.8	120.00	120.00	120.00	120.00	120.00	120.00	93.79	72.11	40.56	12.98			
	11.25	120.00	120.00	120.00	120.00	120.00	120.00	108.78	83.63	47.04	15.05			
	13.5	120.00	120.00	120.00	120.00	120.00	120.00	120.00	109.23	61.44	19.66	13.65		
	15.75	120.00	120.00	120.00	120.00	120.00	120.00	120.00	109.23	61.44	19.66	13.65		
	18	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	77.76	49.77	17.28	12.70	
	22.5	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	83.03	53.14	18.45	13.56	
	27	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	86.64	55.45	19.25	14.15	
	31.5	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	92.20	59.01	40.98	15.05	
	36	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	96.00	61.44	42.67	15.67	12.00
	45	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	107.87	69.03	47.94	17.61	13.48
	54	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	111.97	71.66	49.77	18.28	14.00
	72	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	118.28	75.70	52.57	19.31	14.79
	90	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	81.25	56.43	41.46	15.87
60,000	9.9	120.00	120.00	120.00	120.00	120.00	99.50	66.60	51.20	14.40				
	10.8	120.00	120.00	120.00	120.00	120.00	116.78	78.16	60.09	16.90				
	11.25	120.00	120.00	120.00	120.00	120.00	120.00	90.65	69.69	19.60	12.54			
	13.5	120.00	120.00	120.00	120.00	120.00	120.00	118.40	91.02	51.20	16.38			
	15.75	120.00	120.00	120.00	120.00	120.00	120.00	118.40	91.02	51.20	16.38			
	18	120.00	120.00	120.00	120.00	120.00	120.00	120.00	115.20	64.80	41.47	14.40		
	22.5	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	69.19	44.28	15.38		
	27	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	72.20	46.21	16.04		
	31.5	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	76.83	49.17	17.07	12.54	
	36	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	80.00	51.20	17.78	13.06	
	45	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	89.89	57.53	19.98	14.68	
	54	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	93.31	59.72	41.47	15.23	
	72	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	98.57	63.08	43.81	16.09	12.32
	90	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	105.80	67.71	47.02	17.27	13.23
100,000	9.9	120.00	120.00	120.00	120.00	98.71	59.70	19.98	15.36					
	10.8	120.00	120.00	120.00	120.00	115.85	70.07	46.90	18.03					
	11.25	120.00	120.00	120.00	120.00	120.00	81.26	54.39	41.81					
	13.5	120.00	120.00	120.00	120.00	120.00	106.13	71.04	54.61	15.36				
	15.75	120.00	120.00	120.00	120.00	120.00	106.13	71.04	54.61	15.36				
	18	120.00	120.00	120.00	120.00	120.00	120.00	89.91	69.12	19.44	12.44			
	22.5	120.00	120.00	120.00	120.00	120.00	120.00	96.00	73.80	41.52	13.28			
	27	120.00	120.00	120.00	120.00	120.00	120.00	100.18	77.01	43.32	13.86			
	31.5	120.00	120.00	120.00	120.00	120.00	120.00	106.60	81.95	46.10	14.75			
	36	120.00	120.00	120.00	120.00	120.00	120.00	111.00	85.33	48.00	15.36			
	45	120.00	120.00	120.00	120.00	120.00	120.00	120.00	95.88	53.93	17.26			
	54	120.00	120.00	120.00	120.00	120.00	120.00	120.00	99.53	55.99	17.92	12.44		
	72	120.00	120.00	120.00	120.00	120.00	120.00	120.00	105.14	59.14	18.93	13.14		
	90	120.00	120.00	120.00	120.00	120.00	120.00	120.00	112.85	63.48	40.63	14.11		

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	9.90
Mild Steel, i.e. M-1020, A-36 - ID	11.25
CR Sheet, Thin Galvinized, Half Hard Copper, SS -ID	13.50
AR Plate, T-1, Other Super Alloys - ID	18.00