430-12-10 Prebend Capacity Chart

Base Capacity 0.5 | **Top roll diameter** 12 | **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"	9/16"	5/8"	3/4"	7/8"
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	0.5625	0.625	0.75	0.875
30,000	13.2	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	102.40	75.23	57.60	45.51	18.43	12.80	
	14.4	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	88.29	67.60	53.41	43.26	15.02	
	15	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	102.40	78.40	61.95	50.18	17.42	12.80
	18	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	102.40	80.91	65.54	45.51	16.72
	21	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	102.40	80.91	65.54	45.51	16.72
	24	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	102.40	82.94	57.60	42.32
	30	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	109.34	88.57	61.50	45.19
	36	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	114.09	92.42	64.18	47.15
	42	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	98.34	68.30	50.18
	48	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	102.40	71.11	52.24
	60	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	115.06	79.90	58.70
	72	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	119.44	82.94	60.94
	96	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	87.62	64.37
	120	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	94.04	69.09
40,000	13.2	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	110.59	76.80	56.42	43.20	17.07	13.82		
	14.4	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	90.13	66.22	50.70	40.06	16.22		
	15	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	104.53	76.80	58.80	46.46	18.82	13.07	
	18	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	100.31	76.80	60.68	49.15	17.07	12.54
	21	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	100.31	76.80	60.68	49.15	17.07	12.54
	24	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	97.20	76.80	62.21	43.20	15.87
	30	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	103.79	82.01	66.42	46.13	16.94
	36	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	108.30	85.57	69.31	48.13	17.68
	42	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	115.25	91.06	73.76	51.22	18.82
	48	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	94.81	76.80	53.33	19.59
	60	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	106.53	86.29	59.93	44.03
	72	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	110.59	89.58	62.21	45.70
	96	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	116.82	94.63	65.71	48.28
	120	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	101.57	70.53	51.82
50,000	13.2	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	88.47	61.44	45.14	17.28	13.65			
	14.4	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	103.83	72.11	52.98	40.56	16.02	12.98		
	15	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	83.63	61.44	47.04	18.58	15.05		
	18	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	109.23	80.25	61.44	48.55	19.66	13.65	
	21	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	109.23	80.25	61.44	48.55	19.66	13.65	
	24	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	101.56	77.76	61.44	49.77	17.28	12.70
	30	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	108.45	83.03	65.60	53.14	18.45	13.56
	36	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	113.16	86.64	68.46	55.45	19.25	14.15
	42	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	92.20	72.85	59.01	40.98	15.05
	48	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	96.00	75.85	61.44	42.67	15.67
	60	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	107.87	85.23	69.03	47.94	17.61
	72	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	111.97	88.47	71.66	49.77	18.28
	96	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	118.28	93.46	75.70	52.57	19.31
	120	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	100.31	81.25	56.43	41.46
60,000	13.2	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	115.20	73.73	51.20	18.81	14.40				
	14.4	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	86.53	60.09	44.15	16.90	13.35			
	15	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	100.35	69.69	51.20	19.60	15.49	12.54		
	18	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	91.02	66.87	51.20	40.45	16.38		
	21	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	91.02	66.87	51.20	40.45	16.38		
	24	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	115.20	84.64	64.80	51.20	41.47	14.40	
	30	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	90.37	69.19	54.67	44.28	15.38	
	36	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	94.30	72.20	57.05	46.21	16.04	
	42	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	100.35	76.83	60.71	49.17	17.07	12.54
	48	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	104.49	80.00	63.21	51.20	17.78	13.06
	60	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	117.40	89.89	71.02	57.53	19.98	14.68
	72	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	93.31	73.73	59.72	41.47	15.23
	96	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	98.57	77.88	63.08	43.81	16.09
	120	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	105.80	83.60	67.71	47.02	17.27
100,000	13.2	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	69.12	44.24	15.36						
	14.4	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	81.12	51.92	18.03	13.24					
	15	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	94.08	60.21	41.81	15.36					
	18	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	78.64	54.61	40.12	15.36	12.14			
	21	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	78.64	54.61	40.12	15.36	12.14			
	24	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	99.53	69.12	50.78	19.44	15.36	12.44		
	30	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	106.28	73.80	54.22	41.52	16.40	13.28		
	36	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	110.90	77.01	56.58	43.32	17.11	13.86		
	42	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	118.01	81.95	60.21	46.10	18.21	14.75		
	48	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	85.33	62.69	48.00	18.96	15.36		
	60	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	95.88	70.44	53.93	42.61	17.26		
	72	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	99.53	73.13	55.99	44.24	17.92	12.44	
	96	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	105.14	77.25	59.14	46.73	18.93	13.14	
	120	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	112.85	82.91	63.48	50.16	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	13.20
Mild Steel, i.e. M-1020, A-36 - ID	15.00
CR Sheet, Thin Galvinized, Half Hard Copper, SS -ID	18.00
AR Plate, T-1, Other Super Alloys - ID	24.00